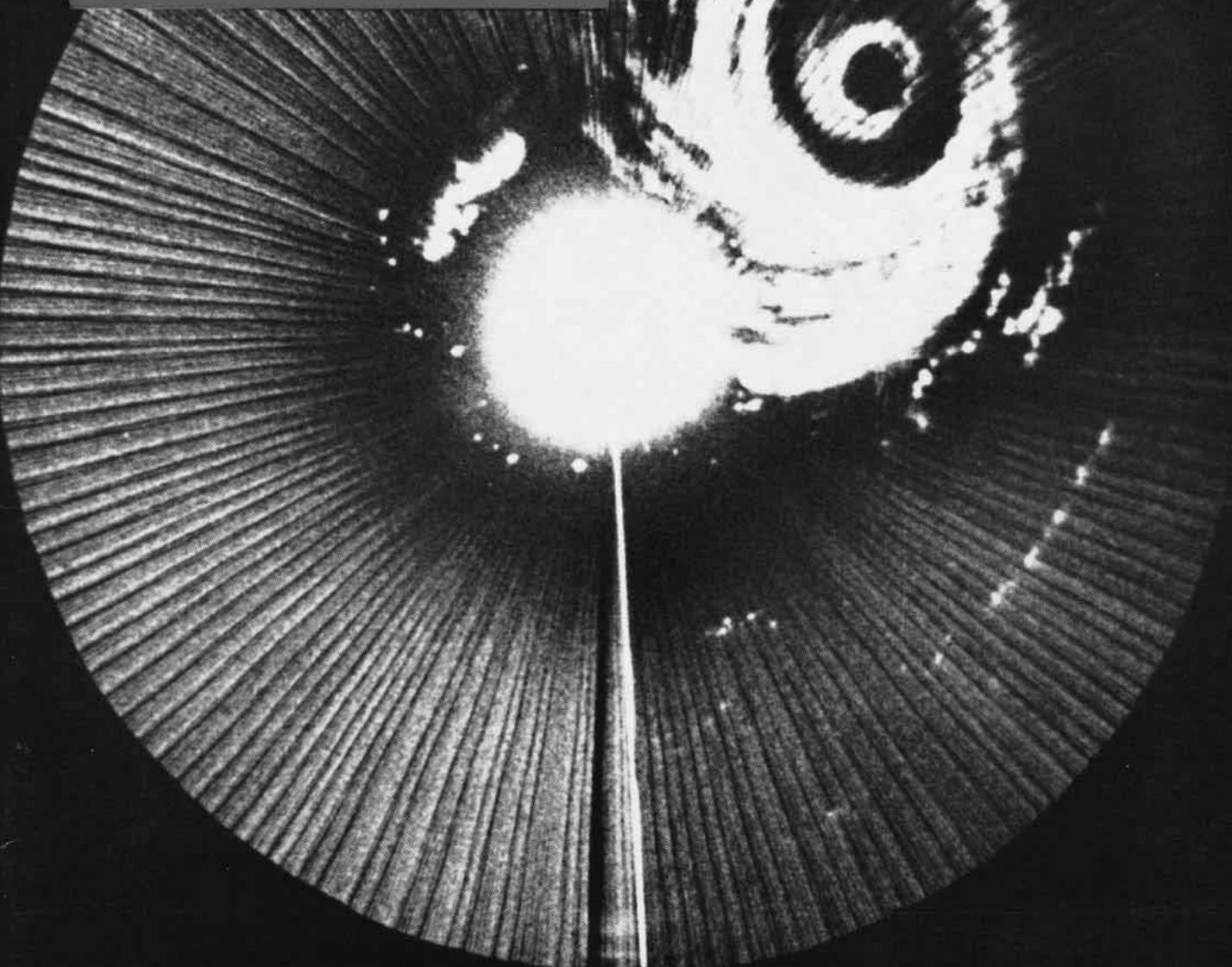


NAVAL AVIATION

NEWS



46th Year of Publication

OCTOBER 1965

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REVOLUTIONARY CHANGE

Nuclear power has provided a revolutionary change in the capabilities of modern seapower. The only limitation in extending our seapower is that on man himself—trying to keep pace with modern technology. Utilizing the latest advances in technology, skilled manpower is our most precious resource. From a national point of view, the Navy feels that a philosophy of relentless pursuit of technological progress is absolutely necessary.—Vice Admiral Paul H. Ramsey, Deputy Chief of Naval Operations (Air)

FORTY-SIXTH YEAR OF PUBLICATION OCTOBER 1965

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- . . . in the North, Too 17** *. . . while an account by Lockheed's Mark Clevenger shifts attention to Orions in Williwaw Land.*
- Cameras Over Vietnam 20** *Regular contributor James Falk, PH1, joins forces with writer Roger Busby to tell about a photo pilot's work.*
- Designations** *Harold Andrews, NANews contributing editor, is the collator of naval aircraft designations inserted in this issue. He was assisted by LCdr. William Robert Jones, USNR, and Naval Aviation News' Art Director James Springer.*

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Issuance of this periodical approved in accordance with Department of the Navy Publications and Printing Regulations, NAVEXOS P-35

■ COVERS

The very eye of Typhoon Wilda carries a threat. This picture was caught by a VW-1 radarscope off Okinawa. VW-1 flies EC-121K's in West Pac. . . . The pride of a crewman in his ship is dramatically caught (back cover) by the camera of Jack Weir, PH2.

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NAVAL AVIATION NEWS

CNO Safety Winners Listed All Candidates for New Honor

The Chief of Naval Operations Annual Aviation Safety Awards program has come up with a list of 24 Navy and Marine Corps squadrons recognized for outstanding achievement in FY 1965.

In addition to receiving CNO plaques similar to those presented in previous years, the squadrons selected were made eligible to compete for the new CNO Readiness Through Safety Trophy. An awards committee, including the commander of the Naval Aviation Safety Center as chairman and representatives of the seven major Naval Aviation commands, was scheduled to meet at NAS NORFOLK to select the No. 1 squadron.

Announcement of the single winner is expected this month.

Squadrons recognized under criteria established in OPNAV Instruction 3590.5G included:

ComNavAirLant—VS-22, VF-33, HC-4, VA-106, VP-49, and VA-176.

ComNavAirPac—VF-92, VA-93, RVAH-123, HS-6, VP-1, and VC-7.

CNATra—VT-4 (Basic) and VT-21 (Advanced).

CNAResTra — VF-931, VS-661, and VR-833.

CGFMFLant—VMA-331, HMM-264, and VMGR-252.

CGFMFPac—HMM-365, VMGR-352, and VMA-223.

MARTC—HMM-770.

VR-22 Heads for Moffett Transport Wing being Expanded

The Naval Air Transport Wing, Pacific (MATS) Moffett Field, Calif., is being expanded to meet increased commitments in the Pa-

cific and Far East areas at this time.

This month, the Wing will be joined at Moffett by VR-22 in a gradual transfer of aircraft, equipment and personnel beginning the 15th and lasting for the next two and a half months. The transfer will add nearly 700 personnel and ten C-130E *Hercules* to the Wing.

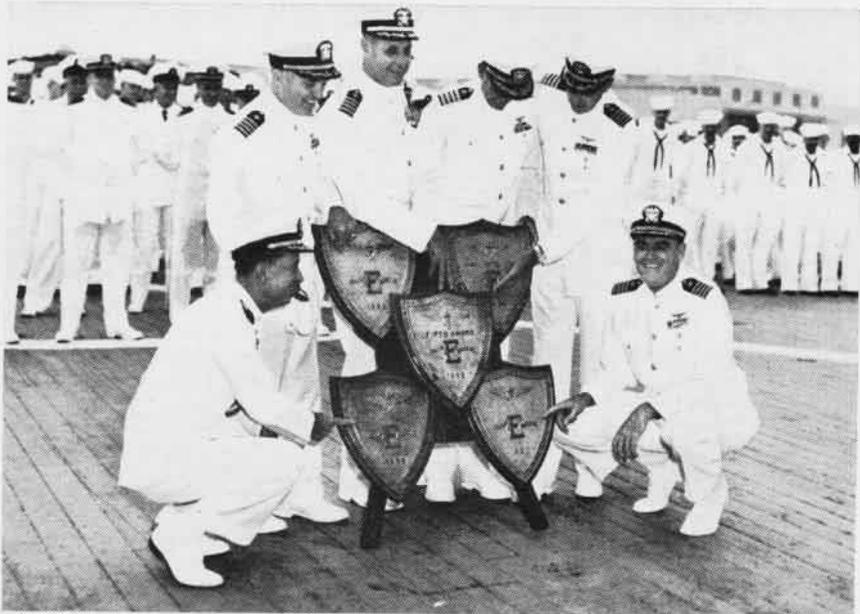
VR-22 is moving from NAS NORFOLK, Va. The squadron has been operating the *Hercules* over regularly scheduled routes throughout Europe and South America since early 1964.

VR-7, the operating squadron, and VR-8, the maintenance squadron, have made up the Pacific Wing. Plans now call for VR-7 and VR-22 to have 35 operating crews with 16 aircraft each. VR-8 will be expanded to meet the maintenance requirements of both squadrons.

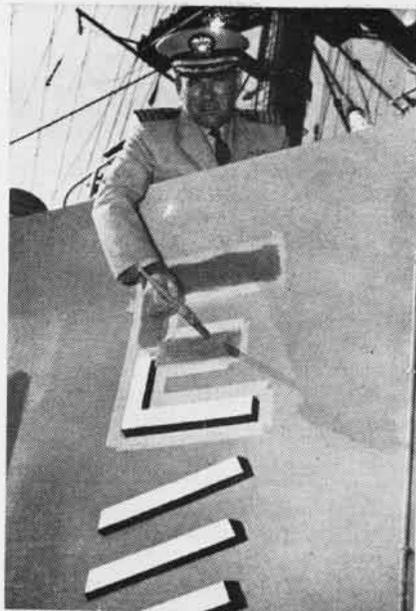


AN SH-3A SEA KING helicopter from HS-2 flew non-stop from NAS Seattle to NAAS Ream Field, Calif., after refueling in flight from a destroyer off the coast. In operations designed to extend the range and time on station of the helicopter in ASW, the Sea King took on 3,700 pounds of jet fuel from the USS O'Brien (DD-725) in

15 minutes. With the exception of a device used on the rescue hoist of the helo to prevent the hose from pinching, no special equipment was used. The SH-3A was manned by Commander Donald J. Hayes, X.O. of HS-2, Ltjg. Terry L. Campbell, and Ronald W. Sites, AX2. The flight, believed the first of its kind, covered 1,126 miles.



