

NAVAL AVIATION

NEWS



46th Year of Publication

AUGUST 1965

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PROGRESS IN THE ASW PROBLEM

'After reviewing our efforts in ASW research and development, we have been led to conclude that the solution to the ASW problem must come from a disciplined, evolutionary, step-by-step integration of literally hundreds of small increments of operational and technical progress. We are aware that such incremental gains can be easily lost unless we vigorously demand and obtain increased reliability, more skilled operating and maintenance personnel, and the best quality control in design, production, installation, and maintenance of our ASW equipments and systems.'

—The Honorable R. W. Morse, Assistant Secretary of the Navy (R&D)

FORTY-SIXTH YEAR OF PUBLICATION AUGUST 1965

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■ COVERS

Loaded with Bullpups, an A-4 Skyhawk belonging to VA-81 is readied for launch from USS Forresteral (CVA-59). Above, Trackers from VS-33 and VS-38 proceed to rendezvous with USS Bennington (CVS-20). The photo was taken by Nolan Atkinson, PH3.

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NAVAL AVIATION NEWS

Test Pilots are Graduated Sixteen Represent All Services

Sixteen graduates of the U.S. Navy Test Pilot School at NATC PATUXENT RIVER, Md., received their graduation certificates at ceremonies held June 11. Rear Admiral James R. Lee, NATC Commander, made the presentations.

The Outstanding Student Plaque went to Capt. Joseph G. Basquez, who was the only Air Force student in the class. The award was presented by Mr. G. I. Rupert Lore, the President of the Patuxent

River Council of the Navy League.

The class had one of the largest cross-sections from all the services in the school's 17-year history. It included pilots from the Navy, Army, Marine Corps and a few civilians, in addition to the Air Force's Capt. Bacquez.

Presiding over the graduation exercises was Commander Joe F. Lassetter, Jr., 11th Director of the school, who assumed command June 7. Principal speaker for the occasion was Captain H. P. Lanham, Chief of Staff for Commander, Atlantic Fleet Naval Air Force, Norfolk.

Marine Commands Merged Headquarters to be in Hawaii

Effective July 1, the Marine Corps consolidated its two major Pacific commands: Fleet Marine Force, Pacific, at Camp H. M. Smith, Hawaii, and Aircraft, Fleet Marine Force, Pacific, at MCAS EL TORO.

Lieutenant General Victor H. Krulak, Commanding General, FMF Pacific, assumed all duties and responsibilities previously assigned to the Commanding General, Air FMF Pacific. Headquarters of the consolidated command are at Camp H. M. Smith.

Major General Avery R. Kier, Commanding General, Aircraft Fleet Marine Force, Pacific, since 1962, is now Deputy Commander, FMF Pacific.

The two commands were merged in order to simplify the structure and command relations of Fleet Marine Forces, Pacific, and to integrate more closely Marine ground and aviation components. The same organization has been in effect in the Atlantic for several years, with both ground and aviation components under the single direction of FMF Atlantic, located at Norfolk, Virginia.

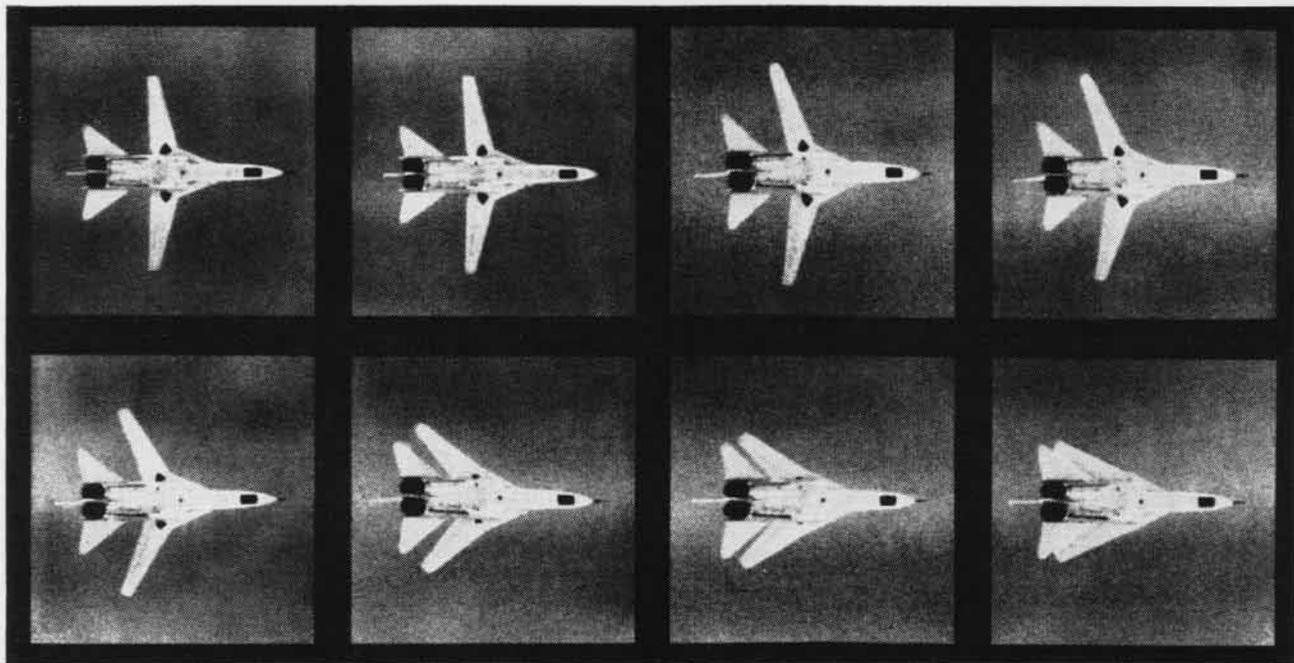
VT-22 Pilot Sets Record 2,066 Safe Hours in 36 Months

Capt. F. J. Horak, USMC, NAAS KINGSVILLE, Texas, completed a 36-month tour at VT-22 with a record 2,066 accident-free hours. The old record was 2,026 hours, set by Lt. D. T. Watts.

Capt. Horak has over 3,000 hours total time with 2,900 in single-engine jet aircraft.



JACK O'CONNELL, editor of "This Week" magazine, receives a Certificate of Merit from SecNav Paul H. Nitze. The certificate was presented for "outstanding service to the Department of the Navy in the field of public information, public relations, and education." "This Week" ran a series of covers during the last Christmas season depicting an American sailor and his family. The magazine also devoted an issue to the Armed Services, featuring a Marine on the cover. The citation said: "Through these presentations 'This Week' has immeasurably enhanced the image of the serviceman in the eyes of the American public."



THE FULL SWEEP of the wings of the F-111 bi-service fighter is shown in this series of pictures, reading from left to right from top. The two-man supersonic fighter is the world's first variable-sweep-wing aircraft. It can fly slowly for long distances or strike at two-and-a-half times the speed of sound. These pictures, made from a chase plane during one of the F-111's test flights, show the sweeping of its wings

from a virtually straight position of 16° (takeoff configuration) to a sharp 72.50 sweep (supersonic configuration). Air Force and Navy versions of the fighter, being developed by General Dynamics with Grumman as principal sub-contractor, are in flight test status. On July 1, the F-111B flew supersonically for the first time and it reached a speed of Mach 1.2 and achieved an altitude of 30,000 ft.

NAMTraGru Wins Award Annual Admiral's Plaque Given

The Naval Air Maintenance Training Group has won the 1965 "Admiral's Award," presented annually by the Chief of Naval Air Technical Training.

The honor is based on the most efficient operations as judged by Administrative/Material Inspections during the year. The competition period is the fiscal year.

Rear Admiral Allen Smith, Jr., Chief of Naval Air Technical Training, presented the award to NAMTraGru at NAS MEMPHIS, headquarters for the 65 training detachments in 27 Naval and Marine Corps Air Stations.

The Commanding Officer, Captain Clyde A. Williams, accepted the plaque for NAMTraGru during the change of command ceremony July 25. Captain George T. Maxwell, who formerly served as Executive Director to the Comptroller at BUWEPs, assumed command of the group.

In the five years since the award was established it has been won by Naval Air Technical Training Unit,

Pensacola, 1960; the NATTU LAKEHURST, 1961; NAS GLYNCO, Brunswick, Ga., 1962; NATTU JACKSONVILLE, 1963, and NAS GLYNCO, 1964.

TACRon 22 Serves on Boxer First Air Control Unit on Scene

During a recent nine-day period in the Dominican Republic crisis, Detachment India of Tactical Air Control Squadron 22 aboard the USS *Boxer* provided air traffic and tactical control services to some 1,700 aircraft.

The unit, under the command of LCdr. Roy Nelson, was comprised of one aviator, three non-aviation

officers, three radiomen, a draftsman, and a yeoman striker. They claim to have been the first U. S. air control organization in the Dominican Republic operation.

When the decision was made to evacuate U. S. personnel from the area, the detachment was prepared to control any and all air operations within the objective area. With the influx of Army paratroops in Air Force aircraft, the unit had to devise a penetration for the transports. They maintained active control of the air situation for nine successive days until relieved.

Sir James Martin Honored Aviation Safety Systems Pioneer

James Martin, Managing Director and Chief Designer of the Martin-Baker Aircraft Company, Ltd. was knighted in June for outstanding service to British technology.

The honor came a week after the company recorded the 1,000th life saved by use of a Martin-Baker ejection seat. Of the thousand men saved, 320 were from the U. S. Navy and Marine Corps (see NA-News, July 1965 issue, page 23).



AIR CONTROL PERSONNEL AT WORK



GRAMPAW PETTIBONE

RPM Loss—Helo Lost

Arrangements were made with a West Coast air station to transport some supplies from a helicopter landing site at a forest ranger station to a youth camp. The pilot and crew of the SH-34J were well briefed on the mission and the aircraft departed for the ranger station at approximately 1500.

About 30 minutes after takeoff, the aircraft arrived at the ranger station and orbited the area several times before spotting the helicopter landing area. The difficulty in locating the landing site was due to the difference in elevation. The ranger station is at an altitude of 2,150 feet and the helicopter landing area is at an altitude of 2,500 feet.

The aircraft was hovering near the ranger station when the landing site was spotted by the crew. The pilot initiated a climbing turn, at a forward speed of 35 to 40 knots, toward the landing site nearly 400 feet above.

Things appeared normal for the



first few seconds. Then the pilot noticed that the airspeed began to drop and RPM started to deteriorate.

The pilot had started the climbing approach to the landing area without increasing power. With both airspeed and RPM decreasing, the pilot pushed the nose over to about seven to eight degrees nose down and attempted to turn away from the slope.

The pilot quickly realized he could not regain altitude or airspeed and initiated a flare above the trees. The helo hit the trees in a level attitude with very little forward speed and came to rest upright in a rocky gully.

All crew members evacuated the aircraft before it started to burn. The helo was completely destroyed by fire.



Grampaw Pettibone says:

Oh, my achin' ulcers! This flight started out as a mission of good will and nearly ended in a tragedy. We've had entirely too many accidents of this type. There's really no excuse for it.

High density altitude helicopter operations are hazardous but can be safely conducted with proper training, briefing, and a thorough knowledge of the hazards that can be encountered (RPM, airspeed, power settling, turbulence, etc.). In the near future, the pamphlet *Mountain Flying Sense* will be distributed to all commands operating helicopters. The new helicopter NATOPS manuals contain a special section entitled "Mountain and Rough Terrain Flying."

The pilot listed the following as contributing factors in this accident: (1) Ascending approach to landing area; (2) unknown wind condition; (3) unfamiliarity with the area of operation; (4) no recent practice on high altitude, mountainous terrain operations. I agree with this lad 100%, but 20-20 hindsight can get you into real trouble.

Stoof Goof

An S-2A crew filed for a local night flight. After approximately two and one half hours in the local area, they returned to the field for



some night mirror landing practice.

While in the local area, the two pilots exchanged seats so the co-pilot could make the first mirror landings. After shooting six landings, the aircraft cleared the pattern and the pilots again changed seats, so the plane commander could make a few mirror landings before completing the flight.

The plane commander made eight normal landings but, during the ninth approach, he was forced to extend the downwind leg because of other traffic. He had about decided to take a waveoff and re-enter the pattern when the aircraft ahead of him took a waveoff. At this point, the pilot quickly elected to salvage the approach and land. He was able to maneuver into a fair position and continued the approach to touchdown. The pilot made a fairly good landing but, immediately after touchdown, he became rudely aware that he had forgotten to lower the landing gear.



Grampaw Pettibone says:

Oh, my achin' ulcers! It's a proven fact that all the machines we operate are pretty accustomed to landin' on a set of wheels and it's darn near impossible to break 'em of that habit without bustin' up somethin'.

We're all more likely to miss somethin' on the check-off list when our habit pattern is interrupted—we break our routine or we're distracted by traffic—but that's no excuse to land with the wheels in the well.

These lads must've had their minds on anything but flyin' this bird 'cause there's several indications in the cockpit to let you know when the gear is down. In addition to the wheel lever and indicators, how about power settin's and trim? You've got to overcome that parasite drag with somethin'.

It all boils down to the simple fact that you're askin' for trouble when you don't use that check-off list and attempt to salvage a poor approach to a landing. These are fundamentals of airmanship that should have been learned in the Training Command.

Tree Topper

An A-1H pilot was on a routine ferry flight between two East Coast air stations when he heard on two occasions a sound similar to back-

firing. No vibrations were associated with the noise and, after checking the engine instruments, the pilot decided things looked about normal. The following readings were noted: CHT, 210° C.; CAT, +5° C.; oil temperature, 72° C.; and oil pressure, 86 psi.

A few minutes later the backfiring occurred again. The only engine instrument change noted was an increase in the CHT to 220° C. The pilot selected rich mixture and the CHT returned to 210° C. He then selected alternate air and observed the CAT increase to 32° C. Approximately 15 seconds later, direct air was selected and the CAT returned to +5° C. The pilot returned the mixture to the normal position and decided to land at a civilian field, approximately 15 miles from his position.

He contacted the tower and received clearance for a precautionary landing. Abeam of the runway, at an altitude of 2,500 feet, the A-1H was cleared number 2 behind a C-130 on a 2½ mile final. The pilot took interval on the C-130 which put him an additional ¾ mile downwind of the 180° position.

As the pilot started his turn to base leg, the engine quit. He immediately declared an emergency and continued the approach. As he passed the 90° position, it became apparent that he would not make the runway, so he reversed

his turn and headed for the only clear area in sight. On short final to the cleared area, the pilot lowered the flaps at tree top level and hit the top of the first tree at about 105 knots. One or two seconds after the collision, the engine started firing. The burst of power was sufficient to regain flying speed, so the pilot turned back to the runway, made a normal landing and taxied to the ramp.

The aircraft sustained substantial damage on the impact with the tree top but the pilot was uninjured.

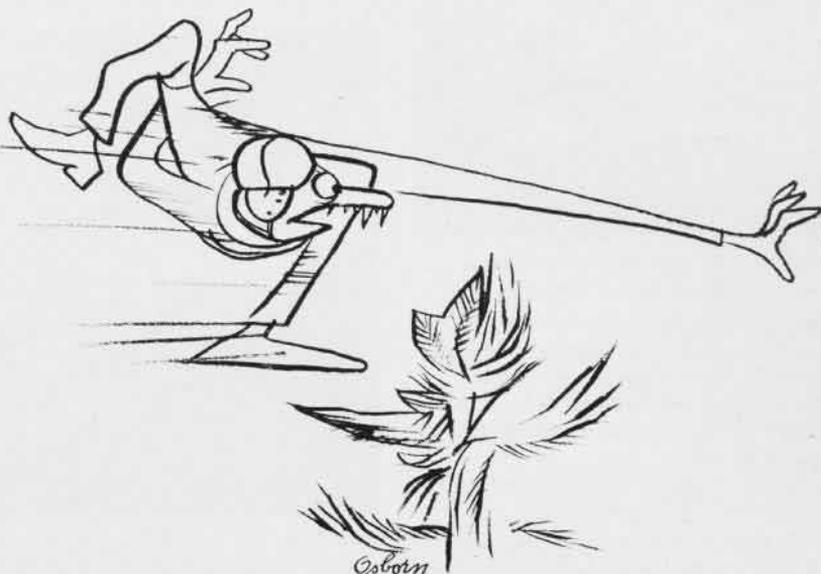


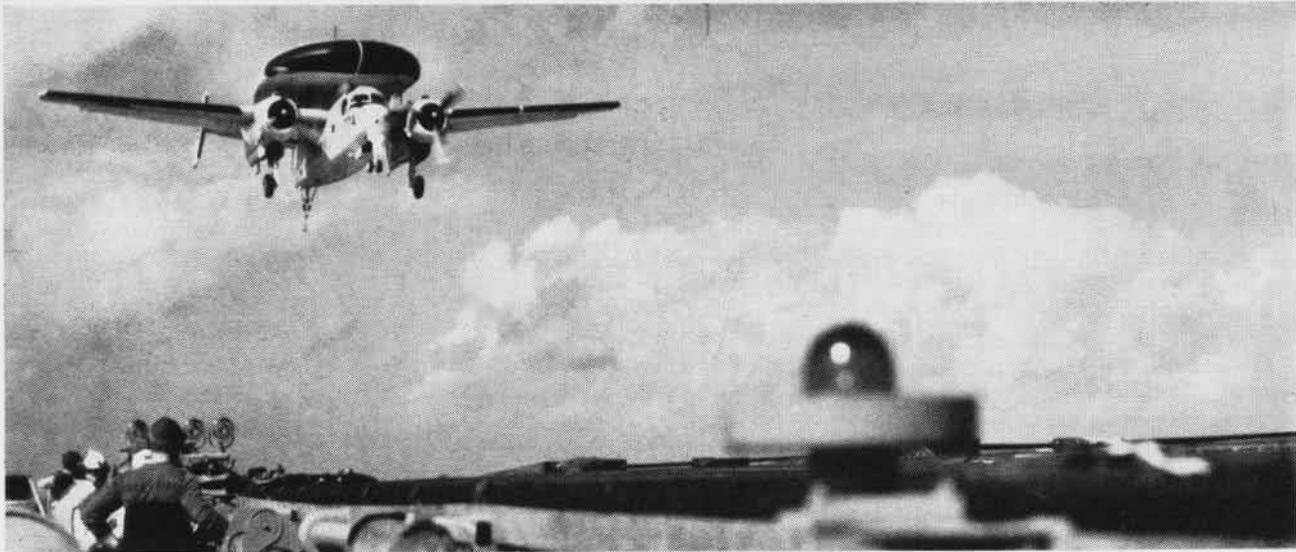
Grampaw Pettibone says:

Egads, lad! Somebody could've got hurt! Just what does it take for a gent to get the message that he just might have a load of carb ice? Conditions were ideal for this sort of thing. After going to rich mixture and alternate air, engine operations smoothed out. So why return to a set-up that caused the trouble in the first place?