COMMANDING OFFICERS instrumental in the USS *Pine Island's* achieving the Battle Efficiency plaques 5 successive times are (left to right): Captains H. P. Lanham, Eugene P. Rankin, Gerald E. Minor, John H. Boyum, Damon W. Cooper and John A. Ferguson.



CAPTAIN Clifford N. Seaver, present Commanding Officer of the *Pine Island*, loses no time in painting the coveted Gold E.

ComNavAirPac E's Selected Pine Island to Carry Gold E

USS *Pine Island* (AV-12) makes winning Battle E's look easy. The San Diego-based seaplane tender has just won its fifth consecutive E and is entitled to display a gold E on the bridge bulwark along with four white stripes.

Vice Admiral Paul D. Stroop, ComNavAirPac, has announced the Battle E awards for March 1964-June 1965.

As the *Pine Island* claimed its fifth E, other Battle Efficiency E awards went to USS *Ticonderoga* (CVA-14) and the antisubmarine warfare carrier USS *Hornet* (CVS-12).

Crewmembers of the three ships are entitled to wear an E insignia on their uniforms.

Departmental E awards were designated for the following ships for excellence in specific areas:

Operations: USS *Ticonderoga*, USS *Hornet*, USS *Pine Island*.

Air: USS *Midway*, USS *Yorktown*, USS *Pine Island*.

Engineering: USS *Constellation*, USS *Yorktown*, USS *Salisbury Sound*.

Weapons: USS *Constellation* and USS *Bennington*.

Communications: USS *Ticon-*

deroga and the USS *Hornet*.

Antisubmarine warfare: USS *Kearsarge*.

Supply: USS *Oriskany*, USS *Yorktown*, USS *Pine Island*.

Patrol squadron winners of Battle E's are VP-1, flying P-2 *Nephtunes*; VP-22, flying P-3 *Orions* and VP-47, flying P-5 *Marlins*.

Winners of Battle E's for CVSG squadrons are VS-29 and HS-6.

All five winning squadrons will also receive the Isbell Trophy, named after Navy Captain A. J. Isbell who distinguished himself in the field of antisubmarine warfare in WW II.

In making the Battle E announcement, Vice Admiral Paul D. Stroop, ComNavAirPac, pointed out that the chief contenders in the competitions were close and commended the performance of squadrons and carriers.

Insignia Ruling is Changed Aircrewman Restriction Lifted

Because of increased training, qualifications, and responsibilities required of modern aircrewmen, the Secretary of the Navy has authorized the wearing of the aircrew breast insignia on a permanent basis. The authorization, detailed in BuPERS Notice 1020, puts air-

crewmembers in the same category as submariners and Navy and Marine Corps parachutists.

Previously, the insignia could be worn by a man only when he was serving as a regular member of an aircrew. Now, according to the BuPERS notice, enlisted personnel who held an aircrewmen (AC) designation as of June 14, 1965, are authorized to wear their insignia permanently.

In addition, an aircrewman distinguishing mark may be worn on the right sleeve by personnel who are enrolled in an approved training course for designation as aircrewmen. Enlisted men qualified for aircrew duty who become officers may continue to wear the insignia until they qualify for another aviation type, the notice said.

Personnel are not authorized to wear the insignia with any other aviation type except the combat aircrew insignia (with battle stars). The manner of wearing insignia is detailed in U. S. Navy Uniform Regulations.

The right to wear the insignia will be rescinded only when a member is disqualified for aircrew duty and his AC designator is removed. Permanent physical disqualification does not remove a man's eligibility to wear the hard-earned insignia.



GRAMPAW PETTIBONE

Crosswind Caper

An A-4 pilot departed an air station early one Monday morning for a cross-country training flight to a mid-western Air Force base. Prior to takeoff, the pilot received a weather brief indicating the surface wind at his destination would be 20 to 25 knots from 180°.

The weather en route was good and the pilot arrived over the Air Force base at 26,000 feet with 2,800 pounds of fuel on board. Prior to letdown, he requested the wind and duty runway from the tower. He was informed that the duty runway was 18 and the wind was from 240° at 20 knots with gusts to 30.

Instead of diverting to an alternate field in the area, the pilot informed the tower that he would attempt a landing. He carried his landing attempt all the way to touchdown but took a wave-off because of excessive crosswinds.

The pilot then climbed to 10,000 feet and asked the tower for information on the nearest suitable alternate. He was informed that the municipal airport had a runway nearer to being into the wind, so he proceeded to the municipal field and contacted the tower. He was given the same wind conditions with a duty runway of 19 and also informed that there were no facilities for military jet aircraft.



The A-4 pilot then returned to the AFB and asked the tower operator for a suitable alternate military field. He was informed that there was another military base only 75 miles away with jet facilities. The pilot was unable to locate the other AFB on his charts and also by this time he was getting pretty low on fuel. After weighing the situation, the pilot decided to attempt a no-flap landing.

With the wind condition the same as reported for his first pass, the pilot made a no-flap approach. Immediately after touchdown, he felt he had the aircraft under control but, after rolling a short distance, he realized he was being blown to the left. The aircraft left

the runway approximately 4,700 feet from the approach end and continued only a short distance before the nose gear sheared. After traveling another 260 feet across the field, the aircraft came to rest.



Grampaw Pettibone says:

Great horned toadies! This lad passed up scads of chances to prevent his accident. Pre-flight planning would have been a great time to locate an alternate landing facility. It would also have been a fine time to check his destination and discover there was arresting gear available. He showed a good deal of concern about the crosswind situation at a time when the most appropriate corrective action (to divert) was available to him, but apparently decided he could "hack it." The good book says he couldn't and he proved it.

The tower earned a bouquet of onions for its failure to advise the pilot of the BAK-9 arresting gear and its obviously hazy knowledge of other airfields in the area.

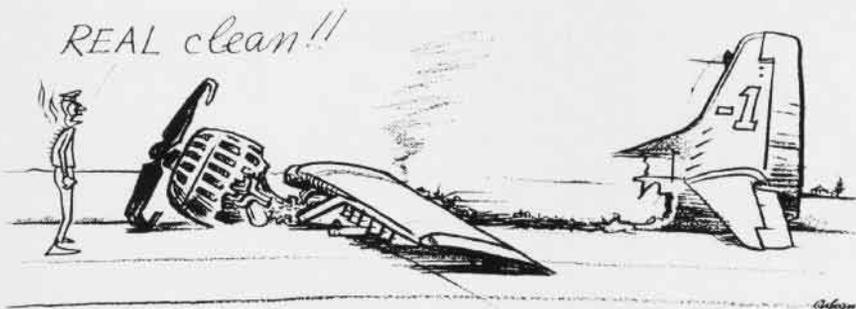
'Course, nothin' takes the monkey off this gent's back. He proved again incomplete planning can buy trouble.

'Clean' Landing

A three-plane flight of A-1E's departed home station for a scheduled rocket bombing hop on a target at a nearby Army Air Field. The pilot flying the #3 position was to land at the Army strip, drop off a Chief Aviation Ordnanceman, then pick him up on the way back to home base. The Chief was to proceed to the target area for a check-out on operations as he was to be in charge of the range for future ordnance flights.

The three aircraft proceeded to the Army reservation and upon arrival the #3 aircraft left the formation and circled the strip for wind information as there was no tower available. After observing the tetrahedron indicating a SW wind, the pilot went over his checkoff list and set up an approach for the SW run-





way. During the approach, the pilot noticed that the tetrahedron had swung around to the southeast so he initiated a wave-off and entered downwind for a landing on runway 14.

The pilot stated that after completing the landing check list he continued the approach at an air-speed of 100-110 knots with an apparently normal touchdown. He further stated that, just after contact with the runway, the nose of the aircraft seemed extremely heavy and almost immediately the propeller blades made contact with the runway. He hauled back on the stick in an effort to raise the nose but got no response. When the pilot applied pressure, the brakes felt as though they were locked. With the prop damaged, he realized it was useless to attempt a takeoff so he shut off the gas.

The aircraft continued nearly 2,500 feet up the runway in a fairly straight line before coming to rest on the right side of the runway. Fire broke out immediately and the pilot and passenger quickly abandoned the aircraft uninjured.

Luckily, the passenger in the aircraft was an ordnanceman. He removed the six rockets from the racks before the fire got to them. In a very short time, the aircraft was consumed in flame.



Grampaw Pettibone says:

Balls of fire! A pilot cleared to land at a strip that has no control tower, no weather or wind information available from any source, and no crash crew, so what does he do? Goes in gear up!

The pilot says he remembers lowering the gear. I don't doubt that he did, but he probably forgot that he pulled it up when he took the waveoff. The belly tank started scraping the runway 639 feet from the approach end and the prop started bitin' into

the runway 100 feet later. There's really not too much evidence that this lad did anything except make a real good landing in a CLEAN condition.

It's sure lucky the Chief was around to get those rockets clear of the fire or things might have ended up worse.

Narrow Escape

After briefing for an afternoon flight, the crew of a UH-2B proceeded to their aircraft. The flight was scheduled as a practice for a simulated water pickup demonstration. Aircraft preflight and engine run-up were considered normal in all respects and the aircraft departed the base at about 1500.

The flight proceeded to a nearby river for a practice rescue at an altitude of 200 feet. The pilot established a pickup site in the water and flew past this point for a few seconds before initiating a wing-over approach into the wind. He entered the turn in about a 45° left bank, nose-down attitude and naturally the helo lost altitude.

Realizing that an excessive sink rate had been established, the pilot attempted to flare the aircraft by pulling the nose up and adding full power. He was unable to stop the descent and the aircraft hit the

water in a level attitude with very little forward motion. Immediately after hitting the water, the helo again became airborne and the pilot was able to keep it in a hover.

The crew chief quickly informed the pilot that it looked like the tail wheel strut sheared on impact with the water. The pilot then moved over to a small sand bar in the river and hovered while the crew chief got out and inspected the aircraft for further damage. He confirmed the previous report of the missing tail wheel. He also found that the aft fuselage and pylon area were buckled and damaged. In addition, all of the external equipment aft of the auxiliary tanks was wiped off on impact with the water.

The pilot did not notice any unusual vibrations or control problems so he flew the helo back to the base. The crash crew provided four mattresses to support the tail of the aircraft and held them in place during the landing.



Grampaw Pettibone says:

Holy mackerel. That wasn't a close shave, it was a narrow escape.

It's just downright hard to believe that two grown men who are supposed to be qualified whirlybird drivers would take off in a fully loaded aircraft on a hot day and pull a junior birdman stunt like this. I don't really know who they were tryin' to impress with this "wing-over" bit to a water pickup, but they sure didn't rack up any plus points with this maneuver.

The helo sustained overhaul damage as a result of the impact, but, to be honest, it did pretty well to hang together at all. Every airframe has a design limit. When you exceed that limit with this kind of treatment, somethin' is sure to come unglued.



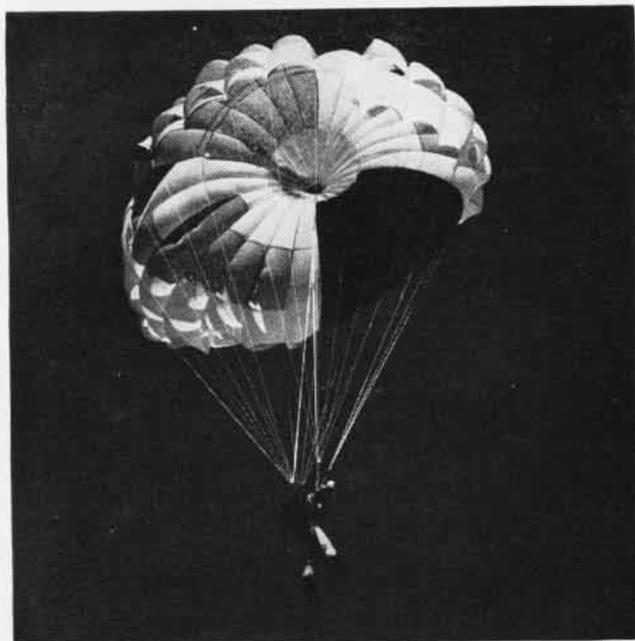
NAS PATUXENT AIR SHOW DRAWS 82,000 SPECTATORS

By Dee Barras, JO2

Photos by Charles M. Apo, PH2



VISITORS GAZE SKYWARD IN WHAT WAS A USUAL POSE

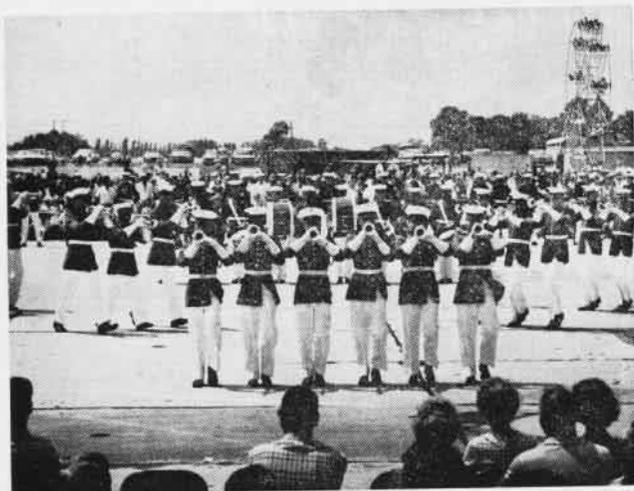


IT'S BEEN CALCULATED, by those who make such calculations, that the 16th annual air show held recently at the Naval Air Station, Patuxent River, Md., was the largest one-day stand of its kind presented there.

The station was turned into a combination grandstand/circus for more than 82,000 spectators, most of them from Virginia, Maryland, Delaware, and the District of Columbia—all in the name of Navy Relief.

The international aspects of the District's population carried over to the air show; foreign diplomats and their families rubbed elbows with American youngsters and visiting Navy admirals as they ambled through the sprawling exposition designed to give them a close-up look at the "airdale" Navy.

Not exactly aviation-oriented, but still worthwhile viewing, were Navy deep sea divers demonstrating their skills in a large water-filled tank and an all-day "gymkhana" sponsored by the Southern Maryland Sports Car Club. Art fanciers had the Navy's combat



MARINE DRUM AND BUGLE CORPS IMPRESSED CROWD



THE NAVY BAND PERFORMED MANY TIMES DURING DAY

NAVAL AVIATION NEWS



GUESTS VIEW COLORS ON PARADE GOOD VIEW OF THE BLUE ANGELS ACTION ON GROUND AND IN AIR

art collection, with the U.S. Navy Band playing in the background; technically-oriented visitors stopped off at exhibits explaining the operation of a variety of Navy gear.

The morning's activities centered around the many exhibits available, but at noon the airborne segment captured the crowd's attention. It began with a "fly-by" of some of the Navy's newest aircraft.

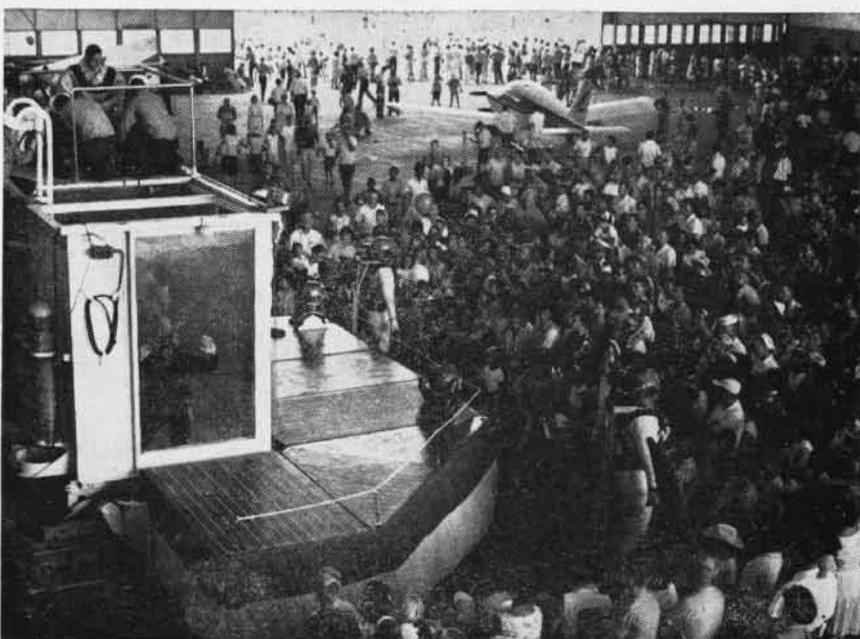
Lining a barrier in an attempt to get a good view of the airborne performance, the thousands of visitors were presented low-level passes by both jet and propeller-driven aircraft, including the F-4B Phantom, A-6A Intruder, A-5A Vigilante, P-3A Orion, and the F-2A Hawkeye. A busy UH-1B helicopter scurried about.

Action during the rest of the day was divided between the air and the ground. Some of the terra firma

performances included a trampoline demonstration by Pensacola's *Starflights*, a concert by the Tenth Naval District's Steel Drum Band, and a precision demonstration by the Marine Corps Drum and Bugle Corps and Silent Drill Team from Washington.

Airborne demonstrations included aerobatics by Bill Fornof of Houma, La., in a Grumman F8F *Bearcat*; a comedy routine by "Flying Professor" Captain Dick Schramm, USNR, of NAS GLENVIEW; skydiving by the *Paratuxents*; and a performance by the Navy's *Blue Angels* (see next article).

Combined with proceeds of an intensive campaign that culminated with the air show, the profits realized from refreshment sales and other activities throughout the day will swell Navy Relief coffers considerably, according to the reports from festival officials.



WAVE STARFLIGHT HAS UPS, DOWNS

NAVY DIVERS STOLE A BIT OF GLORY FROM AVIATION DURING THE EVENT



BLUE ANGELS' TRAVELING MAINTENANCE CREW STOPS FOR A PHOTO DURING A SHOW AT PATUXENT RIVER . . .

THEIR JOB: KEEP THE ANGELS FLYING

By John D. Burlage, JO1

PRECISION. If ever there was a single word that adequately describes the Navy's Flight Demonstration Team, the *Blue Angels*, that's it.

Hours of practice have molded six sea service pilots into an incomparable team whose precision flying has thrilled millions of spectators throughout the nation—and, recently, overseas. They are the latest in a list of crack Naval and Marine Aviators who, because of their exceptional personal and technical capabilities, have been selected for the *Blue Angels* during the team's 19 years of existence.

Plying their flying art in Gruman-built F-11A *Tigers* polished until they glisten, the *Blue Angels* demonstrate a series of group and individual aerial maneuvers guaranteed to astound onlookers.

Two of those onlookers during a recent air show at NAS PATUXENT RIVER, Md., were LCdr. Scott K. (Scotty) Ross and Thomas R. Black, AMCS. Between them, they've watched the *Blues* hundreds of times, but they still observed the 25-minute performance far more critically than the thousands of civilians who lined the barrier 100 yards from the runway.

Their interest is understandable. They and the 40 enlisted Navy men who serve under them are charged with maintaining the *Tigers* that passed over in the famed wingtip-to-canopy diamond formation.

They head the crew that keeps the *Blue Angels* airborne.