A CAT of 32° C. is well within max operating limits for this engine, but it's pretty evident the pilot just didn't know too much about his machine. Even after decidin' to land and have a look-see, our boy fails to declare an emergency and lets himself get sucked way out of position for even a precautionary landing.

This whole embarrassin' bit is a result of the pilot's not knowin' his bird and then usin' poor headwork in an emergency.





MAINTAINING A RECORD of a carrier landing once every of 40,000 flight hours. They currently provide 'round the clock, hour, the Navy's two E-1B Tracer squadrons annually log in excess all-weather, early warning data and antisubmarine coordination.

CARRIER-BASED AEW AND THE E-1B

WITH THE HOLOCAUST that was Pearl Harbor, a great deal was learned about "modern warfare" and its requirements. Although Japanese aircraft had reportedly been spotted on radar, lit-



BOTH AEW SQUADRONS flew the specially configured AD-5W until early in 1960.

tle or nothing was done about it. In less than two hours, a grim chapter in history had been written. Out of the attack, among other things, came a renewed interest in radar.

At that time, radar operated on a line-of-sight principle with the detection range of shipboard and shore radar limited by the hori-

By Ltjg. Richard Booth, USN

izon. The "blind spot" just over the horizon was effectively used by low-level bombers who could often make raids entirely undetected by maintaining a low altitude. With this in mind, the only practical and sensible solution was to install radar in aircraft and send them to search beyond the horizon.

When the limitations of shipboard radar were realized and accounted for, steps were taken to



THE TBM, too late for wartime evaluation, carried a modified shipboard radar set.

extend the "horizon" of the Fleet's searching abilities. The first official interest on the matter developed in 1942. The Radiation Laboratory at the Massachusetts Institute of Technology was working on a project called *Cadillac I*.

The project's mission was to develop and test the concept of an airborne radar platform. Thirty-five TBM aircraft were modified to carry altered shipboard radar units. When tests were completed, the idea was deemed sound. Twelve TBM early warning aircraft were deployed aboard three carriers in the Western Pacific but arrived too late to be evaluated.

The idea of airborne early warning gained acceptance and, in 1948, CNO ordered the Airborne Early Warning Department of the Fleet Airborne Electronics Training Unit (Pacific) commissioned. It became Carrier Airborne Early Warning Squadron One. In August of 1948, its designation was changed to Composite Squadron Eleven (VC-11) and the following spring it moved from Ream Field to North Island and became VAW-11.

On the East Coast, Carrier Airborne Early Warning Squadron Two was formed at Norfolk, Va.,

and shortly thereafter was moved to NAS QUONSET POINT, R. I. With the limited number of aircraft and trained personnel and the growing number of commitments, detachments of men and airplanes soon began to appear on carriers, taking their place with the other squadrons of the air group. The squadron later became VAW-12.

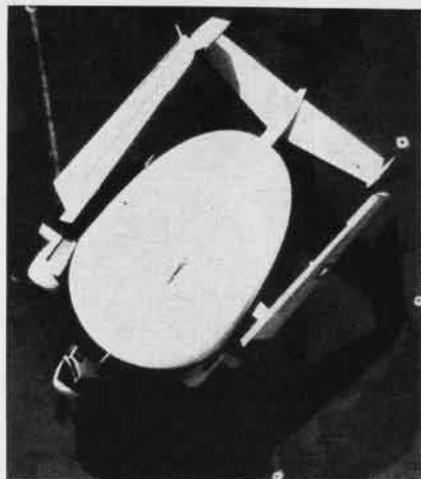
These two squadrons have flown in Korea, the Lebanon crisis, Haiti, the Cuban Quarantine, and they fly today in Vietnam.

With only one squadron of its type on each coast, it became necessary to diversify. The detachment organization was adopted. Most carrier-based squadrons have over

ten aircraft. With the comparatively long endurance of the E-1B, four planes constitute an adequate detachment. The squadron acts as a Replacement Air Group.

In the early years, both squadrons flew the AD-3W and AD-4W. By mid-1951, VC-11 had possession of two TBM-3E's. In 1956, as VAW-11 and VAW-12, they received the Douglas AD *Skyraider*. Although a great improvement over the TBM, the AD-5W still lacked adequate height-finding equipment and plans were made to build an airborne early warning aircraft from the drawing board.

In 1960, the Grumman E-1B *Tracer* made its appearance and



WITH PROFILE of a "sitting duck," the E-1B *Tracer* takes its place on the flight deck.



MAKING ITS FIRST appearance with VAW-11 on the West Coast, the Grumman E-2A *Hawkeye* is designed to revolutionize airborne early warning with its completely computerized data-link system. The *Hawkeye* is capable of operating at 30,000 feet.



THE NFO, specially trained for airborne intercept control, is responsible for the mission.

ushered in a new era of early warning. Because of its radome and ungainly appearance, it quickly evoked many nicknames, most of which are obvious. Because of its prior designation of WF-2, the nickname *Willy Fudd* rapidly became a permanent identity in every air wing.

With the primary mission of airborne early warning, the E-1B crews are qualified in air intercept control. When a "bogey" is acquired on radar, the officer controller (NFO) takes control of one of the fighters assigned to him. Utilizing an F-8 *Crusader* or an F-4 *Phantom*, the controller completes the intercept at a safe distance.

Along with her early warning capabilities, the E-1B is often called

on to assist in ASW operations. Utilizing her air search radar, the E-1B has proved effective in "sweeping" a datum area. With control of a number of S-2 *Trackers* or SH-3A *Sea King* helos, the controller can maintain a plot of surface contacts and investigate each by vectoring aircraft over the contact. This allows the S-2 to be radar-silent with less chance of being detected by the submarine.

Proving its flexibility, the E-1B is also called on to perform any number of additional missions.

In a *strike control* situation, the NFO will control the strike aircraft to their Initial Point (IP). From there the strike aircraft can assume their own navigation or be pro-



FLYING A LONELY BARRIER, the E-1B crews patrol the horizon many miles from the task force. The controller is assigned fighters for intercepts on incoming enemy raids.

vided with additional assistance into the target area. The range of the E-1B radar, along with its detailed scope presentation, makes it especially valuable in strike control. In a similar manner, after the raid has been completed, returning aircraft are picked up and given navigational assistance.

A *delousing* situation prevents enemy aircraft from following the returning strike aircraft back to the ship. The E-1B, through SIF (Selective Identification Feature of

Mk.X modified IFF), can detect friendly and unfriendly aircraft at a glance. When a bogey is detected among the returning aircraft, an intercept is made with one of the fighters on station.

Bellhop is a system by which the E-1B can relay its own radar presentation to the ship for its use. Under a similar system known as *Autocat*, the *Tracer* can relay radio messages between the ships of the task force. Both functions are automatic and may be performed

without interruption of the assigned mission. Not to confuse these functions with those of communications satellites, it can be said that the satellites reflect the signals. The E-1B radar and radio electronically relays the signals.

In a *search and rescue* mission the long endurance of the aircraft coupled with its radar search capabilities, has proved itself.

During *photo reconnaissance* missions, the flight crews of the E-1B control themselves over surface contacts to photograph trawlers and other ships in the area.

Exercising amphibious coordination, the *Tracer* provides protection of the landing forces by detection of low-flying enemy aircraft closing the beachhead.

At this time the Fleet is looking to the ultimate in early warning in the E-2A *Hawkeye*. The twin engine, turbo-prop aircraft will be equipped with a computerized data link system and will feature a rotating dome. It will have an on station time in excess of five hours with an operating ceiling of 30,000 feet. VAW-11 already has delivery of the plane and VAW-12 expects delivery sometime in 1966.



ALWAYS THE FIRST plane off on any launch, because of its radar and endurance capability, the E-1B is usually the last aboard.



THE TRACER often works closely with destroyers during Fleet exercises. Its mission dictates low-level flying, usually below 2,000 feet.

With The Marines In Vietnam



TO SAVE LIVES, LCpl. M. L. Winkel provides perimeter security as another member of HMM-365 Recovery Team rappels from a helo. Team members drop to crash spots for rescue.

Kudos for Marines

In June, eight U.S. Marine Corps Aviation squadrons were awarded the Navy Unit Commendation by the Secretary of the Navy.

The units, all attached to Marine Air Group 16 of the 1st Marine Aircraft Wing, were commended for "extremely meritorious performance of duty and conspicuous intrepidity in action while serving as military advisors providing helicopter support to forces of the Republic of Vietnam . . . involved in com-

bat operations against guerrilla forces (Viet Cong)."

The recipients of the award were Sub Unit Two of Marine Air Base Squadron 16, and Marine Medium Helicopter Squadrons 162, 163, 261, 361, 362, 364 and 365. The units received the award for their role as advisors in the Vietnam conflict from April 1962 to December 1964.

The flying Leathernecks were specifically lauded in the commendation for operating from unprepared landing zones which ranged

from sea level to 6,000 feet. They were also praised for their flights over swamps, rugged mountains and treacherous jungle terrain in support of friendly troops under bad weather conditions.

Another Use for Anchors

At Chu Lai, a ship's anchor fell from the sky and became the first piece of equipment delivered by Marine aircraft under combat conditions.

Using a KC-130 *Hercules* trans-



VIETNAMESE TROOPS await embarkation to a point south of Da Nang. A helo-lifted assault was coordinated with an amphibious landing to sweep a suspected Viet Cong stronghold.



ARMY ADVISORS arrive in Marine helicopters to join up with the Vietnamese troops.



AFTER THE DROP of equipment, a four-man recovery team is thrust out of the KC-130 Hercules to instruct the Marines below how to retrieve parachutes used in making the drop.

port aircraft, the 3rd Air Delivery Platoon, stationed at Da Nang, parachuted 13,000 pounds of supplies from 400 feet above the Chu Lai beach area, landing them in a radius of 65 yards.

After the arrival of Marines at Chu Lai, a causeway had been built out from the beach to assist naval ships in unloading. Following a recent heavy wind, the floating bridge threatened to broach against the shore. The 2,500-lb. anchor kept it from capsizing.

Successful Assault

Using a Marine Corps-developed technique, 400 Vietnamese combined their helilifted assault with an amphibious landing by other Vietnamese troops to strike a suspected Viet Cong stronghold.

Marine helicopters, jet fighters, observation aircraft and several armed Army helicopters supported the operation.

Three F-4B Phantom jets of VMFA-531 softened the helicopter

landing zone, located 20 miles south of Da Nang on the South China Sea coast, with bombs and rockets.

Minutes later, transport helicopters of HMM-163 arrived on the scene, accompanied by two fixed-wing observation aircraft and nine of the deadly Huey escorts.

Four hours later, the helilifted troops linked up with the amphibious force which had stormed ashore less than 10 miles away, and the broad-front sweep started. At the end of the one-day operation, no friendly casualties were reported.

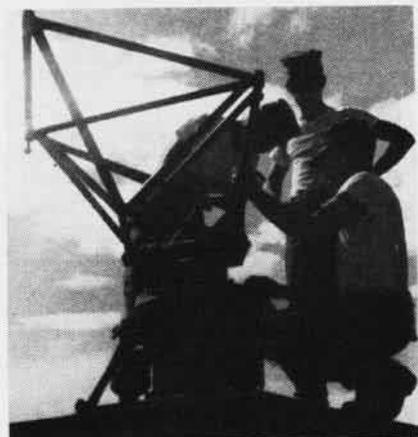
The Dangle Angle

If you don't mind dangling from a rope in mid-air above Viet Cong infested jungle, it's a fine job.

It may not sound like too attractive an occupation, but it's a satisfying one. If you're accepted into Marine Medium Helicopter Squadron's 365's Combat Recovery Team, you will probably be instrumental in saving people's lives, people in crashed aircraft.

There are 23 Marines on the 365 team, and all are volunteers. There could be more if all who wanted to join were accepted. But the screening process is selective and the preliminary training is tough. A man's motivation and strength have to be somewhere in the realm of the superhuman.

The men are lowered into terrain which can't be penetrated over land or by water, not, at least, with the equipment needed for rescue. And they're likely to have to fight the VC while trying to save injured pilots and passengers. When the Viet Cong see a plane go down, they hurry to the site, hoping to capture the injured and gather intelligence information from the



BASE for a search antenna is mounted atop radar van. It will scan for enemy aircraft.

bodies of the dead.

The Combat Recovery Team beats them to it. Within five minutes after HMM-365 is notified of a crash, the three sub-teams have gathered. A hasty briefing—and they're in UH-34D helicopters on the way. Over the crash site, they rappel (a method of controlled descent by rope) one after another, to the ground. Some of the Marines set up a defensive perimeter. Others head for the wreckage, hoping to find life in the tangled mass of metal. If there is, the injured are treated and, if possible, winched back to the hovering copter. If a man is too seriously hurt to be hoisted, the recoverers assemble a saw and hack a landing zone from the jungle.

The dead are lifted into the copters, thermite grenades burn the



A LONG, RAGGED COLUMN was formed by 1,654 residents of *Khe Tre* as they waited to be evacuated to a safe zone by helicopters from Marine Medium Helicopter Squadron 163. The entire village had to be moved because of mounting attacks in the town's area.

wreckage and the Combat Recovery Team is hoisted aboard.

Look at the Record

HMM-161 transferred its operations to the northernmost Marine strip at Phu Bai, Vietnam, the middle of June after six weeks of combat strikes from the deck of the USS *Iwo Jima* (LPH-2).

In these six weeks, the flight crews of HMM-161's 24 helicopters had supported Marine operations at Chu Lai, a new airfield constructed 52 miles south of Da Nang while the *Iwo Jima* was anchored off Chu Lai during that time.

HMM-161, using the ship as its flight line, rolled up delivery statistics: 2,500,000 pounds of supplies delivered to Marines ashore.

Each pilot averaged 7.9 flight hours a day. A 72-man maintenance division, working from 15 to 20 hours daily, averaged each day 240 man-hours on the helicopters.

Diet Note

Like all Marines since the American Revolution, those on the Chu Lai airstrip gripe loudly, vigorously and constantly. Marine Air Group 12 men claim that the mosquitoes are so large they need landing lights. It's inconsiderate of the VC to shoot a man when he's shaving, some complain.

And there's one element at which every man snorts, SSgt. Leroy Dobson says, "This — sand! I wash in it, I eat it, I brush my teeth with it. . . . There it goes again!"

Whereupon SSgt. Dobson and his coworkers dive beneath a can-

vas shroud, a sort of tent built inside a tent.

Outside, a UH-34D helicopter engine accelerates and its rotor blades pick up revolutions. A thick white cloud swirls into, through and out of the tent.

"Happens every time a bird takes off," sighs Dobson as he spoons a layer of dust off a cup of coffee.

Refugee Lift

They formed a long, ragged column down the single dirt road cut into the jungle. The refugees carried everything they owned on their backs and their children under their arms.

That's not exactly correct. They possessed more than what was in the straw packs. They owned the houses which they had built—and were leaving to be burned. They owned the crops which were bursting out of plots hand-sliced from the dense undergrowth which also,

of necessity, must be destroyed.

There were 1,654 of them, these citizens of *Khe Tre*, a village 60 miles northeast of Da Nang.

Terrorized by the VC, the pro-Republic of Vietnam villagers had asked to leave. Eighteen UH-34D helicopters of HMM-163 moved them.

In giving directions for the citizens' evacuation, Lieutenant Colonel N. G. Ewers had said to the pilots of HMM-163: "Get them out as fast as you can and be patient. Remember, they are leaving home."

To Marines with firmly established homes, the exodus was pitiful. Old ladies, gnarled with age and weariness, carried screaming infants, their daughter's, their neighbor's, anybody's.