LCdr. Ross has been the team's maintenance officer since October

1962. Like LCdr. Robert Cowles' public information officer billet, it's a primary duty that does not include performing.

A 42-year-old former enlisted pilot, LCdr. Ross joined the Navy in February 1941, completed aviation machinist's mate school at NAS PENSACOLA, and made chief during WW II. He was designated a pilot in 1947, commissioned an ensign in 1955. He and his wife have two children; the family lives in Pensacola.

Anyone who talks with LCdr. Ross about his job comes away from the conversation with two distinct impressions:

1. The maintenance officer believes the *Blue Angels'* enlisted maintenance crew is the finest that can be found anywhere.



... AND FOUR OF THE F-11A TIGERS THEY MAINTAIN FLY OVER WASHINGTON. THE PILOTS ARE SHOWN BELOW:



CDR. BOB AUMACK



LT. CLARENCE HUBBARD



LCDR. DICK OLIVER



CAPT. FRED CRAIG, USMC



LT. FRANK MEZZADRI



LT. BOB McDONOUGH

2. Being a member of that crew is far different from what a person might think.

"I've got the kind of crew a maintenance officer dreams of working with," he said. "Nobody goes AWOL. We get comments from stations we visit that military courtesy picks up after personnel have watched the crew's example. The men try constantly—literally—to keep all six planes up; they're extremely proud of the fact that we have no spare aircraft. In 82 shows we did in 1963, for instance, we finished a performance with less than six aircraft three times.



BEELER AND RYDER CHANGE VALVE

"Of course," he admitted, "there are certain points that help assure the *Blues* will get the best kind of man for the maintenance crew." Some of them include:

- Joining the team is a voluntary proposition, and nobody beats the bushes for volunteers.
- One of the criteria for membership is a spotless service record.
- New men undergo a period of probation, usually including at least one road trip, before they receive final acceptance into the unit.
- There are no "second offenders" among the maintenance men; the nature of the *Blue Angels* assignment causes the powers-that-be to take a very dim view of misbehavior, and the individual who steps too far out of line can usually count on a transfer.
- The job is anything but a bed of roses.

LCdr. Ross feels the last point is worth dwelling upon. He has apparently arrived at the opinion

that an enlisted billet with the *Blues* is considered by many to be a combination of gravy and glory that can't be beat this side of Fiddler's Green.

"That's an incorrect assumption," he said. "There are three things a man can count on receiving when he reports to the *Blue Angels*: his show uniform, a flight jacket, and more than enough work."

A major headache where maintenance is concerned is the constant traveling required of the *Blues* and their aircraft, and the fact that nobody but personnel on the team works on the jets.



ENLISTED ANGEL POLISHES A WING

"It's impossible to carry both adequate parts and enough technicians for even a 10-day road trip in the C-54 *Skymaster* that transports the 24-man traveling maintenance crew," LCdr. Ross said. (He pilots the C-54; it's on loan to the team from NAS PENSACOLA.) "So, the technicians have to double up—that means that everybody has to be a good mechanic. No matter what else he does, a man must be a good, reliable mechanic."

As far as "what else he does" is concerned, the *Blues* rate just about the same cross-section of enlisted ratings as can be found in a typical—if small—jet squadron (which the team is not; it's actually a division assigned to NAS PENSACOLA's Training Department).

The *Blues'* enlisted allowance is 55. At last tally, those aboard besides Chief Black were an AD1C, two AMH1's, two AMH2's, three AMS2's, four ADJ1's, five ADJ2's, two ADJ3's, a PR1, a PR3, two

AE1's, two AE2's, and an AE3. There were also an AT1, an AT2, an AT3, and AMH3, two ADJAN's, two AMSAN's, a PHAN, an AZAN, an SA, an AK1, an AK3, and a YN2—every one of them qualified in pre-flight checks and certain phases of service.

From this group is drawn the traveling maintenance crew. Those who do not make a particular trip (some assignments can be exchanged) work on equipment in the team's five shops—power plant, electric/radio, air frames, safety and survival, and materiel—located in the *Blue Angels'* hangar at Pensacola's Sherman Field.



WAYNE L. CRANE CHECKS COCKPIT

Requirements for the team's road crew include a CPO, a line PO, seven plane captains, four air frames personnel, three power plants personnel, two electricians, a radioman, a safety and survival PO, an aviation storekeeper, a utility man (described as the "chemical engineer" who mixes the dye that streams from the aircraft wings, as well as the coffee), a photographer, and a log yeoman.

To these men fall the sometimes enormous tasks that are necessary to make certain a crowd of thousands at an air show gets to see a full complement of six *Blue Angels* in the air. Their job, and the job of those who remain at Pensacola as well, is often one that only they can appreciate.

Even so, LCdr. Ross is certain that the *Blues* get the best kind of whitehats the Navy has to offer. He's also just as certain an assignment to the team makes an even better man of a volunteer. "A new



PILOTS START WALKDOWN SEQUENCE AS THEY PREPARE TO MAN PLANES



STARTING CREW TURNS UP TIGERS



A CREWMAN ON RUN WITH CHOCK

man becomes part of a good, happy crew," he said. "These men have such faith in each other that I have trouble getting them to lock their lockers when we're on the road; I insist on that because we run into all kinds of persons."

"Enlisted men who come to the *Blue Angels* maintenance crew seem to grow up in a hurry," he added. "I suppose that's because of the greater responsibility they're often required to accept."

A further discussion of that responsibility is best given by Chief Black; the subject is close to his heart.

This is the chief's second tour



LT. McDONOUGH O.K.'S HIS PLANE



LCPO THOMAS R. BLACK POSITIONS ANGELS' AIRCRAFT FOR TAKEOFF

with the *Blues*; his first ran from 1955 to 1957. He reported to the team for his second assignment in February 1964 from duty at NAS Atsugi, Japan. He, his wife, and their daughter have a home in Pensacola. His duties with the team include LCPO, maintenance chief—and, "chaplain, father-adviser, and plane-pusher."

"The turn-over of personnel is just about the same as you'd find anywhere in the Navy," the chief said, "because a tour with the *Blue Angels* is no different from any shore station—a man serves the time allowed for his particular rate and rating, then he goes to sea."

Right now the maintenance team is operating under a bit of a paradox. Although it's undermanned, it actually has a backlog of potential volunteers who, for one reason or another, are ineligible to join the unit. The one overriding requirement before assignment is that a man be in the Seavey.



LIEUTENANT COMMANDER S. R. ROSS

"We don't chase after volunteers," Chief Black said, "but we do welcome a man who is interested enough to look me up when the team is on the road or who will write me or the personnel officer, Lt. C. H. Hubbard, at Pensacola for information."

Chief Black made one point extremely clear: The man who wants to join the *Blue Angels* is a man who enjoys travel, odd hours, and work.

"The road crew can count on being away from Pensacola about 300 days a year," he explained, "starting with the 40-day winter training period at Litchfield Park in Arizona." That period lasts from the first week in January to mid-February; it's followed by the show season that, this year, will end in mid-November.

"Ordinarily, we return to Pensacola after a show," the chief said, "but a tight schedule can change that in a hurry."

A good example of a tight schedule is the period just before and after the Patuxent River show. The team left Florida for Willow Grove, Pa., August 4, then made the trip to Quantico, Va., before flying to Patuxent, from where planes and personnel were to go to NAS Oceana, Va., before returning to Pensacola for three days August 9. Two-thirds of the same men formed the road crew that left again on August 12 for a series of trips that would allow them only about 15 days at home until the third weekend in November.

"The schedule is so critical that one of our men could get leave only in case of an emergency,"

Chief Black pointed out. He added that as many men as possible are given leave during the November-December off-season.

The chief didn't say, but the *Blues* made a road trip this season for which there probably was no shortage of volunteers. For the first time since its organization, the team traveled to Europe for a tour of France, Finland, Denmark, the Netherlands, and England. The trip gave personnel who formed the traveling maintenance crew an opportunity for fine foreign liberty. It also undoubtedly gave them plenty of overtime and maintenance headaches.

Even when the team is at home, maintenance crew members can't count on anything resembling a normal work week, Chief Black said. "Our liberty runs nothing like the norm," he pointed out. "If there's no work to be done on the aircraft or the other equipment, we secure. It's seldom that there's no work."

The work is placed in two categories: scheduled maintenance and routine checks accomplished in Pensacola, and preventive and unscheduled maintenance on the road.

The latter category can be the real "bucket of worms," Chief Black said, especially if a major problem arises when the team is performing far from the proper



EIFFEL TOWER BACKDROPS CREW



BLACK AND SAFETY PO WILKERSON

support facilities. However, the traveling crew carries dozens of spare parts, and tools to install them, in the C-54.

One man directly involved with obtaining those parts doesn't even wear a uniform. He's Dave Scheuer, senior service representative for the *Blue Angels* from Grumman.

That Scheuer is highly thought of by maintenance crewmen is evidenced by their eagerness to associate him with the team, which is not too difficult a task. Employed by Grumman in 1942, he was assigned to naval air stations and the Pacific Theater before he first joined the *Blues* in 1951.

Scheuer assists in maintaining the team's *Tigers* at 100 per cent availability and in procuring spare parts. He also maintains direct liaison for the team with the Grumman firm.

The maintenance crew's desire to see that Scheuer gets credit for his work on behalf of the *Blue Angels* is simply another example of a crack outfit's "caring for its own"—a habit that is especially evident among the team's maintenance men. It appears to be an outgrowth of the unit's determination to do the job well, and a pride in successful team efforts.

"Most other people can see the advantages of being a *Blue Angels* maintenance man long before we do," Chief Black said, "but one of them is the chance a person gets to work with real pros like these."

The man who keeps the *Blue Angels* flying is a man who can really appreciate their precision maneuvers. What he does requires a special kind of precision itself.

Patuxent Tests Buckeye Evaluation Monitors the T-2B

In August, Navy test pilots from NATC PATUXENT RIVER began the Navy Preliminary Evaluation on the first production models of the T-2B *Buckeye* jet trainer, improved version of North America's T-2A.