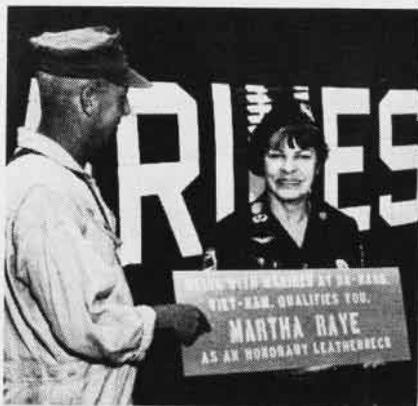
The Marines in one day, in addition to carrying the 1,654 Vietnamese, airlifted 66,440 pounds of furnishings and food. They flew in a single day 16,520 air miles. They could chalk up the record proudly — Mission Accomplished.

Whirlybird Lawnmover

First Lt. William Jones scribbled a note to his copilot: "This was an expensive cut job."

His bird and 13 others from HMM-163 had delivered 124 Vietnamese troops to a field of elephant grass 12 feet high. It was not an ideal touchdown spot, but the only one available.

The "cut job" he referred to was the snipping of elephant grass by the rotors of his helicopter. "This bird was a quarter-million dollar lawnmower." Lt. Jones wrote.



MARTHA RAYE is made honorary Leatherneck for her entertainment tour in Vietnam.

SECNA V VISITS FIGHTING FRONT

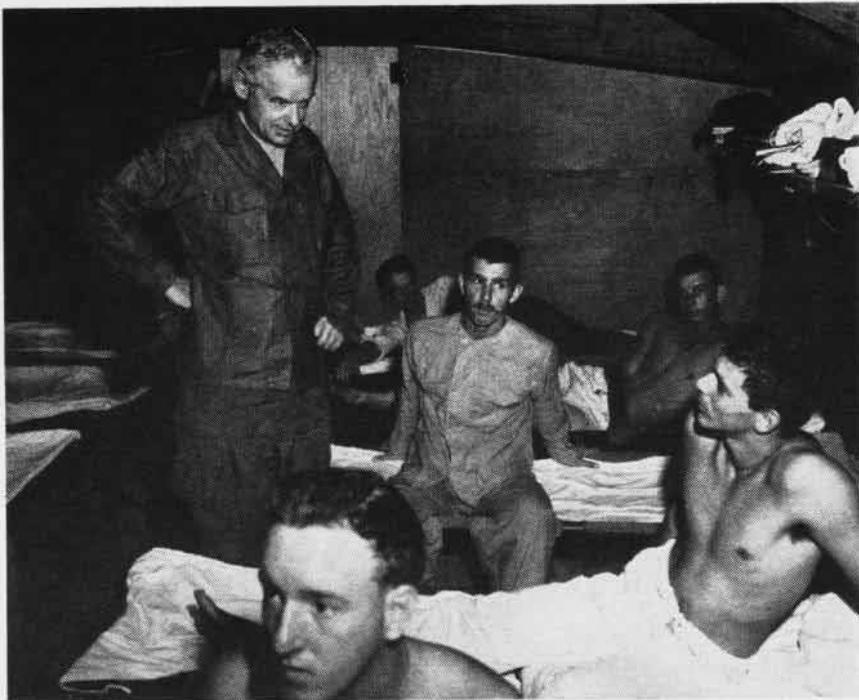
By LCdr. Joseph A. Pursch, MC

ON JUNE 14, 1965, Secretary of the Navy Paul H. Nitze and his party boarded a C-135B at Andrews AFB for a six-day journey to the Western Pacific. As the airplane gained altitude, briefings of the Secretary and his aides were at once resumed.

Ten hours later Mr. Nitze was met at Hickam AFB, Honolulu, by CinCPac and CinCPacFlt. While our car climbed the hill toward Camp Smith and CinCPac Headquarters, we caught a glimpse of the Arizona Memorial on our left, gleaming white and cradle-like, floating in the peaceful waters of Pearl Harbor—a reminder of days when the fighting front was closer to the home front.

After a two-hour briefing, we set course for NAS CUBI POINT, Philippine Islands. At that base, the tone of the briefings, the feverish tempo on ammo-crowded docks and the sick and wounded in the hospital made it apparent that we were approaching the front lines.

The following day we boarded a C-2A Trader for the USS Midway, "somewhere in the South China Sea." The twin-engine COD was piloted by Commander David Draz of VR-21, with Mr. Nitze in the co-pilot's seat. The Secretary, who is a long-time enthusiast of Naval Aviation, likes to tell how he and Commander Draz landed together on the USS Bon Homme Richard a year ago. Just prior to sighting the



SECNAV TALKS WITH THIRD MARINE DIVISION TROOPS IN FIELD HOSPITAL

meatball, Commander Draz, a polite, modest man, turned to Mr. Nitze and said, "Mr. Secretary . . . ah . . . I don't think I'll be needing to . . . call on you to do very much, sir." At this point, Mr. Nitze smiled and said, "What you really mean is 'For heavens sake, don't touch anything.'" Ever since then Mr. Nitze fondly calls him "my favorite co-pilot."

From the moment of our arrival on the Midway, it was obvious that we had dropped into a different world. Since the 6th of March, the men of the Midway, except for 17 days in port, had worked 14 hours a day, seven days a week. Armor-laden aircraft, hooked into the catapults with motherly care, were launched around the clock for combat missions. After recovery, they were checked for flak damage in addition to the routine inspection. The entire evolution was done with quiet professionalism—such as to evoke near envy from any non-participant.

Although by international definition we were not in a state of war, the ship abounded with heroes waiting to meet the Secretary. Commander Robert F. Moore, CAW-2, is an aggressive, dark-eyed tiger with 5,000 flight hours. With

a handkerchief wrapped around his shrapnel-wounded leg, he returned his A-4C safely to the ship. Straining the good judgment of the Flight Surgeons, and pressing for "one hundred combat missions this deployment," he resumed flying four days later.

Lt. Raymond Ilg, when forced to eject from his burning A-4C over Viet Cong territory, prowled his way through an enemy camp to eventual rescue. Commander De Butler, with a soft Louisiana drawl is skipper of VF-111. He took over the shark-toothed F-8 squadron after they lost their C. O. and succeeding X. O. in combat and manages to keep it at peak performance.

A walk around the flight deck showed Mr. Nitze the feverish activity that is everyday existence to the flight deck crews. Between launches he could see an occasional youngster, with stubble-bearded face, cradled by the fins of a 1,000 pound bomb in the 100-degree heat, grab a ten-minute nap. Other in the yellowshirt locker were hunched over steaming cups of coffee talking of girls, combat and occasionally the heat. Combat was the only subject upon which they could exert any influence.

One of the flight deck hands be-

summarized the attitude of the entire ship when he depicted an all-consuming pre-occupation with the job at hand: "There is nothing more important going on in the whole world right now."

The following day two F-4B crews: Commander Louis C. Page, Jr., X. O. of VF-21, and his NFO, Lt. Jack E. D. Batson, Jr., and Lt. John C. Smith, Jr., with his NFO, LCdr. Robert B. Doremus, also of VF-21, returned from a mission over North Vietnam. Mr. Nitze proudly announced "some great news" over the IMC. These two crews had just bagged one MIG-17 each; the first kills of the Vietnam air war. "All hands shared this feat, for every man on the ship played a part in it."

Later, the Secretary was heloed to the USS *Reeves* (APD-52), then highlined to the USS *Bon Homme Richard* where we encountered more heroes. Commander John Tierney, CAW-19, leads most of the missions personally on a pretext, "I gotta' get familiar with the area . . . haven't been here too long, yet." This gets him a lot of missions. "But," one of his pilots proudly confided, "they won't let him get away with it too much longer." Commander Gene Tissot, skipper

of VA-192, is a gentle, disciplined man who, like many of his men, has been at sea for almost all of the past two years. Commander Tissot and his pilots have repeatedly scored *Bullpup* hits on the most heavily defended bridges in North Vietnam.

After addressing the crew and conveying the "gratitude of the American people for the very important job you are doing out here," the Secretary flew "catshot co-pilot" to Da Nang, the busiest airport in the world (30,000 take-offs and landings a month). While visiting the 1st MAW, which defends this most vital area, Mr. Nitze learned of the accomplishments and hardships of these dedicated Marines. They live in tents in a land where showers (except for the monsoons) are hard to come by; where every passing vehicle swirls clouds of red dust into the 104-degree air; and where men sleep to the rumble of guns from the nearby hills. Mr. Nitze also talked to the sick and wounded in the field hospital and got a birdseye briefing of the surrounding Viet Cong areas from an armed helicopter.

The next day Mr. Nitze stopped at Chu Lai (50 miles south of Da Nang), where the 4th Marine Regi-



VF-21'S CDR. PAGE AND LT. SMITH

ment waded ashore May 7th. The Seabees built a jet airstrip, and the Marines, the support facilities. MAG-12 was able to begin combat flights 23 days later at the rate of 50 sorties a day. This too is a tent dwelling; no showers, 105 degrees in the sun. There is no natural shade.

After having lunch in the field with the Marines, he returned to Da Nang for a press conference. This was followed by an overflight of the coast line (sampan and junk bays) to Saigon, and conferences with General W. C. Westmoreland, Admiral N. G. Ward and Ambassador Maxwell Taylor along with officials of the South Vietnamese Armed Forces.

Our final 36-hour day, which began with a 12-hour flight to Hickham AFB, also included a three-hour stop for a CinCPacFlt conference and a short visit with the duty section of USS *Wallace*. It ended with a 10-hour flight back to Washington. After several psychologically out-of-phase breakfasts and catnaps, we were back at Andrews.

The Secretary of the Navy has had the rare privilege of visiting an elite, exclusive group of professionals who share a commitment to a vital task. While this six-day junket covered much geography, by any man's standards, the emotional distance from Vietnam to Washington seemed even more staggering. From a land where stubble-faced flight deck hands seek the shade of an aircraft wing to the White House pavement where bearded non-students frolic under protest placards is indeed a long, long way!



SECNAV NITZE, RADM. W. F. BRINGLE (CTF-77) CONGRATULATE CDR. PAGE



MUCH PUBLICIZED today are the V/STOL aircraft of many configurations providing higher cruise and maximum speed than helicopters. But the helicopters are not being left behind. Compound helicopters show promise of offering considerable improvement in high speeds. Under joint Navy/Army sponsorship, Sikorsky has converted an SH-3A into this S-61F compound configuration, incorporating twin Pratt & Whitney J-60 jet engines, wings and other changes to reduce drag and improve rotor characteristics at increased speeds. Redesignated NH-3A, to note its permanently modified status, the S-61F will undergo extensive tests at Sikorsky's plant in Stratford, Conn. These tests will be done both with jet only as shown in flight above and in the full compound configuration with wings. The Russian version of the compound helicopter was shown at Paris Air Show (see p. 21).

Training Aids Unit Opens \$5 Million Inventory at Quonset

On July 1, the largest Aviation Training Aids Branch (ATAB) on the East Coast was established at NAS QUONSET POINT, R. I. When fully operational, it will have a \$5 million inventory of aviation training devices, including four flight and weapons systems mobile trainers and a film library stocking over 3,000 technical training films.

The manpower and equipment, now included in the Aviation Training Aids Division of Detachment Three, Fleet Airborne Electronics Training Unit Atlantic at Quonset, form the nucleus of the new training aids facility. For almost 20 years, Detachment Three of FAETULant has been providing classroom instructions at Quonset Point in the operation and

maintenance of squadron equipment.

Although FAETULant in Norfolk has operational control of the facility, it will receive logistical support from ComFAir QUONSET.



IN A SPECIAL FORMATION, Attack Squadron 126 celebrates its claim to a new Navy record for single engine jet squadrons. The outfit has logged 40,000 safe flight hours since January 18, 1961. To insure high aircraft availability, the maintenance card system is in operation. Based at Miramar, VA-126 provides jet instrument, transition and refresher training for Pacific Coast pilots. Commander V. R. Hubka is the squadron's Commanding Officer.

USS Camden is Launched Second Fast Combat Support Ship

The fast combat support ship *Camden* (AOE-2) was launched at the New York Shipbuilding Corporation, Camden, N. J., on Saturday, May 29.

Mrs. Benedict J. Semmes, Jr., wife of the Chief of Naval Personnel, sponsored the ship. *Camden* is a sister ship of the USS *Sacramento* (AOE-1), a new class of ship combining the capabilities of a tanker, ammunition and supply ship. *Camden* displaces 53,000 tons, is 792 feet, 9 inches long, has a beam of 107 feet and a draft of 39 feet, 4 inches. The ship has a top speed of more than 25 knots.

Chapel Window Dedicated One of a Series at NAS Pensacola

The second stained glass window installed in the Naval Aviation Memorial Chapel at NAS PENSACOLA was dedicated June 20.

The window, presented by the officers and men of the Pacific Fleet Naval Air Force tells the story of Moses, the Lawgiver. Captain John W. Markley, Chaplain for the Sixth Naval District, gave the address. Rear Admiral John W. Gannon, Commander Fleet Air Wing, Pacific, represented Vice Admiral Paul D. Stroop, ComNavAirPac.

The inscription on the window is the verse, "The Law was given by Moses but Grace and Truth came by Jesus Christ."

The new window is the second of eight windows. The complete installation will take about a year.



HMM-264 COPTERS APPROACH BOXER AFTER 50,000th ACCIDENT-FREE HOUR

50,000 Safe Flight Hours First Marine Unit to Set Mark

Marine Helicopter Squadron 264 claims that, while operating off the coast of the Dominican Republic with the USS *Boxer*, it became the first Marine helicopter squadron to log 50,000 accident-free flight hours.

Lieutenant Colonel F. M. Kleppsattel, Squadron Commander, said his unit's four and one-half year safety record was achieved through the combined efforts of all personnel. All aircraft and all aircrews were airborne at the record hour. According to LCol. Kleppsattel, "We decided that no single aircraft or crew should be credited with logging the 50,000th accident-free hour. . . . Our records will show that all our aircraft and all our personnel shared in the accomplishment." The record flight, involving 45 pilots and 126 enlisted personnel, lasted one hour and took place off the Dominican coast.

During one night in late April, the squadron evacuated 842 persons, mostly women and children, from Santo Domingo. The following evening, while airlifting 611 members of the Third Battalion, Sixth Marines, into Santo Domingo, HMM-264 became the first Marine helicopter unit to conduct a full-scale night landing under combat conditions into an unsecured landing zone on foreign soil.

Flying the UH-34D helicopter, HMM-264 completed the six-hour operation without personal injury or equipment damage despite heavy weather and sporadic sniper activity. In seven days of flight operations in Santo Domingo, the squadron logged 714 flight hours

and flew 1,536 combat support sorties.

AF may Use E-2A Hawkeye For the Tactical Air Command

The Grumman-built E-2A *Hawkeye*, which is not yet operational on the East Coast, may be flown by the Tactical Air Command of the U. S. Air Force.

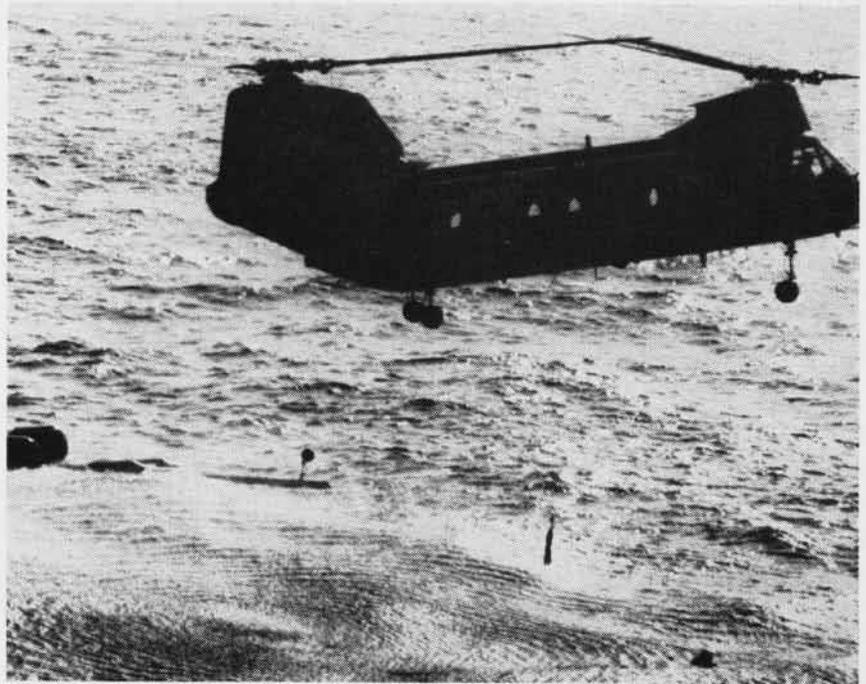
The carrier-based, early warning plane underwent test and evaluation by a 15-man team at the USAF Tactical Air Warfare Center at

Eglin AFB, Fla. It is tentatively planned for use in a forward combat environment until a land-based Control and Reporting Center becomes operational. The E-2A has been evaluated for its ability to act as a command and reporting post either airborne or on the ground.

VA-44 Trains AF Pilots Project 'Sparrow Hawk' is Over

VA-44, at NAS Cecil Field, Fla., recently conducted familiarization training for six Air Force pilots in the Douglas A-4C. The training was part of Project *Sparrow Hawk*, designed to familiarize Air Force pilots with A-4C weapons systems.