The *Buckeye's* two J-60 turbojets give it performance and safety characteristics superior to its single-engine predecessor. At a gross weight actually lower than the earlier version, the T-2B possesses a rated thrust of 6,000 pounds, nearly double that of the T-2A.

The two-week evaluation covered the *Buckeye's* performance throughout its flight envelope. Later, four production models are to undergo a final wringing-out at the Patuxent Test Center.

Initial contract calls for the purchase of 46 T-2B's. The *Buckeyes* are to be used to train Navy and Marine Corps aviators from first jet flight to advanced training, including carrier landings.

Naval Aviator Flies F-111 Flight Made from Edwards AFB

Captain Donald C. Davis, Assistant Deputy for the F-111B Program, became the first Naval Aviator to fly the F-111. The 2¼-hour flight took place at Edwards AFB, Calif., July 27, with Fred J. Voorhies of General Dynamics as check



CAPTAIN DAVIS IN THE F-111A

pilot. During the flight, which was made in the F-111A, Captain Davis utilized the full range of wing sweep in the variable-sweep fighter-bomber.

The first of four Navy F-111B's is being flight-tested at Grumman with Navy preliminary evaluation scheduled soon.

USS Tripoli is Launched Named for Marine Engagement

The Navy amphibious assault ship *Tripoli* (LPH-10) was launched at the Ingalls Shipbuilding Corporation, Pascagoula, Miss., July 31.

Mrs. Clifton B. Cates, wife of former Marine Corps Commandant, General C. B. Cates, USMC (Ret.), christened the ship.

Tripoli is the second ship to

bear the name of the historic U.S. Marine engagement of 1805. The first *Tripoli*, an escort carrier, was commissioned in 1943 and stricken from the Navy register in 1959.

Authorized under the Fiscal Year 1963 Shipbuilding Program, *Tripoli's* keel was laid on June 15, 1964. She is 592 feet long, has a beam of 84 feet and a full load displacement of 18,000 tons.

FAA Fam Flights Approved Training for ATC Controllers

The Chief of Naval Operations has delegated authority to approve local orientation flights in Naval aircraft for FAA air traffic controllers and FAA operations evaluation and supervisory personnel on a non-interference basis.

According to OPNAV Instruction 4630.17B of July 28, 1965, the objective of these flights is to provide the controllers with a better understanding and appreciation of jet operating problems. These include fuel consumption, cruise control, penetration, and let-down procedures.

Authority was also delegated to approve point-to-point passage in Naval aircraft by FAA controllers and operations evaluation and supervisory personnel within their own FAA region of responsibility. Such flights will be permitted for evaluation of FAA services to U. S. Naval Aviation activities.



AROUND THE WORLD, UH-2 Seasprites serve Navy ships and stations in SAR, plane guard and general utility roles. "Meanwhile back at the ranch," two new UH-2 versions have made their appearance. NATC pilots have completed a flight evaluation of the compound version (left). Modified by Kaman, under an Army contract, this UH-2 incorporates wings and a single YJ-85 jet engine to investigate the



high-speed potential of the compound configuration. Of more direct application to the UH-2's present mission is the twin-engine prototype (right). Developed for the Navy with two T-58's instead of one, this UH-2 has had its first evaluation flights at the Kaman plant. Additional safety and performance of this version are the attractive advantages for the UH-2's all-weather, day/night missions.

HELICOPTERS VERSUS ANTARCTICA

By Ltjg. Frank H. Lobb, HC-4

AS THE FALL months slip off the face of the calendar, Operation *Deep Freeze* once again swings into action. The icebreakers ease out of port late in September to begin their 10,000-mile transit to the ice.

Aboard these ships are the helicopter detachments of HC-1 and HC-4 that maintain two CH-19's aboard the *Glacier* and a CH-19 and a UH-13 aboard each of the smaller *Wind*-class breakers. For the majority of these pilots, it's a new experience, a situation resulting from the fact that Antarctic flying is unique and few pilots ever ride the icebreakers south a second time.

The squadrons, realizing the newness and strangeness of flight in Antarctica, spend a great deal of time briefing and instructing their detachments. Yet how can you describe adequately a "white-out" to a man who has never before seen one? How can you explain that one can be flying in good VFR conditions one moment and in the next find visibility so reduced that the deck can't be seen ten feet away?

You can point out that a small, dark spot on the horizon which would normally have little meaning elsewhere, could in Antarctica easily reduce perfect VFR conditions to zero in ten to 15 minutes.

The author has experienced conditions so poor that the ground couldn't be seen from the cockpit, even after landing. Or you can speak of 60-knot winds seeming to appear from nowhere. You can also speak of the difficulties that are incurred in flying from a postage stamp deck that is rolling 15 to 20 degrees and pitching better than 50 feet.

Certainly these are not daily occurrences in the Antarctic, but they are everyday possibilities.

Lack of experience, then, is the basic problem a new breaker pilot faces. Experience is the only true teacher and sometimes the tuition fee is high.

The great liberty port of Christchurch, New Zealand, serves as the



HELICOPTER RETURNS TO USS GLACIER AFTER ICE RECONNAISSANCE TASK

jumping off point for the Antarctic. From here early in November the three *Deep Freeze* icebreakers steam south into the "roaring forties," the "howling fifties," and the "screaming sixties," nicknames for some of the worst seas on earth. Here the round-hulled icebreakers bear remarkable resemblance to corks in a boiling pot. Forty-degree rolls are common and the author has seen a number in the 50 and 60-degree bracket.

With conditions such as these, corrosion becomes a major problem. On a *Wind*-class icebreaker, the aircraft are chained to the exposed flight deck less than 15 feet above the waterline, making it not at all uncommon for these aircraft actually to take green water. To make things worse, seas like these can easily keep the men off the flight deck for days at a time. All this adds up to corrosion with a capital C.

Luckily, relief isn't long in coming as five days steaming generally brings the ships to the edge of the pack ice. Here the boiling of the sea is quickly dampened and the scene takes on a deceptive stillness and calm. But the trip is far from complete: 1,000 miles of ice-covered sea still remain between the ships and McMurdo.

At this point, the helos really begin to earn their keep. Continual

ice reconnaissance is needed to give the ship safe passage through the ice. As the ice thickens and hardens in the lower latitudes, the reconnaissance information becomes more and more vital.

It is quickly apparent that a pilot in the Antarctic must do more than fly his aircraft; he must know the ice. He must not only be familiar with ice terminology, but must be able to recognize the many forms of ice as well as understand their potential dangers. In short, he must know what the ship can "hack" and what she cannot.

The temperature of the water, over which these men fly their single-engine aircraft, is about 28° Fahrenheit. It is a chilly place to ditch, to say the least; life expectancy, even with exposure suits, would be all too short.

Upon reaching the fast ice of McMurdo, the flight conditions change again. For the first time, the breaker pilot faces the danger of white-out and severe unpredictable turbulence. He has left the open sea and pack ice far behind and is operating over the solid ice and snowfields of Antarctica. His problem is complicated by the fact that a radio altimeter can be off as much as 50 feet over loosely packed snow. His eyes are also incapable of judging altitude over a snowfield on a bright day. Mistakes

involving hundreds of feet can easily be made.

Furthermore, the glaring rays of the sun, reflected from the undisturbed snow and ice, can be nearly blinding. While the Antarctic possesses far worse places for turbulence than McMurdo, the breaker pilot must show due caution lest his flight end up as a number of his predecessors—a crumpled monument to Naval Aviation on the McMurdo ice.

UPON completion of the McMurdo shipping channel, two of the icebreakers begin looking toward new tasks, ones that usually fall into the category of scientific surveys. Whether the pilot finds himself at Hallett Station, the Bally Islands or the Bellingshausen Sea, he finds new flight conditions. As the Antarctic summer is now well along, most of the sea ice will have broken up and been blown north. The ships are again exposed to the cruelties of the open sea.

Where the pilot has been able to count on a stable deck during his month and a half at McMurdo, he is now forced to work from a deck that is often pitching and rolling to a point that is a nightmare to a pilot.

Just how can anyone fly from a deck rolling 15° and pitching better than 50 feet? Conditions such as these can easily fall outside most of the safety instructions for shipboard helicopter operations, yet aboard an icebreaker in the Antarctic, times arise when the mission demands just such operations. Only through extreme proficiency and teamwork between helo detachment and ship can the mission be completed in safety.

In his survey work, the pilot surely will be called on to airlift shore parties to the snowfield, mountains and glaciers of various off-shore islands as well as the continent itself. To the inexperienced pilot, these landings may look deceptively simple; time will soon prove his first impression anything but correct. The glaciers and valleys of Antarctica often act much the same as a venturi tube, for here the velocity of the winds is greatly increased and turbulence can become severe. The direction

of the wind often has little correlation with the surrounding conditions. A smoke flare is the only safe means of determining wind over the land area. Even then, the pilot must always be prepared for an erratic shift, for the Antarctic is the home of the wind.

But wind is not the only problem the pilot faces in a landing in the wilds of Antarctica. During the final phase of an approach over light powdery snow, the strong



CH-19E AND SLEDS PASS MT. EREBUS

blast from the rotor blades can easily whip the snow into such a frenzy as to completely white-out all visibility. Thus the pilot loses all visual reference just when it is critical. His only solution is to maintain attitude and smoothly settle to a landing.

But even with the helicopter on the ground, the situation may still be anything but safe. What may have looked like a solid snowfield from the air can, in reality, conceal a number of dangerous crevasses. Just when the pilot thinks that the landing is complete and all is well, a gear may suddenly crash through the frozen crust into a 1,000-foot void. The aircraft then is in danger of rolling over and beating itself to death. The author once saw a man, less than ten feet from the helo, suddenly break through the ice to disappear into a deep crevasse. Only his safety line protected him from death.