In less than one month, Majors R. S. Fogg, J. C. Halley, D. A. Griffing, and Captains J. E. Daniel, Jr., R. E. Gus, and W. M. Burkett completed over 80 training flights in formation, instruments and weaponry. During the same period, 52 enlisted Air Force technicians received over 1,000 hours of formal training and 13,000 hours of on-the-job training in the maintenance program for the aircraft.



A NAVY UH-46A Sea Knight helicopter, while engaged in vertical replenishment operations in the South China Sea, recently responded to a Mayday call and picked up four survivors of a downed helicopter. The Boeing Company's Vertol Division believes this is the first actual "at sea" rescue mission performed by the UH-46A. Above, the Sea Knight hovers over one of the survivors and lowers the rescue hoist. The downed helicopter can be seen lying upside down in the water. Piloting the rescue aircraft was LCdr. James E. Waldon. Other HU-1 members were Lt. L. D. Presnell, copilot, crewmen B. R. Shirley, Jas. Lundolph.

MARINES TRY TRANSPAC TOGETHERNESS



A COMBINED TRANSPAC—called the first of its kind for the Marines—necessitated in-flight refuelings from KC-130 Hercules aircraft, here taking off to fuel VMFA-542 Phantoms and VMA-311 Skyhawks in the air as the jets make the flight from California to Japan.



GROUND CREWMEN at MCAS Kaneohe, Hawaii, take time to watch a VMA-311 Skyhawk land for one of two ground refueling stops made during a combined trans-Pac deployment.



REFUELING PLANE, KC-130 Hercules, needed work in Hawaii before continuing.



EN ROUTE to take up station for refueling VMFA-542 and VMA-311 aircraft making TransPac, Hercules appear wingtip-to-wingtip.



VMFA-542 PHANTOMS line up before refueling from Hercules aircraft. Fifteen F-4s and 20 A-4s were combined for the deployment.



PHANTOM SQUADRON skipper, LCol. R. A. Savage, confers with RIO, CWO W. T. Steinken, during second refueling stop at Wake.



MECHANICS GO to work on one of the support aircraft involved in the first combined TransPac deployment for two Marine jet squadrons.

THEY SAY it was the first attempt to send Marine F-4B *Phantoms* and A-4E *Skyhawks* on a joint Pacific transit. When it was over, Operation *Hammer Head* was a success.

The trans-Pacific deployment of 15 VMFA-542 *Phantoms* and 20 VMA-311 *Skyhawks* from MCAS EL TORO, Calif., to Japan was called "a piece of cake" by a squadron Marine. Any flight that covers 6,187 miles—most of them over the Pacific—isn't quite that simple, however, and because it was termed the first deployment of more than one such squadron at a time, *Hammer Head* called for careful planning and precise navigation.

After the first 10 *Skyhawks* left El Toro en route to their year-

By WO James Smith, USMC

long Far East stay, the rest flew off the next day. VMFA-542's *Phantoms* departed in flights of five a day after the last *Skyhawks* were airborne. In flight about 14 hours before they were set down at their new base, Atsugi, the first F-4's landed just hours after the initial A-4 group completed its 17-hour transit to Iwakuni.

Only land refueling and rest stops were made at MCAS KANEHOHE, Hawaii, and at Wake Island. In-flight refuelings—four for the *Skyhawks* and three for the *Phantoms*—were made from VMGR-352's "flying gasoline stations," KC-130F Hercules aircraft. VMGR-352 was also assigned the job of

transporting remaining personnel.

VMFA-542 and VMA-311, both units of the 3rd Marine Air Wing, are commanded by Lieutenant Colonels R. A. Savage and B. J. Stender, respectively. VMGR-352's skipper is LCol. N. R. Boortz.

Although the flight itself was called "routine" by LCol. Savage after he landed, the importance of such TransPacs was stressed by LCol. G. E. Wasson, movement control officer, who said: "We cannot afford to send our fighters overseas any other way than the current trans-Pacific flight method. Our aircraft are usually in service for 75 months. We save the taxpayer a great deal of money [by this method] in addition to improving readiness."



PHANTOM PILOT gets landing approval signal from "wheels watch" at Kaneohe. The F-4 landed for its first rest stop of flight.

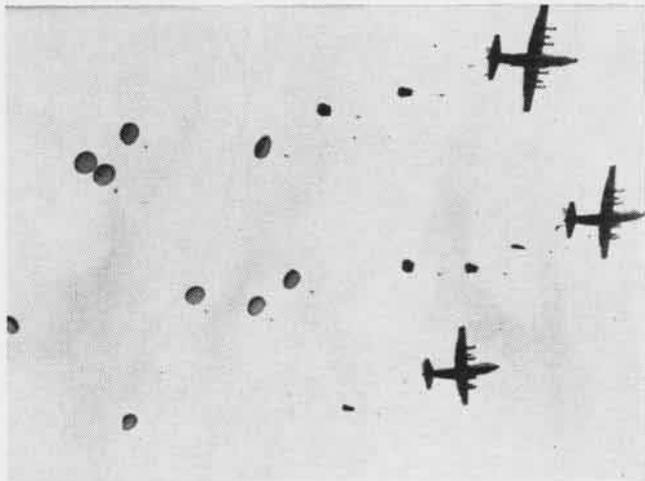


THE TRANSPAC a success, a smiling LCol. R. A. Savage (R), VMFA-542 C.O., presents "Tiger" plaque to Colonel R. F. Conley.

VR-3 MARKS 23 YEARS ACTIVE DUTY



FLYING LOW and fast, C-130's drop equipment to ground troops with pinpoint accuracy using the Computed Air Release Point system.



DURING AN EXERCISE in 1964, VR-3 crews participated in an air power demonstration, air-dropping 2,300 troops, for Shah of Iran.

NAVAL AIR TRANSPORT SQUADRON THREE (VR-3), home-based at McGuire AFB, N. J., celebrated its 23rd anniversary on July 1. The squadron, one of the Navy's oldest, marked its 17th year with MATS on June 1.

VR-3 was commissioned on July 15, 1942, at NAS OLATHE, Kansas. At that time, they maintained and operated over 100 R-4D (C-47) aircraft carrying vital war supplies and personnel to all parts of the nation. In September 1946, they moved to NAS PATUXENT RIVER, Md., and underwent training in the four-engine Douglas *Skymaster* R-5D.

Initially, the squadron operated as a unit of the Naval Air Transport Service. In June 1948, MATS was established; this consolidated two wartime agencies—the Air Transport Command (USAF) and the Naval Air Transport Service.

Since 1948, VR-3 has worked hand-in-hand with the Air Force carrying troops, patients and cargo to air bases and naval stations all over the world. In December 1949, the squadron transferred back to the Continental Division of MATS and moved to NAS MOFFETT FIELD. With the outbreak of the Korean War, the squadron moved men and equipment to the war zone and airlifted wounded back to the States.

In June 1952, VR-3 began to receive the R-6D's (C-118), which were

flown for the next 12 years. The squadron continued its Pacific missions until July 1957 when it was assigned to the 1611th Air Transport Wing of MATS Atlantic Division. Flying out of McGuire AFB, N. J., the Navy crews flew missions in support of U. S. and NATO forces in troubled areas.

In May 1958, the squadron came under the operational control of the newly-formed Naval Air Transport Wing, Atlantic (NATWA). Under the single management concept of MATS, all NATWA units



PULLING THROUGH the props to clear the oil was standard 20 years ago in VR-3.

turned over their aircraft to the Air Force and all maintenance functions were assumed by VR-6.

More than two decades of operations with piston-driven aircraft ended for VR-3 in January 1964 when the squadron began flying the Lockheed C-130E *Hercules*. With this aircraft, the squadron began air-dropping troops and equipment, utilizing the new Computed Air Release Point (CARP) system which enables pilots to air-drop paratroops and their equipment with a high degree of accuracy over a pre-determined target. In November 1964, VR-3 became the first MATS unit to receive an Air Force "C-1" combat readiness rating.

To date in 1965, the squadron has met commitments all over the globe. VR-3's C-130's were among the first to land at San Isidro Airport in Santo Domingo during the Dominican Republic crisis and they are currently taking part in the Vietnamese action.

While these extra efforts have become a part of VR-3's "routine operation," her crews have continued support of the normal trans-Atlantic traffic from Greenland through Europe and the Mediterranean to Pakistan and other Near East air fields. The average flight crew logs more than 80 hours a month. The squadron is commanded by Capt. Stanley Montunna.

ARTC Opened at Houston Last Unit of Consolidated Program

The FAA's air route traffic control center (ARTC) opened at Houston, Texas, in June to complete the final link in the program to consolidate centers throughout the nation.

The Houston ARTC, located at the Houston Intercontinental Airport, took over all airspace previously controlled by the New Orleans and San Antonio Centers. Radar coverage of the area is provided by four long-range radars located at Houston, Alexandria, New Orleans and San Antonio.

Savings resulting from the consolidation program are estimated at better than \$100 million over a period of 16 years. The program will also promote a safe and efficient flow of air traffic. With the opening of the Houston center, the number of air route traffic control centers in the continental United States is reduced from 29 in 1959 to 21.

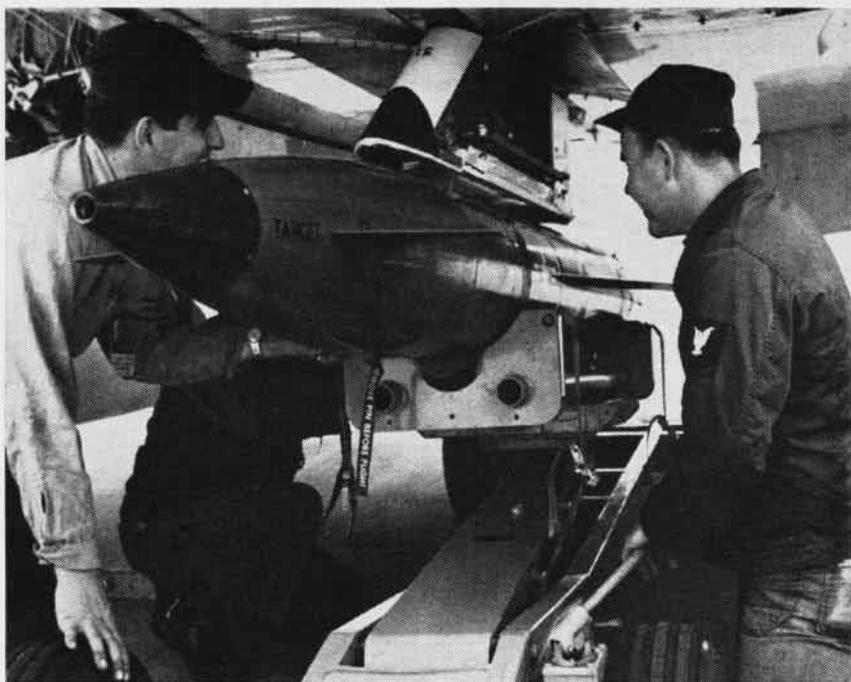
Centers previously consolidated were at Pittsburgh in October 1962; Spokane in April 1963; Norfolk and El Paso in June 1963; St. Louis and Detroit in July 1964; and Phoenix in August 1964.

Puget Sound Tender Returns Ends Extended WestPac Cruise

The 14,000-ton seaplane tender, USS *Salisbury Sound* (AV-13), arrived at home port, Oak Harbor, Washington, June 26 after a seven-and-one-half-month deployment to the Western Pacific. It is currently Puget Sound's only permanently assigned Naval vessel to deploy regularly to that area.

Manned by 650 officers and men, the ship supported air antisubmarine warfare and seaplane operations conducted by the U. S. Seventh Fleet, and served as flagship for Rear Admiral Richard L. Fowler, Commander of Patrol Forces, U. S. Pacific Fleet. Her seaplanes flew regular ocean surveillance and patrol flights in support of Seventh Fleet operations in the off-shore areas of Vietnam and throughout the Western Pacific.

The USS *Salisbury Sound* is commanded by Capt. Ernest R. Horrell.



MISSILE TECHNICIANS of Guided Missile Unit 55 at Naval Missile Center, Point Mugu, California, load an AQM-37 target missile aboard a Skyhawk for airborne test and evaluation.

MISSILES ARE THEIR BUSINESS

GUIDED MISSILE UNIT 55 was commissioned at Point Mugu in 1957 to assist in the development and evaluation of the *Regulus II* guided missile. Three months later the unit was told to assist in the maintenance, handling and recovery of all surface-to-surface missiles, their components and their testing equipment. GMU-55 is now responsible for assisting in the development and evaluation of specific guided missile systems and the design and fabrication of astronautic systems.

The unit, under the command of LCdr. Carl D. Davis, Jr., performs these missions with a complement of nine officers and 103 enlisted men. Combining a wide variety of talent to accomplish their mission, they keep an assortment of machinist's mates, gunner's mates, missile technicians, electronics technicians, storekeepers, electricians, fire control technicians and yeomen all under the same roof.

The unit itself is divided into three departments—ground launch, sea launch and air launch. They

maintain and support the MQM-15A, the target version of the *Regulus II* missile and the RIM-2A, the target version of the *Terrier*. They also support the *Jindivik* target drone.

The unit provides an assembly and launch team for research and development work on various rocket vehicles. Its members are working on the *Hydra*, a sea-launch concept, and the *Tidal* which provides for the launching of rocket vehicles from free-floating capsules and tubes. Another of their projects is *Sea Horse*, which involves the launch and sea recovery of a liquid-fueled vehicle.

Other tasks include the training of personnel from other units, assisting contractor development programs, and aiding Department of Defense research laboratories. The training program is used by the Pacific Fleet and the Operational Test Evaluation Development Force. Both send personnel to be trained in the maintenance, handling and operation of a great variety of aircraft, air-launched missiles and astronautic systems.



PARIS AIR SHOW HIGHLIGHTS



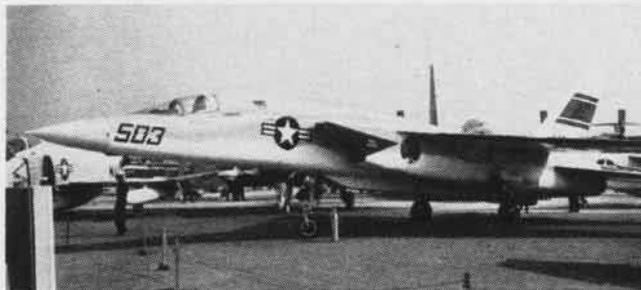
ASTRONAUTS WHITE AND McDIVITT WITH WIVES AND VICE PRESIDENT HUMPHREY WERE GOOD WILL AMBASSADORS



THE BLUE ANGELS PRECISION FLIGHT DEMONSTRATION TEAM OPENED THEIR EUROPEAN SWING AT PARIS AIR SHOW



NAVY'S INTRUDER PROVED ITS LONG-RANGE CAPABILITY BY ITS 3,500-MILE, NON-STOP FLIGHT TO PARIS



NAVY DISPLAYED SARATOGA'S RA-5C'S FROM RVAH-9



RUSSIA SHOWED COMPOUND HELICOPTER WITH WINGS

THE VICE PRESIDENT of the United States, Hubert H. Humphrey, with the Navy's pride, the *Blue Angels*—all this, and the *Gemini-4* Astronauts too—added just the right touch of glamour to the United States' participation in the major aviation exhibition of the year, the Paris Air Show in June.

According to *Aviation Week*, "the *Blue Angels*' performance was so outstanding that they were the only one of seven aerobatic teams to draw applause from the multitude jamming Le Bourget on the final day. Even the French newspapers gave them the accolade of superiority in this greatest competition of the past two years."

For the first time in all the 19 years since the *Blue Angels* were organized, they flew in European skies, opening their tour of France, Finland, Denmark, the Netherlands and England.

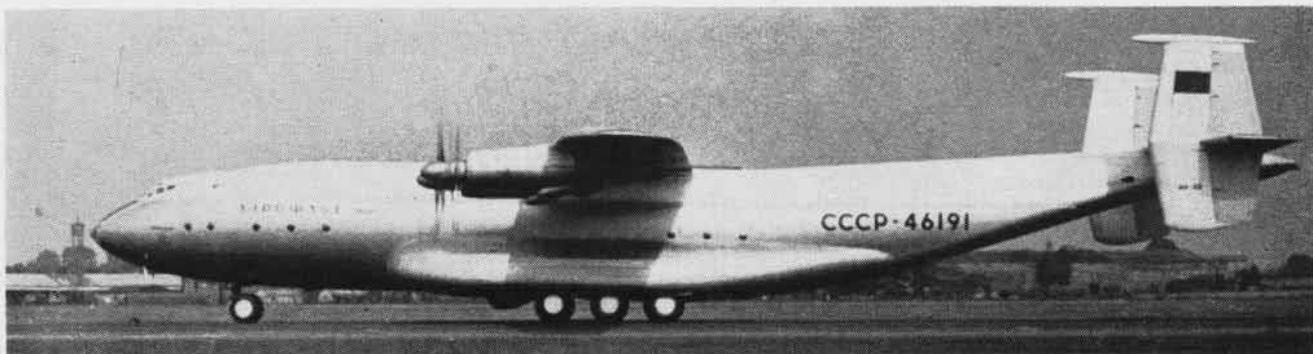
U. S. Naval Aviation was represented at the show by the RA-5C *Vigilante*, the A-6A *Intruder*, F-4B *Phantom*, F-3 *Orion*, E-2 *Hawkeye*, UH-46 *Sea Knight*, F-8E *Crusader*, A-4C *Skyhawk* and a TA-4E mockup.

The A-6A *Intruder* (from NATC PATUXENT RIVER) made a dramatic entrance to the show by flying directly from Long Island's Peconic airfield to Le Bourget. To make the 3,500-mile, non-stop, non-refueling, trans-Atlantic flight, the *Intruder*

was equipped with five extra drop tanks carrying an additional 2,200 gallons of fuel. The A-6A was piloted by Commander Robert Pollard and Bombardier-Navigator Lt. John Griffith.

On the 14th of June, 16 F-8 *Crusaders* from USS *Shangri La* made a fly-over. The F-8's were from VF-13 and VF-62, led by the C.O. of VF-62, Cdr. P. R. Craven.

Among the objectives the Secretary of the Navy had listed for Navy's participation in the Paris Air Show was that of projecting an image of the United States as a world leader in the aviation industry and aerospace research and to demonstrate U. S. achievements.



USSR INTRODUCED THE HUGE 700-PASSENGER AN-22. FOUR DOUBLE COUNTER-ROTATING PROPS PROVIDE THE POWER

PLAT: TELEVISION WITH A PURPOSE



AT THE REMOTE control console, Gerald D. Clark, ICFN, selects camera positions to be relayed to the closed-circuit TV receivers placed in squadron ready rooms, on the bridge, and on the LSO platform aboard *Bon Homme Richard*. The system is known as PLAT.

TELEVISION was once called a "vast wasteland" by a former chairman of the Federal Communications Commission.

Aboard USS *Bon Homme Richard*, however, TV presents no wastelands. Ocean wastes, maybe—but, even so, *Bonnie Dick's* Pilot-LSO Landing Aid Television (PLAT) serves a valuable purpose for pilot training and instruction, as it does in most CV's.

Somewhat similar, though smaller, than the setup of a typical TV studio, *Bonnie Dick's* PLAT system is used to record every landing and launch made by the carrier's aircraft. What the system picks up—and that includes the voices of the Air Boss and controllers over the radio circuits—is recorded on two-inch magnetic video tape for playback when requested by pilots during a lull in operations. Ten of the tapes, with 1½ hours' play time each, are rotated.

Like ordinary magnetic recording tape, that found in *Bonnie Dick's* PLAT system can be erased

By Hugh O'Haire, J03
Photos by J. F. Falk, PH1

and re-used. It is re-used, unless there is an accident and the tape must be forwarded to ComNavAir-Pac for evaluation, or unless a re-run is requested so pilots can evaluate flight operations.

By giving a pilot the chance to "look himself over" after he completes a flight, PLAT helps him spot possible safety hazards or a bad approach.

The system also serves the landing signal officer. A monitor installed on the LSO platform enables the LSO and his trainees to better "guide in" aircraft—a far cry from WW II and Korea days when the LSO had nothing but sunglasses to protect his eyes from the sun's glare as he used brightly colored paddles to signal a plane.

Bonnie Dick's PLAT system has four TV cameras.

The lenses of two of them poke through accesses at the centerline of the flight deck. Covered for pro-

tection by a circular steel disc called a "top hat," these cameras—one is a standby—view a plane as it approaches for a landing. Cross hairs show if it is "in the groove" and on a glide slope that will set it down properly.

On the island, a third camera covers launches and provides aircraft identification with a side view. It also televises landings, showing which wire a plane caught and presenting a wider view of flight deck activities as aircraft come in.

Camera number four is constantly focused on a data board which provides wind and aircraft speed and time of event. It appears as a sort of "tote board" at the top of the TV screen.

An ICman on watch at a control console in the PLAT control room punches buttons to select the best camera view of operations. The image is transmitted to TV receivers in all squadron ready rooms and on the bridge, in addition to the LSO platform.

The system was introduced



THREE LEVELS above the flight deck, a camera operator covers the launch of an F-8 Crusader. He can also swing around for landings.



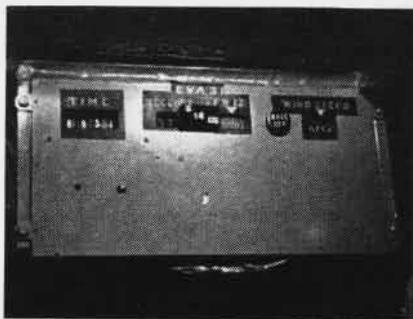
PO-IN-CHARGE of Bon Homme Richard's PLAT control room, Ronald D. Ennis, ICI, switches the system's monitor to forward camera.



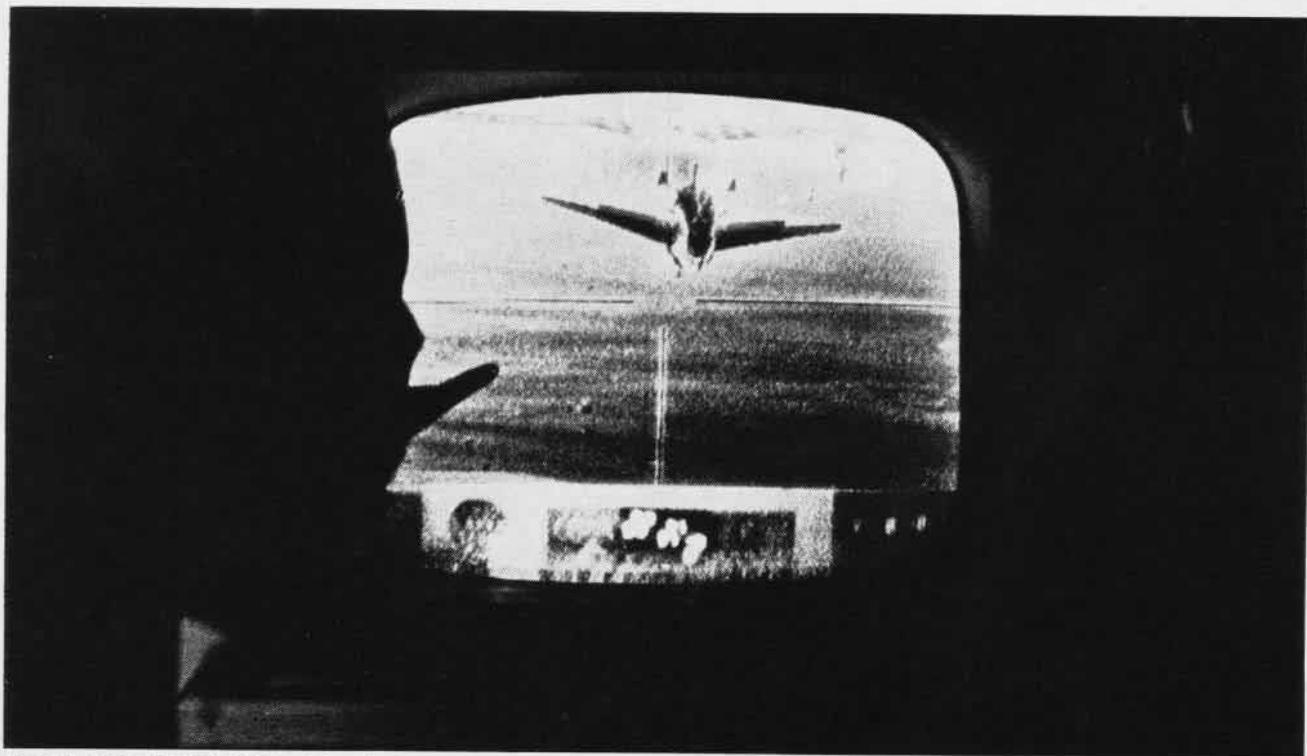
A NEW ROLL of magnetic tape is threaded on video tape recorder by Phillip Cano, IC3.

aboard *Bonnie Dick* in May 1962. Most of the personnel who man it received their basic education at a 16-week school in Great Lakes, Ill., but at one time specialists had to be trained by the civilian firm that makes most of the equipment used by carriers.

Secret of the system's maintenance, says CWO Charles G. Johnson, the ship's electrical material officer, is controlled temperature. The PLAT shop is steadily maintained at an even 72 degrees.



THIS 'TOTE BOARD' provides additional data to those watching *Bonnie Dick's* PLAT.



PILOTS VIEW PLAYBACKS of their landings in *Bonnie Dick* ready room. The two-inch magnetic recording tape used enables pilots to

evaluate landings within minutes after they are made. Ten of the tapes are used aboard the CV. They are rotated unless playback is requested.

AIR TRAFFIC CONTROL BY AUTOMATION

By Cmdr. R. H. Fahrney, USN

THE NATION'S air traffic control system is the heart of both the civil and military air network. A vast complex of about 200,000 miles of aerial highways has been established within the continental United States. New solutions to problems facing the air traffic control system will evolve from progress being made today in system engineering.

Year-long tests of two new systems are now under way. The Federal Aviation Agency is conducting the field trial in two parts. The operational test of the Advanced Radar Traffic Control System (ARTS) is being conducted in the airport control tower, Atlanta, Ga. The test of Stored Program Alpha-numeric (SPAN) is being conducted in the high altitude portion of the air route traffic control center at Indianapolis.

In both tests, aircraft radar blips will be electronically "tagged" with luminous letters and numerals (alpha-numeric) grouped in rectangular-shaped tags (data blocks). The tag will then follow the aircraft radar blip across the air traffic controller's radar screen, providing the controller with vital flight information.

The computer-driven ARTS and SPAN equipment will automatically display in the alpha-numeric tag not only continuous identity, but also the actual altitude for those aircraft equipped with automatic altitude reporting transponders. Furthermore, the altitude will, like mileage increments on an odometer, be ticked off at each 100-foot level as the plane climbs or descends. When an aircraft is not equipped for automatic altitude reporting, the controller may manually insert into the alpha-numeric tag the pilot's assigned altitude or his altitude as last reported by radio.

Side-by-side operation of both new and existing equipment will permit comparisons as well as limited experimentation with the new equipment while in no way decreasing the safety and efficiency of air



EQUIPMENT UPDATES DATA AT NEW YORK CENTER COMPUTER SECTION

traffic control during the trials.

The equipment used in SPAN is very similar to ARTS except that the direct view storage tube (DVST) system is not included since it was designed for short range (airport) traffic control rather than for the high altitude, en route portion of the airways system. Furthermore, the SPAN system does not track normal (non-beacon) radar targets since aircraft in high altitude airways are transponder (beacon)-equipped.

Under the present system, computers located at the New York, Boston, Cleveland, Washington, and Indianapolis Centers have assumed the time-consuming manual chores of data preparation in the form of flight progress strips for air route traffic controller use. This fixed format presentation of vital information enables the controller to "fix" an aircraft in three dimensions and to determine its relationship to aircraft in the system. Except in the five centers mentioned, these data are handwritten and computed by assistant controllers, utilizing their knowledge of the airway system, aircraft operating characteristics and weather factors.

The use of automatic data proc-

essing for air traffic control is not intended to relieve the controller of his decision-making function, but to permit him to devote his full attention to those duties requiring experience and the exercise of human judgment.

Let us follow a typical flight plan through a center to demonstrate the role of the computer in today's operations. Our theoretical journey will be in four phases: data gathering, data processing, data display and data interchange.

Data gathering for military activities generally starts when the flight plan is submitted. The pilot's intentions or plan is transcribed into computer language and transmitted directly to the air route traffic control center computer via teletype. Some commercial activities use stylized flight plans which have been pre-stored in the computer memory circuits and are immediately available.

In *processing the data* just received, it is necessary to separate the data to be processed for use in the system at a later time, such as a proposed flight plan, and active or real time (now) data. Next, the variable flight plan data must be integrated with fixed data which is

stored in tabular form in the computer as parts of its permanent memory. These tables contain vital information; for example, all airways of concern to the area, all fixes associated with the airways, mileage between fixes, all airway junctions, and X-Y coordinates for direct route processing. This information is constantly brought up to date.

There is no limitation to the route configuration which can be filed as part of a flight plan. Routes may consist of airway segments or direct point-to-point routes, expressed latitude/longitude, distance and direction from a navigational aid, RHO/THETA or any combination thereof. The computer program is written to select the required "fix postings" for each flight regardless of the type of route configuration filed. When the computer has internally assembled the data required, a flight progress strip is generated for the departure controller serving the departure airport. When the aircraft departs, the departure time is inserted in the system with a special input device called CUE (computer updating equipment). The computer will now apply to the previously accumulated fix data other factors, such as true airspeed, climb/descent

profiles and wind data at altitude levels, and will generate fully computed flight progress strips for controller use.

The data produced by the computer will be *displayed* on "strip printers" at the controller-operating positions. In more advanced programs, the computer will be capable of displaying data on radar indicators as well as electro-mechanical tabular displays.

In *data interchange* under normal, non-computer environments, the direct point-to-point telephone is used between control positions, and between centers to forward and coordinate flight data. In the computer environment, when the computer has determined that data must be forwarded to an adjacent computer center, it will generate an inter-center message for transmission by 100-word-per-minute teletype circuits to the required facility. When adequate updating equipment for amending flight data generated by control actions is available, it will then be possible to further reduce the coordination now required.

In summary, the flight plan you as a pilot file at NAS OCEANA, Va., today, for instance, will be sent directly to the Washington Air Route Traffic Control Center in

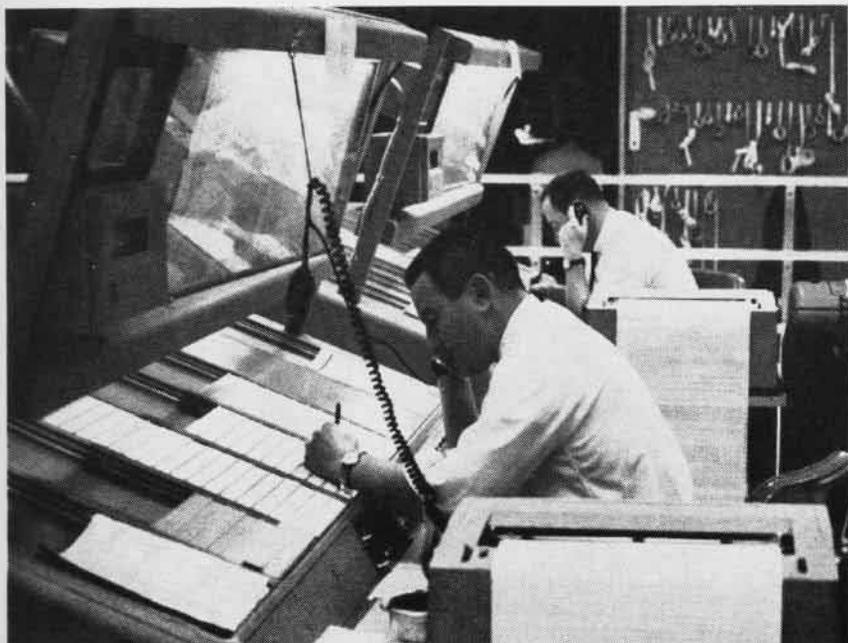
computer language via teletype. In a matter of milliseconds, your plan will be processed, then displayed at the proper control position to await the actual time of departure.

THE SYSTEM OF TOMORROW must be evolutionary in nature so as to maintain a safe operation during transition from phase to phase. Further assistance from the automatic data processor and its associated equipment can be expected in all areas. The initial flight data which today are received by teletype or telephone and then inserted into the computer may, in the not too distant future, be inserted directly into the system by remotely located input devices, thereby eliminating one step in data acquisition.

Maintenance of target identity on a radar indicator is a function which can be accomplished by computers. Automatic and semi-automatic target tracking could be accomplished. The computer can also provide the controller with alpha/numeric data on the radar display, thereby decreasing his reliance on tabular displays. The computer can also be programmed to scan its memory and determine when two or more aircraft may violate the required longitudinal, horizontal or vertical separation minimums.

The use of the computer to establish optimum arrival and departure sequence is a fertile field for the automatic data processor. The controller may, in the future, be provided with valuable data, such as the required aircraft maneuvers or speed controls which will enable him to establish the optimum aircraft spacing to serve the terminals in the system.

Since the beginning of air traffic control, the controller's tools have consisted largely of an assemblage of equipment "patched" into the system to keep abreast of the steady growth of air traffic. Introduction of automation, as recommended by the President's 1961 Project Beacon Study, required a revised design for the national airspace. The continued growth of automation, the trials of ARTS and SPAN, and the great possibilities projected for automation make it possible to predict with assurance a new and complete National Airspace System.



DATA WHICH HAVE BEEN RECEIVED BY PHONE OR TELETYPE ARE INSERTED

PACIFIC AIR WINGS ON PATROL



A PATROL SQUADRON 19 P-3A Orion fires a salvo of seven folding-fin practice rockets into a dummy target in Kuluk Bay, Alaska. The flight was part of an Armed Forces Day demonstration at Adak. The P-3 was flown by Cdr. Howard, squadron C. O.

THE HELM of Patrol Squadron 1 changed hands during official ceremonies at NAS WHIDBEY ISLAND on May 3, 1965. Commander W. T. Vierregger, in his farewell remarks, reiterated a comment originally made by Captain R. L. Dahllof, ComFAirWing Six, when he called VP-1 "the best prepared squadron ever to deploy to the Far East."