The unexpected is the great danger in Antarctic flying. To in-

sure safety, the pilot must plan, his flying carefully in advance and, using all the knowledge and skill at his command, be prepared for any hazard and all eventualities. But even this, in itself, will not make for a safe and successful cruise. He must have a maintenance crew second to none. This is one place where AOCIP means a downed aircraft for the remainder of the cruise and a simple mistake, possible disaster.

The working conditions these men face rate as some of the worst on the face of the earth. Ice, wind and cold are the daily companions of the maintenance crews of the *Wind*-class breakers. During *Deep Freeze 65*, a CH-19 assigned to HC-4 accumulated nearly an inch of frozen sea water during one storm. Conditions such as these test the skill of even the finest maintenance crew.

The USS *Glacier* has a hangar, and hangars are in the immediate future for the six *Wind*-class icebreakers. These will certainly improve maintenance conditions. But for the most part, Antarctic helicopter operations aboard icebreakers will change very little. Even new aircraft cannot lessen the dangers to any great extent. The key to successful operations remains the same: a wealth of skill and knowledge forged in the fires of experience. Yet experience in Antarctic operations is all too difficult to obtain. The small detachment is, for the most part, completely cut off from the outside world. Thousands of miles of sea and ice force the men to become completely self-reliant.

In this isolated area of the world, the Antarctic icebreaker helicopter pilot faces a compromise between safety and achievement. If a pilot is overly cautious, the mission will suffer; yet if he fails to show due caution, all can easily be lost. Somewhere between these two extremes lies the road a breaker pilot must follow, a road marked only by the signposts of experience. In following this road, the icebreaker pilot is tested by one of the most demanding fields in aeronautics. Passing such a test should assure him a proud position in the ranks of Naval Aviation. ★★★

Unitas VI is Under Way

Exercise Will End in December

Naval task forces from the United States and eight South American nations are taking part in a four-month antisubmarine warfare exercise in South American waters. This is the sixth consecutive year that such combined maneuvers have taken place.

Designated Exercise *Unitas VI*, the operation consists of a series of ASW training exercises conducted by the U. S. units with the Navies and, in some cases, the Air Forces of Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay and Venezuela. During the conduct of these exercises, U. S. Forces are circumnavigating the continent of South America in a counter-clockwise direction and will transit the Panama Canal and the Straits of Magellan. Additionally, the U. S. Forces are making visits to selected port cities of the participating countries along the exercise route.

Admiral Thomas H. Moorer, Commander in Chief of the Atlantic Fleet, with headquarters at Norfolk, Virginia, has provided the U. S. Forces for the exercise. The exercise commenced August 18 with the departure of the U. S. and Venezuelan forces from the U. S. Naval Station, Trinidad, West Indies, home port of the Commander South Atlantic Force and Task Force Commander, Rear Admiral



THE FIRST F-111 equipped with missiles under the wing has begun flight tests at Edwards AFB, Calif. Rotating pylons keep the externally carried weapons parallel to the fuselage during changes in the wing-sweep angle. The F-111 takes off with its wings set at a 16-degree angle, then sweeps them back to 72.5 degrees for supersonic flight. The rotating pylons automatically compensate for the changes in wing sweep.

Arthur R. Gralla.

Flagship of the Force is the frigate USS *Norfolk* (DL-1) which is homeported in Norfolk. Other U. S. Navy units include the destroyer escorts USS *John Willis* (DE-1027) and USS *Von Voorhis* (DE-1028) with Commander Escort Squadron Eight embarked from Newport, R. I.; the submarine USS *Atule* (SS-403) from Key West, Fla.; two *Neptunes* from VP-23, based at Brunswick, Maine; and one C-131 transport from Fleet Tactical Support Squadron One (VR-1) based at Patuxent River, Maryland.

U. S. ships and aircraft are expected to return about Dec. 8th.

New AVROC's Graduate First to Complete Pre-Flight

The first Aviation Reserve Officer Candidate (AVROC) class to complete both segments of pre-flight training graduated from the U.S. Naval School of Pre-Flight on August 20, 1965.

Twenty-eight men received their graduation certificates from Captain J. C. Haynie, Jr., Commanding Officer of Pre-Flight, during weekly ceremonies at NAS Pensacola. Later that morning, seven from the class were commissioned Ensigns in the U.S. Naval Reserve. These officers then participated in a five-week course before proceeding to one of the outlying fields.

The other 21 AVROC's returned to their respective colleges to complete their academic education. Upon graduation from college, they will be commissioned and report for active duty to continue their training.

The program, initiated in 1964, is comprised of two eight-week segments. One is completed during the summer between the sophomore and junior years of college with the final segment between the junior and senior years. Upon completion of both eight-week segments and their college training, the AVROC's are commissioned.



TO A CASUAL BYSTANDER (if there were any in the area), the arrival of the *Floyd County* (LST-762) in company with nine motor patrol boats from the Coast Guard must have resembled a mother goose and her young ones. But to men of USS *Currutuck* (AV-7), it meant the end of a 62-day deployment to the Vietnamese island penal colony of Con Son where the ship had not only been carrying out her primary mission as a seaplane tender but had also been acting as flagship for the entire Market Time Operation.



ORIONS IN WILLIWAW LAND

THE BIG ORION droned up Kuluk Bay and past Finger Bay, a lean stretch of deep water cleaving a rocky coast where ships of a King Crab fishing fleet lay beside docks that once hosted submarines.

Over Point Zeto, I looked down at a cluster of abandoned barracks and quonset huts, lonely reminders of the 40,000 men who occupied the island during WW II.

Then LCdr. Dean North, aircraft commander and a former airline pilot, wrestled the P-3A through a gutty, gusty crosswind to land.

I climbed down the *Orion's* ladder. A chill, wet wind blew through my topcoat. This was Adak, a tundra-sheathed volcanic island two-thirds of the way down the Aleutian chain from Alaska and a temporary "home" for Patrol Squadron 19.

Dick Rippey, a customer service representative who has been with Lockheed since cutting his teeth on Model 10's and 12's 27 years ago, turned out to greet me. He had a succinct comment about VP-19 and its 240 men and 54 officers: "They just don't come any finer."

The next morning, wrapped in a

*Photographs and Story by
Mark Clevenger*

Lockheed-California Company

pile-lined parka borrowed from Rippey, I squeezed into his ancient four-wheel drive station wagon for the cold, windy ride to the squadron headquarters.

There, I met Commander Donnelly Howard, ruddy-faced squadron commander. His crews fly over our northwestern backyard fence and watch the oceanic alley—a job, he allows, that the *Orion* helps them do with considerable effectiveness and comfort. The squadron's mission is surveillance.

"We look over ship traffic. We fly mercy missions. At least two of our planes are on patrol every day, flying tracks from south of the Aleutians to as far north as 68 or 69 degrees north latitude—clear past the Bering Straits into the Arctic Ocean.

"We handle occasional emergencies. Everyone has to lend a hand in this rugged country," Commander Howard went on. "We've flown injured fishermen to Elmendorf. We've searched for lost ships. A

few months ago, following a storm, we helped search for lost Russian trawlers."

Howard's planes fly from a base installed during WW II when the Japanese occupied islands at the end of the Aleutian archipelago. Squadron crews take turns on this duty.

"Patrol Squadron 46 was the first full *Orion* squadron based here," Commander Howard said. "Before that, a *Neptune*-flying squadron, based at Kodiak, detailed a detachment to Adak."

He turned to look out his window at an *Orion* bearing the designation, VP-22: "That plane brought a party of VP-22 people—including one of your reps—to take a look at Adak."

VP-22 knows a different kind of flying. For some time the squadron has flown out of the warm and verdant Hawaiian Island post, NAS BARBER'S POINT. Both VP-19 and VP-22 belong to Fleet Air Wing 10 with headquarters at Moffett Field under the command of Captain John W. Crowe.

Adak, Moffett, and Naha, Oki-nawa, are points of a Pacific Ocean

triangle patrolled by men and planes of FAW-10. Each of FAW-10's squadrons spends time at the Pacific outposts, interspersed with assignments on home grounds at Moffett.

Commander Howard admitted that Adak is not the most popular station around. Men putting in a half-year's duty at Adak face bleak duty. But, he stressed, the men make the most of it.

In a large structure overlooking the base—called the Bering Building—are a snackbar, gymnasium, basketball court, and a heated swimming pool along with a small, local museum. Identifications are original. A whale's jawbone is: "Tool used by first SeaBees on the island." A large, oval stone—

named Mount Moffett behind Adak's cross-hatched runways.

The climate's the joker. The 4,000 Navy men, government people, and dependents on the island are alternately shrouded, doused, frozen, or wind-whipped by the weather. Surprisingly warm according to weather records—mean temperature of 40.5 degrees—Adak weather feels a lot colder because it is cloudy, wet, and windy.

Skies are overcast more than 60 per cent of the time. The ceiling stays below 3,000 feet nearly 75 per cent of the time. Average yearly rainfall is 70 inches; snowfall is 91 inches; and it rains, snows, hails, or sleet—often all four—on more than 260 days of the year.

"Our first week on Adak, we

"Most of our missions last about eight hours," Commander Howard said. "That brings us back to Adak with plenty of reserve fuel.

"In case Adak is soaked in, we skip up the chain. We try to land first at Cold Bay, then at King Salmon, Kodiak, or Elmendorf. One of the fields always is open."

Crews fly missions over vast expanses of water—a day-long period of staring at instruments and out through windows, nibbling at snacks from the aft galley, and indulging in the Navy's interminable habit of coffee drinking. The monotony is broken when planes "rig" a ship, the crews' term for sweeping low near a vessel to identify it. *Orions* come in low and fast and pull up sharply after



SETTING-UP EXERCISES HELP MEN KEEP PHYSICALLY FIT



AN ORION FLIES BY ABANDONED BARRACKS ON ADAK

rounded by ceaseless sea action—carries a label reflecting a local joke: "Sea otter egg."

A theater showing nightly films and a bowling alley also help pass the time. And men study or pursue hobbies—ham radio, music and the like.