The new Commanding Officer, Commander F. D. Armstrong, Jr., has served with the squadron as Executive Officer for the past year. Commander Armstrong served with the Pacific Missile Range before reporting to the squadron.

* * *

During Armed Forces Day celebrations at Adak, Alaska, 300 personnel observed an aerial display by two VP-19 P-3A Orions as they fired rockets and dropped unarmed depth charges on a dummy target in Kuluk Bay. The two aircraft were manned by VP-19's crews 1 and 2, commanded by Commander Donnell Howard and Commander Albert Lesperance.

Throughout the afternoon, small groups of Armed Forces Day observers toured four aircraft. The display included a P-3A Orion from VP-19, a P-2V Neptune from VP-42 and a UH-2B amphibian and HU-16D helicopter attached to NS ADAK.

Edward James AEI, attached to Patrol Squadron 19, has designed a technique for operating and aligning the P-3A Orion inertial navigation system that will elimin-

ate purchase of additional electronic equipment and improve the use of the present system.

During a deployment in Adak, the squadron's P-3A Orions were operating in the Aleutian areas. At NS ADAK, high velocity winds prevented accurate alignment. To counteract the system errors caused by the buffeting winds, the manufacturers designed additional equipment. James researched the schematic diagrams and discovered a means of bypassing key circuits and modifying the alignment procedure. His method disproved the need for additional components and resulted in a considerable saving for the Navy.

James was presented a letter of commendation by VP-19's Commanding Officer, Cdr. Howard.

* * *

The red carpet for four amateur radio operators was rolled out by Patrol Squadron 46 officers and men. Honored for their services were Californians John Collins of Los Altos, H. A. Thompson of Santa Clara, Herbert Mesler of San Carlos, and William Townsley of Oakland.

Commander Dana A. Overman, Jr., Commanding Officer, presented squadron plaques and letters of appreciation to the "ham" operators in recognition of their volunteer service during the squadron's seven-month deployment to Adak, Alaska. Often working until early in the morning, they relayed radio

calls through their equipment to families of the deployed sailors.

Gus Drummond, AT1, and Gary Jackson, AT3, are licensed operators who worked with the civilians during the deployment.

* * *

In mid-April, VP-17 underwent its annual ADMAT inspection conducted by Captain D. G. Gumz, Commander Fleet Air Whidbey. Especially worthy of mention was the excellent condition of the squadron aircraft. The maintenance department, along with the flight crews, worked many long hours to get the airplanes in near-perfect condition. The squadron then conducted intensive training operations in preparation for their operational readiness inspection.

* * *

March was a very special month in the lives of three Patrol Squadron 50 men. Perry E. Bumgarner, HMC, was transferred from active duty to the Fleet Reserve. Chief Bumgarner served in the Navy for 23 years during which time he earned 12 decorations or awards, including the Silver Star and the Purple Heart.

During squadron ceremonies, Commander W. A. Van Train, Jr., Commanding Officer, administered the Oath of Office on initial commissioning as Limited Duty Officer to Ens. Richard J. Van Pelt (Aviation Electronics) and Ens. Gayle W. Bass (Aviation Maintenance). The new officers will report

10 NAS PENSACOLA for eight weeks of training before assignment.

* * *

Just 20 miles south of North Island, a room full of Mexican children burst into applause in thanks for their daily meal. The three Navy men who were the recipients of the applause represented 325 officers and men of VP-48 out of NAS NORTH ISLAND.

The children, ranging in age from one to about twelve years, are daily visitors of the Casa Amiga De La Oberra Mission, Tijuana, B. C., Mexico. They numbered approximately 90 that day but occasionally there are more than 150.

Delivering the squadron's monthly contribution of food and clothes were Ltjg. P. E. O'Brien, J. C. Luse, ATC, D. Soto-Mattos, A02.

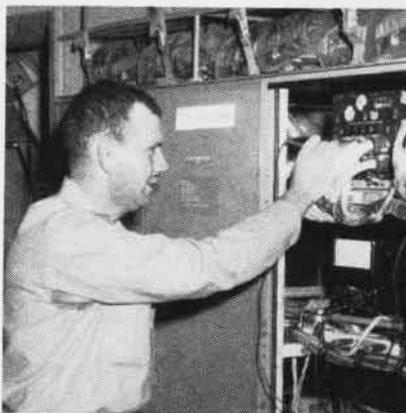
The children are "adopted" daily by Sister Maria Escobar, Mother Superior of the Mission. Most of their parents are unemployed and many have no families. Since "adopting" the children of the Casa De La Oberra Mission, VP-48 has given more than clothes, toys and food staples—they have given hope and happiness.

* * *

Twenty-one enlisted men in Patrol Squadron 17 were presented advancement certificates during an awards ceremony. The men are part of the first of six increment advancements which will promote some 60,000 petty officers Navy-



THE "ADOPTED" FAMILY of VP-48 congregates at the Casa Amiga De La Oberra Mission in Tijuana, B. C., Mexico, for the monthly visit. Unit donates food, clothes and toys.



JAMES, AE1, VP-19, develops technique to accurately align P-3A navigational system.

wide by October 16 of this year.

The certificates were presented by Commander R. J. Sadler, VP-17 C. O., to the following men: R. C. Anderson, AXCA; P. Z. Angel, ABH2; R. H. Bowen, A03; W. H. Cook, ATR3; M. W. Fermon, AX3; W. Y. Gayle, ATR3; J. R. Hart, AX3; L. D. Labbe, AE3; C. J. Langille, ADJ3; A. R. Manno, AX3; E. A. McDonough, A03; R. Melanson, ADJ3; T. J. Mueller, PR1; J. D. Mullis, AE3; G. O. Naeger, AE3; W. T. Royal, AX2; T. W. Smith, AX3; T. W. Urban, AX3; L. J. Winlund, AX2; R. D. Woodman, AX1; M. T. Tyler, OA3.

* * *

Captain Robert L. Dahllorf, Commander Fleet Air Wing Six, recently congratulated Patrol Squadron Two on the quality of its reconnaissance photography while on deployment in the Western Pacific.

The squadron also received commendation for the outstanding aircraft availability rate during the deployment. Employing Fleet Air Wing Four maintenance procedures, the squadron maintained an average aircraft availability of over 85% and on many occasions maintained 100% availability. This was accomplished in spite of flight hour loads double the normal rate and extensive advance base operations. The results obtained demonstrated the value of an aggressive, flexible, thorough maintenance program.



AFTER RECEIVING their advancement certificates, 21 men of VP-17 line up with Commander R. J. Sadler, C.O. Fifteen men sewed on the petty officer's crow for the first time.

VT-5 MAINTENANCE PROVES ITS WORTH



AFTER 1,000 HOURS WITHOUT A MAJOR OVERHAUL, AIRCRAFT IS CHECKED

BASIC Training SAUFLEY FIELD Squadron Five, NAAS SAUFLEY FIELD, Pensacola, reached a goal in aircraft maintenance when T-28C, Bureau No. 140564, went over the 1,000-flying-hour mark with the same R1820-86A engine.

The T-28 was piloted by LCdr. Clarence Prewett when the milestone of 1,000.4 hours was reached by the engine. The aircraft, with this engine installed, had logged 9,182 landings.

Many T-28's have passed the

1,000-hour mark before, but never one that has been flown on the gruelling mission performed by VT-5. "Our engines are operated at 'flank speed' continuously," commented LCdr. Prewett, the Maintenance Officer.

VT-5 carrier-qualifies student Naval Aviators. The entire syllabus consists of numerous field carrier landings. The big day is the one on which students make actual landings aboard USS *Lexington* in the Gulf of Mexico.

"Not only are our engines operated at flank speed," says Lt. Reid Bronson, the Assistant Maintenance Officer, "but there is an additional problem in that we have to run them in an under-boost condition since the carrier break is at full RPM with throttle off."

This past year VT-5 has increased engine longevity to an average of 512 hours as compared with 255 hours in 1962 and 315 in 1963.

Eighteen specific cases of impending failures were detected in 1964. Steps to detect such failures had been evolved from the conferences with the CNABaTra Staff, Wright-Patterson representatives and NAS O&R and VT-5 Maintenance Officers. These were:

1. Removal of all main strainers every 10 days.

2. Use of medical filter paper with analytical inspection made of metal discovered.

3. Use of scavenge strainers.

4. Special metal contamination inspections.

5. Inspection of sumps and strainers of suspected aircraft after each flight.

6. Maintenance of records and filing of metal samples for future reference and comparison.

After analysis of the probable area of impending failure, squadron maintenance people, if it were within their capability, made the correction. If not, the work was transferred to O&R PENSACOLA.



PIECE OF METAL IN STRAINER IS CAREFULLY SCANNED



CHECKOFF LIST IS USED AS MEN GO OVER THE ENGINE



LAUNCHES OVER TEMPORARILY, CREWMAN DOZES

When you're working up to 16 hours a day to launch aircraft on responsive strikes against the communists in North Vietnam, you soon learn to snatch your sleep when there's a lull in flight operations—and wherever you happen to be at the moment. Witness these flight deck crew members of the Seventh Fleet's USS Coral Sea (CVA-43).

S L E E P



STEEL LADDERS HAVE NOVEL USE



TAIL OF AN F-8 MAKES A FINE BED



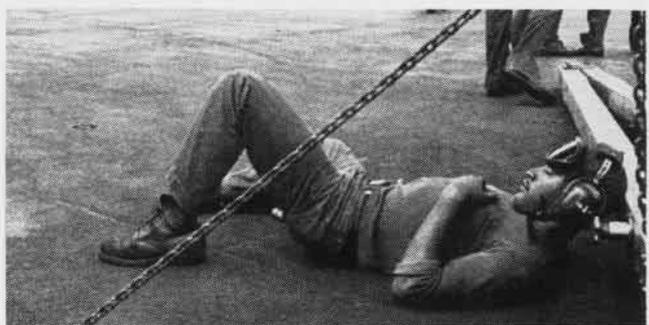
AN NC-5 OPERATOR SLEEPS ON HIS MOBILE POWER UNIT BESIDE AN F-4



HE WORKED VERY LATE LAST NIGHT



OXYGEN GEAR HANDLER IS UNDISTURBED BY NOISE



AN ORDNANCEMAN CATCHES A FEW QUICK WINKS

SELECTED AIR RESERVE



FOR ENLISTING most recruits in one quarter, C. M. Rankin, CS1, 2nd from left, receives his trophy from Capt. E. H. Lowrance.

VP-883 Man Wins Trophy

Petty Officer C. M. Rankin, CS1, was the winner of the Commander's Recruiting Trophy for enlisting the most veterans and recruits in the Naval Air Reserve at Olathe during the third quarter of fiscal 1965.

Captain E. H. Lowrance, Air Wing Staff 88 Commander, bought the trophy and authorized its award as a recruiting incentive.

In the picture above, in addition to Captain Lowrance and Commissaryman Rankin, are Commander T. O. Gravitt (left) and B. D. Adkins, ADRC (right), runner-up

in the recruiting race. This was the first presentation of the trophy.

Photo-Mosaic Produced

To familiarize transient pilots with the local area obstructions to flight and restricted zones in the area, NAS NEW ORLEANS put a photo-mosaic on the bulkhead.

The groundwork for the mosaic was laid by members of Naval Air Intelligence Unit 821. LCdr. R. B. Harter, NAIRU Program Officer, established the boundaries of the area to be photographed.

At that point Marine Photographic Squadron VMJ-4 carried

the ball. They took clear, high quality, good contrast photos of NAS NEW ORLEANS, the city itself and the adjacent land mass. At the conclusion of this task, the Photo Specialists returned a stack of 8 x 10-inch photographs to the Air Intelligence Unit.

On the day of installation, officers and enlisted men alike agreed that the project had given them excellent training.

Exchange Favors Navy

Ralph Roberts, a former USAF Major, has traded his Air Force headgear for the hat and gold



BOUND FOR HAWAII in an Alameda YR-883 C-54 are three Navy nurses: Kathleen Reardon, Patricia Spinazola and Cecilia Lech.



LCDR. WILLIAM KLONER, Jewish Chaplain for NAS New York, Air Wing 83, holds Torah given by Jewish War Veterans.



MARINES AND NAVY reservists cooperated to produce this photo-mosaic mounted on a bulkhead at NAS New Orleans.



BILL FORSMARK, PH1, NARTU Norfolk, is contender for the Eastern Soaring School's Trophy for the one airborne longest.



CDR. C. J. EADLE, VP-16 C.O., makes Cdr. W. R. Ost, VP-702, and his Dallas Reservists honorary Eagles for their training record at Jax.

braided of the Navy at NARTU JACKSONVILLE.

Enlisting in the Navy in 1943, he served as an enlisted man aboard U. S. Navy carriers. After his tour, he attended the University of Florida where he received his Air Force commission through the reserve officer training program.

Now as a lieutenant in the Naval Air Reserve, he attends weekend drills each month at NARTU JACKSONVILLE.

For the Defense

At the Boot Camp at NAS NEW YORK, every Boot is taught the fundamentals of self defense, Judo



H. MANFRED EHRHARDT, photographer attached to the NARTU, almost swept the field in prizes at NAS Alameda when he won first place and "best of show" for a color photograph, entitled "Hummingbird Feeding," a third prize for an oil painting, and still another first for color photo.

and Karate as part of his training. Instructor is Bill Wiener, AB1.

CPO's Mess Night

The Chief Petty Officers of NAS NEW YORK held their first annual CPO Mess Night. More than 50 of the station's Chiefs attended the occasion which was held at Toots Shors' night club. The honor guest was Mr. Richard D. Peters, Editor of the New York World Telegram and Sun.

Coordinator and organizer of the event was Manuel Garcia, AKC, of Procurement and Recruiting.

The name "Mess Night," inherited from the British, means a formal dinner given by the Mess for its members and guests.

Honor for Olathe Reservist

A Naval Air Reservist from Kansas has won a Commendation for Achievement from the Secretary of the Navy, the Honorable Paul H. Nitze. Lt. Hale H. Lait was honored with a citation and commendation ribbon bar for his devotion to duty during the Alaskan earthquake of March 27, 1964. The commendation cited Lt. Lait for working "day and night under the most disagreeable and difficult conditions."

While Lt. Lait was serving on temporary active duty on the staff of the Alaskan Sea Frontier Commander at Kodiak, the Anchorage-Kodiak area was devastated by an earthquake and seismic sea waves. The electric power plant at the Naval Station on Kodiak was put

out of commission. Lt. Lait volunteered his services and used his knowledge of electrical engineering to reactivate the power plant. He also restored electric power to two ships then in port and made possible a hook-up of portable power and heating units.

Deputy CNAResTra

Captain Edelen A. Parker, former Commanding Officer of NARTU ANDREWS AFB, has been named to the newly created post of Deputy Chief of Naval Air Reserve Training. Captain Parker will be on the staff of Rear Admiral George P. Koch, NAS GLENVIEW, Illinois.



AS HER FIRST official act as the new "Miss Navy Reserve," Kathleen Jean Johnson, cuts the ribbon for Captain W. J. Scott, C.O. of Naval Air Station, Twin Cities, to open officially the station swimming pool for the 1965 season. Miss Johnson was chosen from a field of 12 beautiful contestants.

AT SEA WITH THE CARRIERS



NOW EMBARKED in USS *Independence*, these A-6A Intruders are now on duty in WestPac. They are assigned to VA-75, called the first operational A-6A squadron assigned to a carrier. *Independence*, homeported in Norfolk, steamed to the Pacific to join the 7th Fleet.

ATLANTIC FLEET

INDEPENDENCE (CVA-62)

As *Independence* steamed out of Norfolk, bound for what was called the first assignment of an East Coast carrier to the Seventh Fleet in more than a decade, CVA-62's crew members claimed another "first" with the embarkation of the only operational A-6A Intruder squadron in the Fleet.

The squadron is VA-75. Its In-

truders are subsonic, all-weather, high and low altitude aircraft that can fly from New York to Los Angeles without refueling, can hit moving targets, and can make pinpoint bombing runs. Skipper of the CVW-7 squadron is Commander Leonard A. Snead, who has flown the *Intruder* since the Navy accepted it.

Crew members of an HU-2, Det. 62, helicopter aboard CVA-62 rescued the co-pilot of a UH-2A *Seasprite* helo that crashed shortly after takeoff. Aided by a search-

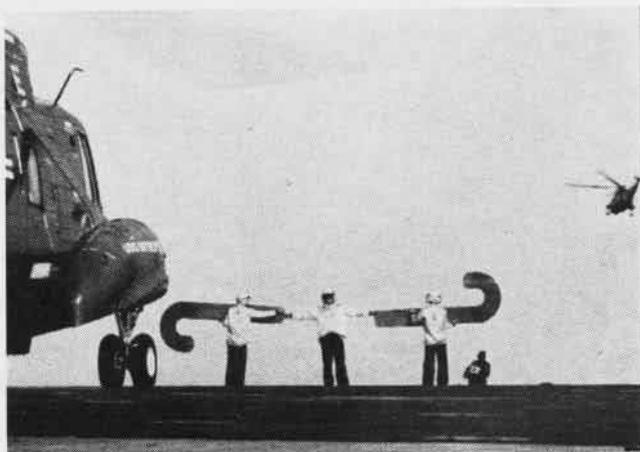
light from the oiler USS *Nantahala*, they hoisted Ltjg. Stanley R. Kruk aboard. The oiler's whaleboat picked up another crew member of the downed *Seasprite*, Ltjg. Richard K. Melcher. The HU-2 "Angel's" crew included Lt. Lawrence B. Kauffman, Ltjg. David C. Shelby, William B. Richardson, and Cecil W. Watkins.