Outdoor sports are available—but enjoyed only by the most adventuresome and hardy. Flocks of eagles and gulls, sparse blue foxes, occasional sea otters, a herd of imported caribou, but no native Aleut Indians inhabit the island. Hunting caribou was permitted for the first time last year. Salmon can be caught during runs. Fish and Wildlife Service have stocked cold lakes with trout which attain prodigious size, some (no doubt truthful) island anglers say. A ski lodge sits on the slopes of coincidentally

faced winds up to 100 knots. We quickly learned why we chain down the planes," Commander Howard said.

First men out of the *Orions* on landing are men with the heavy-linked tie-down chains.

Howard's recollections paralleled those of Navy men who made first landings on Adak beaches in 1942. Then, 100-knot-plus winds made shambles of efforts to set up camp the first night. Adak winds blow over 15 knots more than half the time, and winds in excess of 40 knots are common. Highest wind ever recorded was in 1951 when the anemometer hit 117 knots, or 132 miles per hour.

Squadron life at Adak is not much different from that of any other patrol squadron during the regular working hours of the day.

passing nearby. Between missions, crews train.

I went along on one such exercise, sitting in the cockpit with Pilot Lt. Don Foery and Flight Engineer Robert M. Harry, AMI, and two pilots who had only recently reported to the squadron, Executive Officer Commander Albert Lesperance and LCdr. Ken Krause. Above low clouds the sun shone brightly.

"Flight crews get to see the sun almost every day," Commander Lesperance pointed out.

Below, the sea, glimpsed through momentary breaks in the clouds, was dotted with white caps and speckled with slick, gray wind patches. Sun alternately spangled the sea surface or gave it dull luminescence off shores of extinct volcanoes thrusting from the sea,



MOST MISSIONS IN P-3 LAST FOR ABOUT EIGHT HOURS WHICH LEAVE A WIDE MARGIN OF FUEL FOR EMERGENCIES.

carrying a matrix of ice, snow, and bare rock on the sheer sides.

Flurries of snow, rain, and hail drummed over an area, then passed quickly on.

Finding a large break in the clouds, Lt. Foery dropped smoke markers for targets. Then the two new pilots took turns firing rockets at and bombing the markers. Bouncing in through choppy winds at Adak, the pair shot landings and takeoffs, with a martini bet on who could best master the crosswind.

People permanently stationed at Adak spend a year on the island—a year and a half if accompanied by dependents. Several hundred families live on the island. Some 20 Alaskan School System teachers—a few are Navy dependents—man the island's 12-grade school.

The base, under the 17th Naval District, provides facilities for Coast Guard Loran stations and buoy tender, some government teams, a Navy tug, and a U. S. Army Radio Signal Propagation Station whose huge, bulbous antenna buildings are called in island jargon, "white Alices."

Army engineers created the Adak airfield in 10 days in 1942 by draining a flooded basin off Sweepers Cove. On September 14, planes—including Lockheed-built P-3s—took off to bomb Kiska Island.

A totem pole, that stands between two diminutive trees overlooking Sweepers Cove and the commodious docks that now nest only a tug, cutter, and the supply ship that calls every two weeks, bears this inscription:

"This totem is the story of Adak. The bottom figure is a monster from prehistoric times when the Aleutians probably were a land bridge to Adak. The walrus symbolizes the sea life from which the Aleuts obtain food, clothing, and tools. The two-headed emperor goose represents the era when Imperial Russia ruled. The blue fox is characteristic of the time when only hunters and fishermen visited the island. Next is the Williwaw, the wind devil whose actions have plagued every inhabitant. The airplane represents the armed forces on Adak today."

Commander Lesperance spent a duty tour on Adak in 1949.

"The flying was much more grim," he said. "We had fewer navigational aids, although we had good GCA. Adak has always had a crackerjack GCA unit.

"Propellers of the P2V-2 *Nephtunes* we flew had no reverse pitch. When we landed on ice, we just slid to a stop.

"Our *Orions* give us a very safe feeling. It's really a great plane."

Three Lockheed reps spend 60 days with Adak squadrons before rotating back to Moffett. The trio aids in keeping squadron planes healthy and flight ready.

Maintenance on the line is sometimes rugged. Crewmen wear heavy parkas to protect themselves against the wet blasts. Residents insist it often snows or rains horizontally in the wind.

More extensive work is done in the squadron's big hangar. A brand-new hangar to house patrol units is under construction nearby. Squadron crews also work with Navy men permanently stationed at Adak to man the island's aircraft maintenance shops.

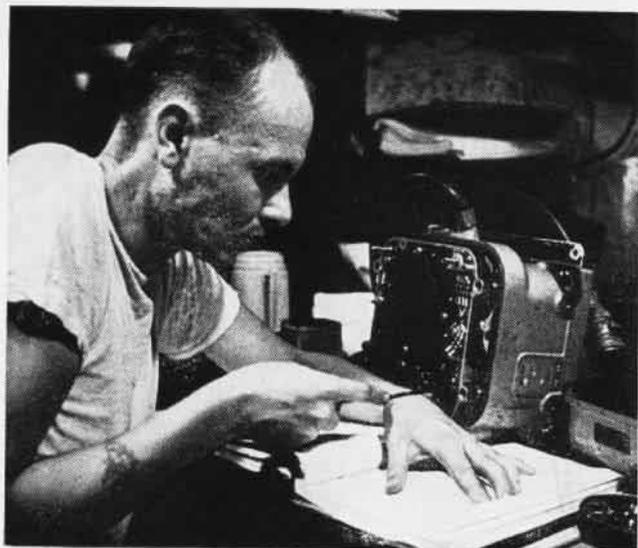
After four days on the island—during which the wind had been relatively quiet—I joined a sleepy-eyed crew that mustered at 4:30 for a flight to Moffett. Plane commander, LCDr. Bill Cloughley, made his walk around the P-3 while crewmen checked the big plane thoroughly before takeoff.

The *Orion* was already filled with some 20 VP-19 men, taking off for one of the two weekends at home they are allowed during the unit's six-month tour.

"No one is ever late for this flight," Commander Krause had said the night before. "This flight goes home." ★★★



PHOTO RECON pilots Ltjg. L. S. Brown and Ltjg. C. M. Clark go over charts. Their unarmed Crusaders are escorted by armed fighters.



WHILE LTJG. Clark is briefed, M. O. Nyberg, PH1, adjusts one of six cameras, capable of six exposures a second, aboard each plane.

PHOTO PILOT—THE UNARMED FIGHTER

LTJG. COLIN M. CLARK, attached to VFP-62, is one jet pilot who has many missions over Vietnam to his credit, yet he has neither dropped a bomb nor fired a rocket.

His specially equipped F-8 *Crusader* has no guns, rocket pods, or bomb racks. The *weapons* are six cameras covering an area from horizon to horizon and from below the plane to directly ahead. With-

*By Roger E. Busby, JOSN
Photos by James Falk, PH1*

out armament, its range is greater than the conventional *Crusader*.

Clark's working day begins the evening before his mission when he receives information on the locations of the targets and the types of photos required by the Military Advisory Command in Saigon.

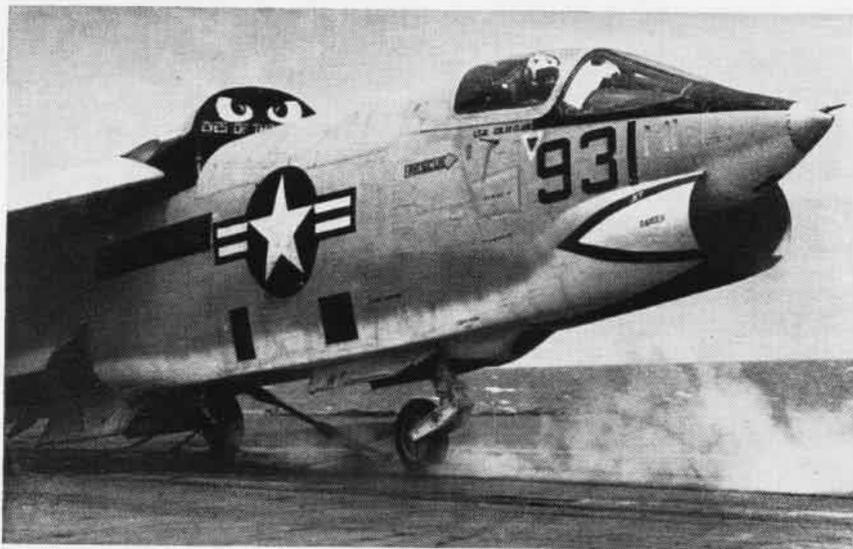
From this information, he determines which of the plane's cameras will be utilized, and the types of film to be used. He then goes to the Photo Intelligence Office and picks up maps covering the area.

Before retiring, he completely plans his flight. Then he studies the maps to familiarize himself with the surrounding terrain.

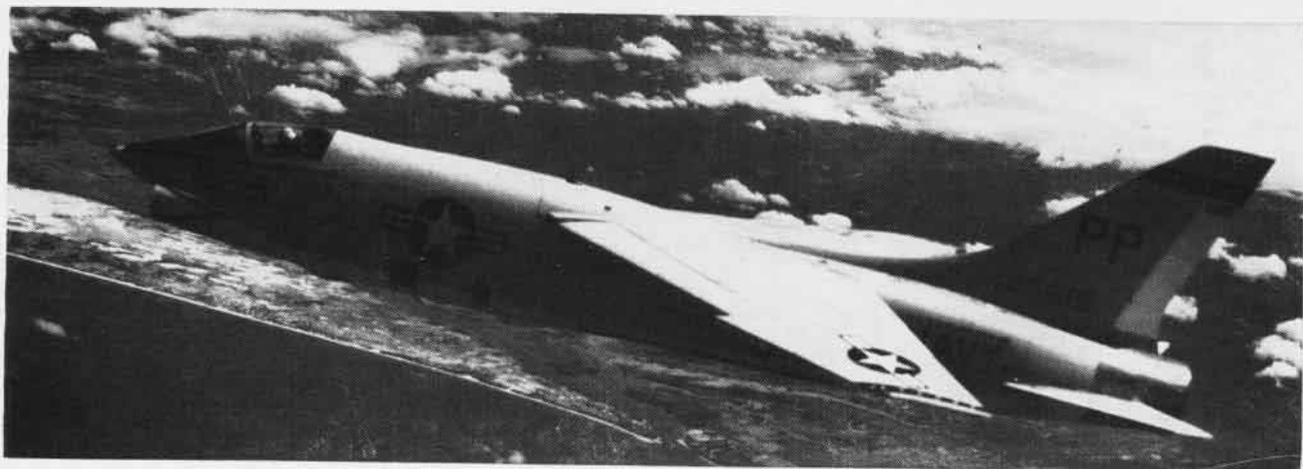
The next day, two hours prior



G. D. GILL, PH3, installs aerial camera in *Crusader* on flight deck just before launch.



LTJG. CLARK takes off. Minutes later he will join up with fighter escort for a reconnaissance run over enemy territory. His photographs will provide valuable strategic data.