LEXINGTON (CVS-16)

Marine 1st Lt. Peter D. Williams made the carrier's 120,000th arrested landing in a T-2A *Buckeye*.



AFTER MAKING *Lexington's* 120,000th arrested landing, Marine Lt. Peter D. Williams is congratulated by Capt. Q. C. Crommelin.



GIANT 'CANDY CANES' are held by enlisted landing signalmen, assigned to Guadalcanal, to mark 20,000th accident-free landing.



INTREPID was host ship for Spanish sailing ship *Juan Sebastian de Elcano* in New York.

GUADALCANAL (LPH-7)

Ltjg. W. J. Doyle, HS-3, flew an H-3 *Sea King* aboard to make *Guadalcanal's* 20,000th accident-free landing, 22 months to the day after the LPH was commissioned.

INTREPID (CVS-11)

"You'd think the crew of a ship in drydock would be left alone to get its work done," lamented *Intrepid's* Ens. R. K. Martin. Such is not the case for CVS-11, however. Witness:

"Since April 16," Ens. Martin reported, "when this carrier entered Brooklyn Navy Yard for overhaul, she has hosted a Spanish sailing ship and two Canadian destroyers; given tours to Cub Scouts, Sea Cadets, church groups, and the highest-ranking officer of the Royal Saudi Arabian Navy; and she has provided marchers for two parades down New York's Fifth Avenue."

Demands on *Intrepid* crew members, he said, ranged from requests for guest speakers to calls for baggage handlers. "On top of it all, the ship recently got a new skipper (Captain Guiseppi Macri)," Ens. Martin declared.

The *Intrepid* officer said the latest special request came from network television. NBC needed a boatswain's mate to pipe former



USS LAKE CHAMPLAIN, operating in Atlantic waters, recently turned 20 years old. Her crew celebrated the event with an Anniversary Ball held in ASW carrier's hangar bay.

President Harry Truman through a strip of silent film that showed him boarding a ship in the documentary "Surrender of Japan." *Intrepid's* Gerald F. Yost, BM2, was sent around. He piped away into a microphone until the former President was safely over the brow.

Actually, Ens. Martin wasn't really decrying the demand for the talents of *Intrepid* sailors. He remembers well what such projects do for the Navy's public information program.

Besides, *Intrepid* isn't going anywhere until October anyway.

SHANGRI LA (CVA-38)

HU-2's seventh 1965 rescue was



RADM. E. R. KING and **CWO J. R. Woolyhand** recall old times in *USS West Virginia*.

made by a Det. 38 team that pulled *Shangri La* crew member Ronald Cheran, AMHAA, out of the Mediterranean. Cheran fell off the carrier's No. 3 elevator. The rescue crew included LCdr. Joseph E. L. Dugas, pilot; Ltjg. Craig M. Forsgren, copilot; Allen R. Wells, ADR2; and David C. Moehnke, AE3.

Two former shipmates of the battleship *USS West Virginia* reminisced about experiences that happened 25 years ago when Rear Admiral E. R. King, Task Group 60.2 commander, and CWO J. R. Woolyhand, ship's boatswain, got together in *Shangri La* for their first meeting since 1941.

The unplanned meeting took place shortly before Admiral King transferred his flag to the cruiser *USS Little Rock* and the two again sailed separate courses. They were Ens. King and Woolyhand, BMC, when both were aboard *West Virginia* during the Pearl Harbor attack that sank the battlewagon. Admiral King was later transferred to a destroyer, but Woolyhand helped refloat *West Virginia* and returned with her to the West Coast for overhaul.

WASP (CVS-18)

"With the eyes of the world on you, you once again turned in a

flawless performance. My heartiest congratulations." The message to *Wasp* and her squadrons was from Rear Admiral Magruder H. Tuttle, ComFAir Quonset; he was referring to the carrier's successful recovery of Astronauts James McDivitt and Edward White and their *Gemini-4* spacecraft.

After a computer failure, Command Pilot McDivitt manually fired the braking retro-rockets a single second too soon and the *Gemini-4* set down 56 miles short of the planned recovery point near *Wasp*. Even so, Commander Clarence O. Fisk, HS-11 C.O., got his SH-3A *Sea King* over the spacecraft in minutes so his crew could pick up the astronauts. Then he flew them to *Wasp*.

BOXER (LPH-4)

Marine Capt. M. Rader, HMH-461, made *Boxer's* 65,000th helicopter landing since the ship was converted in 1959.

FORRESTAL (CVA-59)

Vonda Kay Van Dyke, Miss America of 1965, was the guest of *Forrestal* crew members during a stopover in Portsmouth, Va.

ENTERPRISE (CVAN-65)

Enterprise successfully completed sea trials after her first general overhaul and refueling of all eight of her nuclear reactors.

The trials were conducted under the personal direction of Vice Admiral Hyman G. Rickover. They included full-power steaming and an emergency reversal test, aircraft launch and recovery operations, and a check of systems and equipment.

CVAN-65 began the overhaul and refueling at Newport News, Va., November 2, 1964.

ESSEX (CVS-9)

Four ships, participating in a NATO Exercise *Match Maker*, conducted combined ASW operations with *Essex* and other ships of ASWGrp 3 in the western Atlantic. All destroyer escorts, the NATO ships included America's USS *Hammerberg*, Britain's HMS *Leander*,



WRAPPING UP USS *Yorktown's* fifth WestPac deployment since the carrier was recommissioned a CVS, "Fighting Lady" crewmen line the flight deck as their ship nears home.

Canada's HMCS *Columbia*, and the Netherlands' H.N.L.M.S. *Overijssel*. A U. S. submarine, the *Sablefish*, was designated the opposition.

SARATOGA (CVA-60)

Both the 99,000th arrested landing aboard CVA-60, by Ens. Alan M. Gates, VA-36, and No. 100,000, by Commander J. R. Sanderson, CAW-3, were made in A-4 *Skyhawks*. The latter mark came just over nine years since *Saratoga* was commissioned, for what the ship says is a record.

PACIFIC FLEET



USS CONSTELLATION'S insignia is shown here. CVA-64 is in Bremerton for its overhaul.

YORKTOWN (CVS-10)

Yorktown was named one of 11 ships that embarked more than 800 U. S. Air Force Academy cadets during the First Fleet's 1965 "Falcon Cruises." The cruises are part of a summer field trip conducted annually by the Air Force to familiarize cadets with major operational commands.

TICONDEROGA (CVA-14)

Captain Robert N. Miller became *Tico's* 22nd commanding officer when he relieved Captain Damon W. Cooper during dockside ceremonies at the San Francisco Naval Shipyard.

CORAL SEA (CVA-43)

A VAH-2 A-3B *Skywarrior* made *Coral Sea's* 142,000th arrested landing. Its crew included LCdr. Charles J. Cellar, Ltjg. David G. Cohick, and William D. Hansard, AQB2.

Coral Sea crew members believe the \$14,363 they raised for Navy Relief to be a record for any ship. The drive was sponsored and coordinated by Commander G. B. Riley, chaplain.

HANCOCK (CVA-19)

Medals were presented to 22 officers assigned to *Hancock* and her embarked air wing for outstanding



NEW CENTURIONS, all VA-24 pilots, mark the event aboard USS Hancock. CVA recently returned to Alameda from 7-month tour.



CATAPULT CREW lines up VA-164 A-4 Skyhawk for launch from Oriskany's flight deck. Squadron underwent first combat in May.

performance of duty during the seven months the carrier spent in WestPac.

Admiral Roy L. Johnson, CinCPacFlt, made the presentations aboard Hancock while the carrier was in Pearl Harbor. The awards were for participation in or support of air strikes flown by Hancock pilots against North Vietnam.

Included were five Distinguished Flying Crosses, 14 Air Medals, two Navy Commendation Medals, and a Legion of Merit. Hancock C.O., Captain Frank B. Stone, received the fifth highest award a Navy man can get when he was presented the Legion of Merit.

KITTY HAWK (CVA-63)

Captain Martin D. Carmody relieved Captain John L. Butts as CVA-63's skipper. C.O. since April 1964, Captain Butts, who commanded Kitty Hawk longer than any of his predecessors, left the carrier to become a student at the National War College. Captain Carmody formerly skippered the USS Zelima (AF-49).

HORNET (CVS-12)

Hornet was one of 22 ships that formed the First Fleet's second consecutive midshipman training squadron. The squadron was designed to cruise as a unit in the eastern Pacific area, carrying more than 1,000 Naval Academy and NROTC midshipmen for training. USS Princeton (LPH-5) was also in the group.

Captain Mayo A. Hadden, Jr.,



LEGION OF MERIT is presented Capt. Stone, Hancock C.O., by Adm. Johnson.



RADM. E. C. OUTLAW receives Legion of Merit from VAdm. P. P. Blackburn.

Hornet's C.O. since July 1964, was relieved by Captain William M. Pardee during a ceremony aboard the carrier. Captain Hadden received an assignment to study at Harvard. Captain Pardee was C.O. of the USS Mispillion.

ORISKANY (CVA-34)

Three VA-164 pilots made their 500th arrested landings while they were serving aboard Oriskany. They are Commanders J. W. Roberts and J. D. Shaw and LCdr. T. R. Powers.

VA-152 pilots were hosts to an old friend when Maj. Nguyen Van Ba of the South Vietnamese Air Force boarded Oriskany to renew old acquaintances. He was one of a group of South Vietnamese pilots the squadron trained during its stay at Bien Hoa.

MIDWAY (CVA-41)

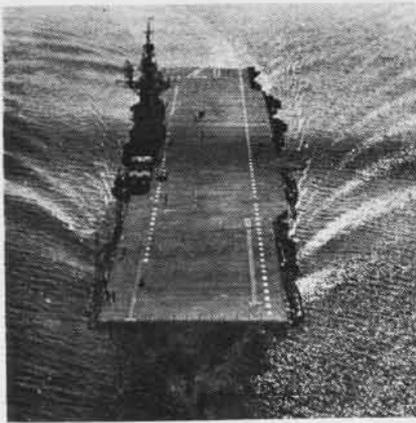
Rear Admiral William F. Bringle, Commander of Task Force 77, was presented the Legion of Merit for distinguished service in directing Fleet operations that involved air strikes on North Vietnam.

The award was given by Vice Admiral Paul P. Blackburn, Seventh Fleet Commander, aboard Midway while the carrier was operating.

Admiral Bringle was scheduled to be relieved of command of the task force by Rear Admiral Marshall W. White. He has been assigned as a Deputy Chief of Staff for CinCPacFlt.

BON HOMME RICHARD (CVA-31)

The Seventh Fleet's carrier strength jumped to four with the arrival of Bonnie Dick in WestPac. CVA-31 joined Coral Sea, Oriskany, and Midway, all at that time units of Task Force 77.



OUT OF MOTHBALLS, *USS Bunker Hill*, which sunk 140,000 tons of enemy shipping in WW II and was decommissioned in 1947, arrives at San Francisco Naval Shipyard to be outfitted as a floating test ship for the Naval Electronics Laboratory near San Diego. The carrier will simulate at-sea conditions.

Ney Awards are Announced A Carrier and NAS Rate High

In the 1965 Ney Memorial Award competition for excellence in food service, *USS Oriskany* (CVA-34) won the award in the "Large Afloat" classification.

Joined with *Oriskany* as first place winners were "Small Afloat," *USS Skagit* (AKA-105), and "Ashore" category, Naval Training Center, Great Lakes, Ill.

The first place runner-up for the "Ashore" category was Naval Air Station, Miramar, California.

Hancock Leaves Vietnam CVA Back at Homeport, Alameda

USS Hancock (CVA-19) steamed into her homeport, Alameda, Calif., ending what news releases termed "the most demanding deployment in the Far East since World War II." The CVA, with CVW-21 embarked, left for WestPac Oct. 21.

During the first three months of the cruise, *Hancock* sailors trained as the carrier operated with the Seventh Fleet. The ship made goodwill visits to Far East ports.

Early in February—the 7th, specifically—the face of this deployment underwent a major change. News came that the Viet Cong bombed an American billeting area in South Vietnam and, with it, came orders for *Hancock*, *Ranger*, and *Coral Sea* to get their aircraft ready for possible responsive strikes. When execution of the strike was directed, *Hancock* launched the carrier's first combat mission since WW II. With aircraft from *Coral Sea*, "Hannah's" pilots struck a Viet Cong staging area at Dong Hoi, reduced it to ashes, and set the tempo for future action.

Hancock participated in eight major strikes and several smaller operations before she left the South China Sea. CVW-21 aircraft destroyed communist billeting and staging areas, harassed ground



REAR ADMIRAL James R. Lee, Commander Naval Air Test Center, Patuxent River, Md., pins Distinguished Flying Cross on Army Captain Gary C. Hall. Capt. Hall, now attending the Navy's Test Pilot School, received the medal for rescuing a crew of a downed helicopter during Vietnam assault.

traffic, and knocked out AA batteries, radar installations, and bridges.

Most of *Hancock's* tour was spent at sea. The longest at-sea period was 36 days; the longest in-port period (in Subic Bay, P.I.), nine days. The carrier steamed some 70,000 miles.

USAF Honors LCdr. Hopp Safety Officer is Given Medal

LCdr. Frederick H. Hopp, former Safety Officer for the Naval Air Transport Wing, Pacific, based at Moffett Field, was honored early in May when he was presented with the Air Force Commendation Medal and Citation for meritorious service, June 1964 to April 1965.

The citation was presented to LCdr. Hopp by Captain E. W. Bergstrom, C.O., VR-7.

As Safety Officer for the wing, LCdr. Hopp was cited for his development of an effective and positive accident prevention program that greatly contributed to the successful accomplishment of the command mission in flying the C-130E *Hercules* for MATS.

The citation stated in part that "through his introduction of new ideas and approach to accident prevention, his organization has remained at an all-time low in flight accidents" and shows continuous improvement in ground safety.



AT THE 17TH ANNUAL Reunion and Symposium of the U.S. Naval Test Pilot School, NATC Patuxent River, Md., over 500 of the nation's top aviators and persons associated with aviation attended. Graduates are playing major roles in Naval Aviation, aircraft testing, company management and NASA astronautics. Above, with then current TPS Director, are several former directors, all of them Navy Captains: L. M. Satterfield, S. S. Sherby (Ret.), N. J. Smith III, current head, J. G. Smith, Leo Krupp (Ret.) and W. H. Livingstone.

VR-7'S DET ALFA: VIETNAM LIFELINE



MARKING THEIR UNIT'S 333rd consecutive scheduled airlift/ operations, personnel assigned to VR-7's Det. Alfa gather around one evacuation departure made on time, and 12 months of "no-delay" of their Super Constellations. The unit regularly flies to Vietnam.

LESS THAN 200 miles northeast of Saigon, a Navy helicopter raced eastward toward the South China Sea, bound for the airfield at the South Vietnamese city of Nha Trang. The chopper carried a precious cargo—two badly wounded Marines. Emergency medical attention saved their lives after they were wounded by Viet Cong machine-gun fire in an ambush on a combined U. S. Marine-South Vietnamese patrol.

Now, special stateside facilities and physicians were needed to help them complete a recovery.

At Nha Trang, a sleek, unpainted *Super Constellation* sat on the airstrip, its four engines running. The plane would airlift the casualties on the first leg of their 5,000-mile journey to Tripler Army Hospital in Hawaii.

The Aircraft Commander shaded his eyes against the sunlight reflected into the cockpit by the spinning props. He searched the afternoon skies for the helicopter. His aircraft was vulnerable to enemy fire, but if he left before the helo arrived, the wounded Marines might die before the next transport landed. The pilot waited.

The C-121C *Super Connie* was

By Lt. J. B. de Francesco, Jr.

manned by a crew assigned to VR-7's Detachment Alfa, permanently based at Tachikawa, Japan. The Navy unit is assigned to the Military Air Transport Service (MATS) mission in the Far East. It plays a vital role, providing air transportation for airborne forces, their equipment and supplies, long range movement of personnel, and air evacuation.

The 21 officers and 160 enlisted men of the unit live by an adopted slogan: "We Do What We Can—Now."

The detachment now makes weekly air evacuation flights to Clark Air Base, Saigon, Bangkok, Korat, and Nha Trang. Twice-a-month flights are added to Okinawa and Taiwan. In addition, weekly passenger runs are flown to Iwakuni and Itazuke, Japan. Also, emergency calls from higher authority may take the crews to unscheduled locations, such as Hong Kong, Korea, and Australia. Det. Alfa responded to a call several months ago at Pleiku, South Vietnam, where casualties were evacuated after a very heavy Viet Cong mortar attack on an American barracks.

In the 10 months preceding February 1965, the relatively small unit flew more than 4,150 hours. There have been no departure delays on scheduled missions from home station since June 1964. Commander Bernard F. Gerdes, OinC of the detachment since June 1963, credits the record to an efficient and effective maintenance team.

The detachment flew a special airlift mission to Korea for five years, beginning in June 1959. During this period, 1,800 flights were made to Kimpo, airlifting 11,000 passengers and 1,000,000 pounds of mail. A total of 87,600,000 accident-free passenger miles were flown by the Navy personnel.

Det. Alfa has compiled a total of six accident-free years in the C-121C. Since assignment of the air evacuation mission in Southeast Asia in July 1964, more than 12,750 passengers have been airlifted—including more than 2,500 patients, 500 of them litter cases.

On the home front, the Navy men present an obvious contrast to the personnel at Tachikawa. Det. Alfa is the only Navy unit stationed aboard the Air Force base, a situation that does not seem to have bothered the sailors a bit.

WEATHER RADAR

ONE RADAR SET, THE CPS-9, WAS DESIGNED AND ENGINEERED SPECIFICALLY TO BE USED BY METEOROLOGISTS AS AN AID TO FORECASTING. THIS PARTICULAR RADAR HAS A RANGE UP TO FOUR HUNDRED MILES.



ONE OF THE MOST VALUABLE FEATURES OF RADAR IS ITS ABILITY TO PRESENT THE PRECIPITATION PATTERNS, WITHIN A FEW HUNDRED MILES OF THE SET, IN GREAT DETAIL.



THREE DIMENSIONAL INFO ABOUT THE PRECIP PATTERN THROUGH A VOLUME OF MANY CUBIC MILES CAN READILY BE OBTAINED WITH THE CPS-9.



SHOWERS AND THUNDERSTORMS ARE EASILY TRACKED WITH THE SYSTEM. INFORMATION THUS GAINED CAN BE USED FOR SHORT-RANGE FORECASTS.



QUALITATIVE MEASUREMENTS OF THE AIR MASS-STABILITY, FREEZING LEVEL, EXTENT OF VERTICAL CONVECTION, AND MOVEMENT-CAN BE MADE.



RADAR IS USED ONLY AS AN AUXILIARY TOOL TO SUPPLEMENT THE WEATHER MAP, FOR A SINGLE RADAR IS OF USE IN STUDYING ONLY A SMALL SECTION OF THAT ANALYSIS.

O. J. J. J.

AIR CONTROL CHANGES ARE SOUGHT

A 10-POINT PROGRAM has been recommended to reduce flight identification problems caused by duplicate and similar-sounding words and numbers used in the air traffic control system.

The program was developed by a committee that includes users and regulators of the nation's federally controlled air space and suppliers of airborne communications equipment.

Established by the Radio Tech-

nical Commission for Aeronautics (RTCA), the committee recently analyzed current aircraft-to-ground communications practices and air traffic control requirements. Its program, the committee said, is designed "to insure more efficient communications between aircraft and the nation's air traffic controllers of the future."

The recommendations include:

- A nation-wide program to

train pilots in proper voice communications, procedures, and the need for brevity to reduce traffic over control frequencies.

- Pre-recording routine flight information for broadcast over local navigational facilities, and cutting the amount of aircraft position reporting.

- The possible use by the scheduled airline industry of data processing to analyze flight schedules so duplicate or similar-sounding flight numbers can be eliminated.

- A request that the military services standardize identification procedures and use single words or word-number combinations in air traffic control.

- A suggestion that the FAA amend its present air traffic control procedures manual so airline flight identification numbers can be spoken individually instead of in numerical groups.

- Discontinuing the use of the aircraft manufacturer's name as the sole call sign in air traffic control identification procedures, and substitution of the more definitive trade name which list the model of the aircraft flown.

- Institution of a program requiring collection of statistical data of incidents caused when duplication confuses controllers and pilots and reporting of low-quality reception to proper authorities.

- Two long-range proposals that call for automatic data link transmissions of all routine communications between aircraft and the control system, and establishment of automatic, instantaneous "call-up techniques" when voice communications are required for non-routine message transmissions.

The RTCA is a non-profit organization formed to study and coordinate both existing and proposed air navigation, communications, and traffic control systems. Its members include civilian and military organizations and groups concerned with air traffic control.

Editor's Corner

FAMILY TRADITION. LCdr. Robert L. Buc, of the Naval Station, Bermuda, has two brothers, Gerald and William, also lieutenant commanders. All three are pilots, all earned their commissions after entering the Navy as enlisted men. Gerald is with VS-37, NAS North Island, and William is with VU-8, Naval Station Roosevelt Roads.

RON Kits. Most Naval Aviators are familiar with the message acronym RON, which means "remain over night" while flying across country. Now a commercial firm has come up with RON kits for men and women. The men's kits are fully stocked with toilet items and shaving needs. The women's kits include hair spray, emery boards, hair nets and soap granules for laundering. The kits originally were designed for unexpected overnight stays by airline passengers; they are now being introduced for general distribution.

NO HOSPITALITY HERE. A Naval Aviator, flying from the attack carrier *Midway* off Vietnam, was asked on his return from an air strike over Communist North Vietnam, "How did you find the enemy?"

"Indignant," replied the young jet pilot. "They fired back."

A Way of Life. James L. Cunningham, BM2, became the last of the USS *Ranger's* plankowners when Donald Aliff, BM1, left the carrier for new duty. Both were on board the ship before commissioning at Newport News, Va., in 1957 and had been with *Ranger* on five Western Pacific cruises. Aliff and Cunningham had been feted at a surprise "*Ranger* Plankowner Day" aboard ship a few weeks before orders arrived for Aliff.

KEEPS 'EM BUNCHED. Leon Bunch, YN1, made a successful transition from being a recruiter to being a "retainer." After a tour as a recruiter in Baltimore, Bunch reported to the Air Navigation Office, Naples, a unit which supplies aeronautical charts and flight information publications to the Sixth Fleet. During his tour, Bunch

hit 100 per cent on reenlistments in the office. Four men went into the STAR program, four made regular reenlistments and one was accepted for SCORE training. The ANO "formula" for retention is: "Take one former Navy recruiter, mix him with nine sailors eligible for reenlistment, sprinkle with moderate amounts of career programs, and you come up with 100 per cent."

For PBY Buffs. A California company is producing *Super Catalinas*, a modern version of the famed PBY-5A Navy amphibian of the 1930's and 1940's. Steward-Davis, Inc., of Long Beach, says the new "Skybarge" version features two 7x9-foot cargo doors and has improved powerplants that may include jet thrust augmenters to improve takeoff characteristics. "No amphibious aircraft in the world has ever matched the PBY-5A for simplicity and ability to operate from small airstrips and bodies of water," says a press release.

THREE THINGS. From the Naval Air Test Station (Trenton) Newsletter:

"Three things to govern—temper, tongue and conduct.

"Three things to cultivate—courage, affection and gentleness.

"Three things to commend—thrift, industry and promptness.

"Three things to despise—cruelty, arrogance and intolerance.

"Three things to wish for—health, friends and contentment.

"Three things to work for—security, independence and happiness.

"Three things to admire—dignity, gracefulness and honesty.

"Three things to give—aid to the needy, comfort to the sad, and appreciation to the worthy."

No More Service? The Military Air Transport Service (MATS), the military airlift command managed by the U. S. Air Force, will be known as the Military Airlift Command, starting January 1, 1966. MATS will be changed to MAC. The new name is said to be more descriptive of the unit's mission.



A CAR IS BROUGHT TO TARGET SITE



THE PYRAMID TARGET IS COMPLETED



AN AERIAL VIEW OF THE TARGET

JUNK CAR UTILIZATION. A limited, but effective, way to get rid of America's junk car blight was demonstrated in North Carolina by HU-4. The helicopter squadron lifted junked autos to the Navy practice bombing target in Dare County. There the autos were formed into pyramids for bombing practice. They made fine targets.

LETTERS

Naval Memorabilia Solicited

SIR: A recent adjunct to the San Diego AeroSpace Museum in Balboa Park, San Diego, Calif., is the Naval and Marine Air Museum.

The interest of this museum spans the entire history of Naval Aviation. Exhibits highlight the innumerable contributions of such men as Chambers, Ellyson, Towers and other pioneers in this fascinating field. Records of most recent feats will be seen by visitors if photographs, documents, artifacts and memorabilia are sent in.

DON F. SMITH, CURATOR

Naval & Marine Air Museum
San Diego AeroSpace Museum
Balboa Park, San Diego, Calif.

Be an 'Angel'

SIR: Each year the *Blue Angels* are looking for two or three replacement pilots. At the close of our 1965 season, there will be three billets available: (1) one demonstration member, (2) the public information officer, and (3) the maintenance officer.

There is no established time to apply for the *Blue Angels*—applications are accepted throughout the year. Since it isn't feasible to change members during the show season, which runs from February through November, we normally make our selection at the end of the year. Once an applicant is selected, he is ordered to the Team for arrival in November, or early December. A file is maintained on all applicants and those interested in the Team should keep us informed of any pertinent changes in their status during the year.

All formal application forms will be forwarded from the *Blue Angels* to anyone expressing a desire to join the Team. Our requirements are quite basic. We want a career-oriented Naval Aviator who intends that aviation is to be his profession. He should have served a tour with a jet squadron and be eligible for shore duty rotation about the end of the year. Although we desire to acquire new members for a full three years of shore duty, we do accept members for two years. In the case of our Maintenance Officer billet, which carries the responsibility of piloting the C-54 transport, it is not necessary to have served in a jet squadron. It is highly desirable that he be multi-engine qualified and have a maintenance background. Above all else, we desire highly motivated personnel.

Any Naval Aviator desirous of being considered for the *Blue Angels* should forward his request to the following ad-

dress: Officer in Charge, *Blue Angels*, Naval Air Station, Pensacola, Florida.

BOB COWLES, LCDR., USN
Public Information Officer

Saratoga Reunion

SIR: The 14th Annual Reunion of the USS *Saratoga* (CV-3) is to be held at the Edgewater Inn, 6400 East Pacific Coast Highway, Long Beach, Calif., on the 15th and 16th of October 1965. Those wishing further information should get in touch with me.

T. A. WHITELOCK

3992 Oak Knoll Drive,
Los Alamitos, Calif.
Telephone: Geneva 1-9551

Welcome Words

SIR: I have been a keen reader of *Naval Aviation News* for the last two years, and it is only this year I have discovered our own Academy library subscribes to your magazine. The journal is filed in our Aerodynamics Section of the library after circulation through the staff.

I usually manage to read *Naval Aviation News* from cover to cover, and I am always impressed by the quality of the journal and by the way the Navy stimulates competition amongst the various squadrons for safety awards.

I enjoy most of all "Grampaw Pettibone," and I only hope I can remember his suggestions when I start flying myself. In fact, I hope I can start off doubly aware in remembering just how easy it must be to forget one little point if an experienced pilot can forget that self-same point.

ROY D. PHILLIPS
Senior Air Cadet

RAAF ACADEMY
Point Cook
Victoria, Australia



NAVAL AVIATION FILMS

Among the latest motion picture films released by the Film Distribution Division, U. S. Naval Photographic Center, the following should prove of particular interest to personnel in Naval Aviation:

MN-9782B (confidential) *Conventional Ordnance Delivery—Operational Training and Delivery (U)*. Low level methods of conventional air weapons delivery (U). 28 minutes.

MN-9996E (confidential) *Sidewinder AIM-9D—Air Intercept Missile (U)*. Improvements in AIM-9D infra-red missile over older AIM-9B (U). 15 minutes

MN-10050 (unclassified) *The Effects of Wind During Carrier Landings*. Characteristics of turbulence caused by relative wind over carrier deck. Disturbances in glide path of plane making carrier landing; corrective action. 10 minutes.

Instructions for obtaining prints of newly released films are contained in OPNAV Instruction 1151.1C.

Parateam Wins Top Meet Marines International Champs

Three months of intensive training at MCAS EL TORO, Calif., have paid off for a team of U.S. Marine parachutists, who out-jumped some of the world's top military 'chutists in international competition at Rio de Janeiro, Brazil.

The Marine Corps Competition Parachute Team, representing the U.S., took first place in the *Conseil International de Sport Militaire* (International Military Sports Council) championships. Some 15 countries were represented in the meet.

The five-man team, which had never before entered competition, trained from mid-January to mid-April at El Toro before going to Brazil. An El Toro Marine, MSgt. Richard L. Myron, was NCOinC of the team.

In winning the world title, the jumping Leathernecks edged out a tough French team which had dominated C.I.S.M. competition since the biannual world meets began in 1961. Brazil finished in third place.

Naval Memorabilia Needed Will Augment Naval Exhibitions

The Navy Department is seeking to build up its collection of naval memorabilia for displays in the large Naval Museum at the Washington Navy Yard and exhibits elsewhere. The Department requests that anyone having such items consider contributing them.

Among items sought are uniforms, uniform equipment and insignia of both officers and enlisted men for all U. S. naval history prior to 1900. When displayed, contributions will be identified with the name of the donor. All donations will be gratefully acknowledged by the Department.

Contributions should include all the information known in regard to the items, such as original owner and the period when used.

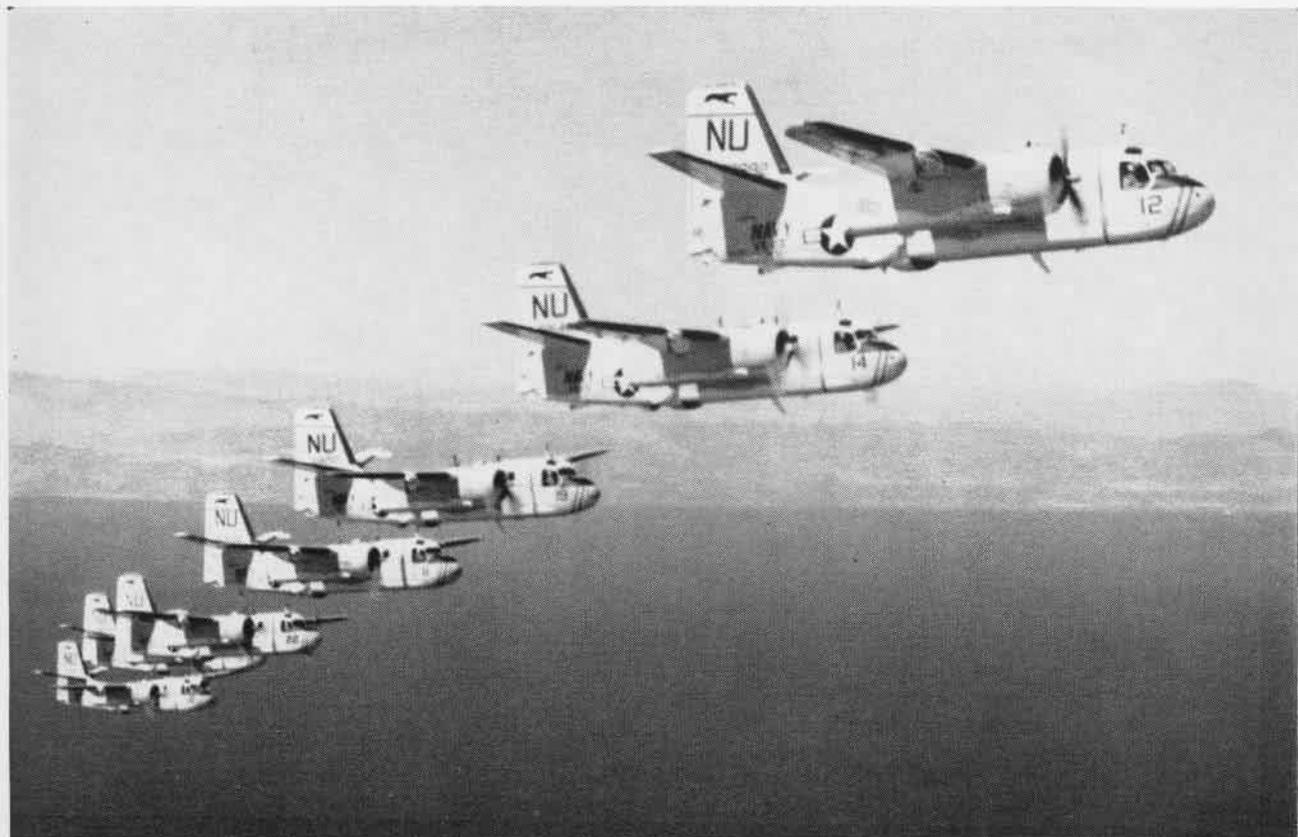
Donations may be sent to Rear Admiral E. M. Eller, USN (Ret.), Curator for the Department of the Navy, Office of the Chief of Naval Operations (Op. 09B9), Washington, D. C. 20360.



VS-23



In April of 1947, VS-23 flew TBM's and F6F's from the deck of the USS Mindoro in the Atlantic after receiving the new mission of air anti-submarine warfare. In 1950 the squadron moved to the West Coast and, in 1955, it became the first squadron on that coast to deploy with the S-2 Tracker. Currently based at NAS North Island, the 'Black Cats' of VS-23 recently completed their ninth WestPac cruise. The squadron is flying the Grumman S-2E Tracker and is presently deployed aboard the USS Yorktown. The present Commanding Officer is Commander Richard A. Eldridge, USN.



NAVAL AVIATION

NEWS

Memo To All Pilots



NAVAL AVIATION

NEWS

It doesn't take aerial delivery with a 100-foot cargo parachute to get a monthly story about your squadron, station or ship to Naval Aviation News. Just write it and place it in any convenient envelope and mail it off to Naval Aviation News, Department of the Navy, Washington, D. C.