WITH CRUSADER escort standing guard, Clark prepares to roll in on his reconnaissance pass. By carefully studying charts of the area, he is able to pinpoint the location of a bombing attack. After completing the run, he joins his escort for the flight back home.

to launch, Clark attends a briefing in the Air Intelligence Office. At this time he receives information concerning the latest weather over the targets and enemy anti-aircraft positions.

Following the AIO briefing, Clark, with the fighter pilot assigned to fly cover for him, goes to the squadron ready room. At this time, he gives one set of the target maps to the escort pilot. He explains the mission and passes on any pertinent information.

One-half hour before the launch, Clark goes to the flight deck and begins his pre-flight check of the

aircraft and its cameras. At this time he goes through a last-minute instrument check. Then, amid a cloud of steam, his *Crusader* is launched from the carrier and the photo pilot is on his way.

Minutes after his return, the developed negatives are taken to the Photo Intelligence Office where Clark is already being debriefed.

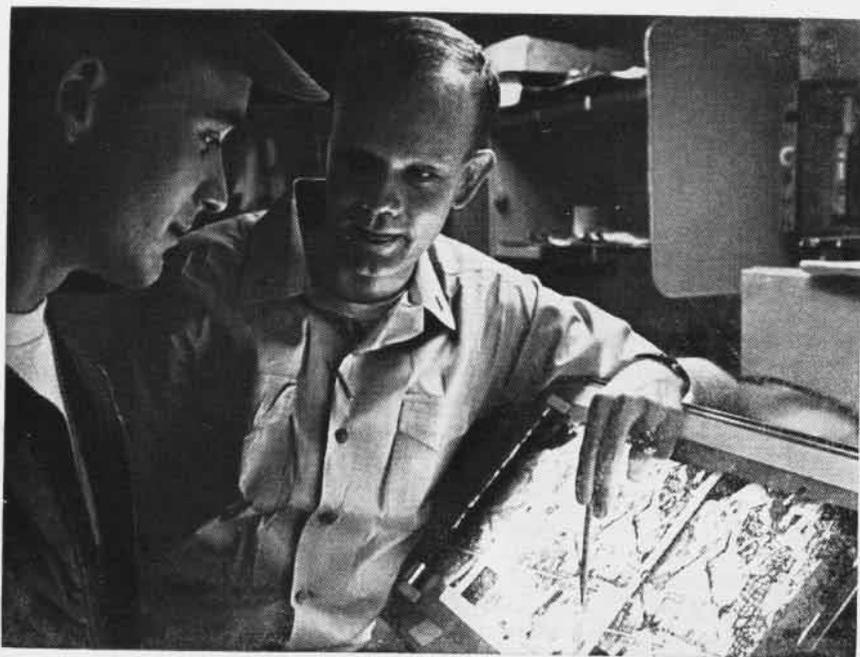
A report of this information is compiled, and a copy sent to Air Intelligence for comparison with reports from other pilots. Another report, together with the film, is forwarded to a higher command. And the cycle begins again. . . .



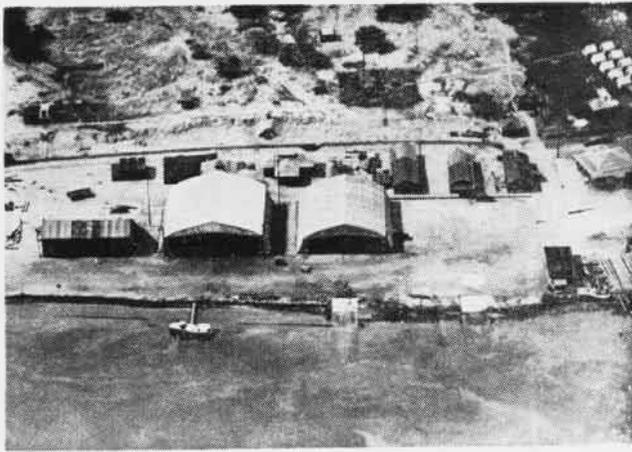
BEFORE engine is shut down, photographers remove film cartridge for trip to photo lab.



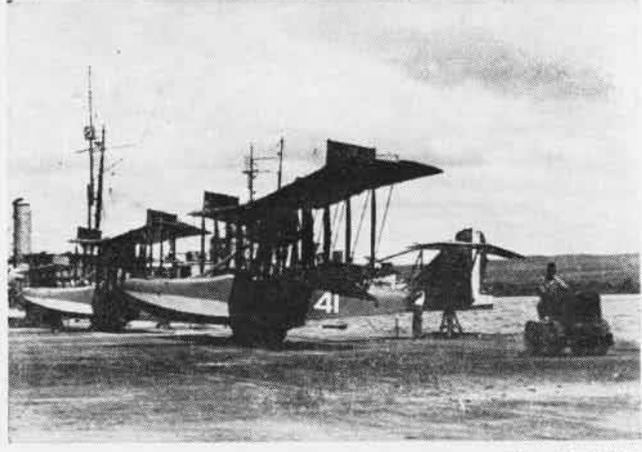
FILM is carefully taken from magazine for rapid processing before viewing by the AIO.



CLARK, STILL in flight suit, is interviewed by Ltjg. L. L. Fry, Photo Intelligence Officer, after film is processed. Discussion centers around ground fire and area weather.



THIS IS THE SEAPLANE STATION AS IT WAS BEFORE 1923



THESE HS-2L SEAPLANES WERE THE FIRST ONES ASSIGNED

QUIET ARRIVES AFTER 40 YEARS

By *LCdr. James E. Wise, Jr.*

IN MARCH 1962, NAS FORD ISLAND, originally designated NAS PEARL HARBOR, was decommissioned without fanfare or ceremony. The tiny island air station, which had for over 40 years played its role in war and peace, passed quietly into the annals of Naval history. It was a chapter bright in Naval Aviation's development and achievement.

Today, the retired station is empty—almost ghostlike. Where once hundreds of Navy fighters and divebombers ringed a single dark runway, now only vacant white ramps and gray hangars rest, silently, under a warm tropical sky.

The letters A.L.F. are written on the bleached second story wall of the operations building. As an auxiliary landing field for NAS BARBER'S POINT, some ten miles to the west, the station still keeps its hand in aviation. A single UC-45J remains on the field for use by desk-bound aviators attached to the various commands located on the island.

The development of military aviation in the Pacific is closely linked with the history of Ford Island and the Naval Air Station. Records indicate that a large segment of the cane-covered island, which was to be used for aviation purposes, was purchased by the U.S. Government shortly after the beginning of WW I. (Portions of the island had been purchased by the Army and Navy as early as 1902.)

The U.S. Army was the first military air arm to establish itself on Ford Island. A rough sod field was cleared down the center of the island and, by late 1917, the new installation welcomed its first air unit, the Sixth Aero Squadron. Although the "Sixth" initially had no aircraft to demonstrate "height flying," Maj. Brooks, the Commanding Officer, "kept his men busy in the theoretical work of learning about planes and flying, splicing cables and mending canvas." Within a year several wooden hangars were completed to house the increasing number of squadron observation type aircraft. By October 1919, the field was in full operation and the Army began to add new units to its fast growing mid-Pacific air base.

Naval Air first appeared in the Pacific in December 1919. Commanded by LCdr. R. D. Kirkpatrick, USN, a small detachment of nine officers and 55 enlisted men was situated in the Navy Yard at Pearl Harbor. The unit listed only four aircraft on its flying roster: two HS-2L flying boats and two N-9 float planes. Two large canvas hangars which had been salvaged from WW I operations were erected to protect the flimsy aircraft from sudden tropical storms.

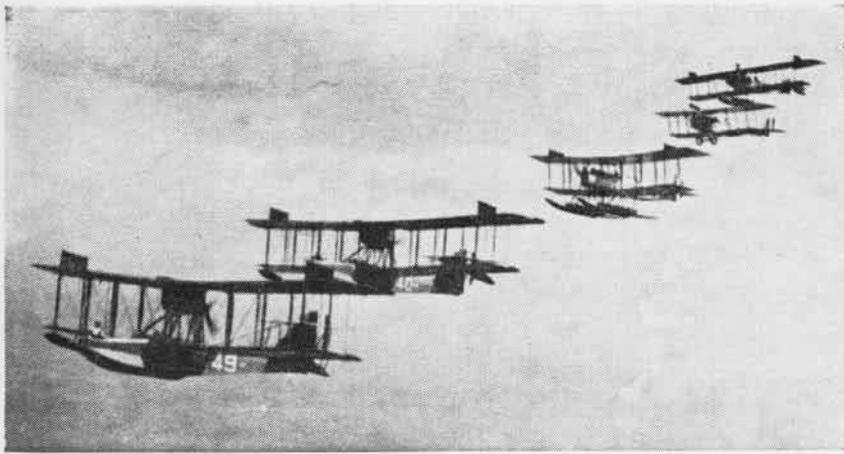
A year later the Navy completed negotiations for moving its air activities to Ford Island. It was

agreed that the Army would continue to occupy the area west of the field and the Navy would utilize and expand the east side of the island. Prior to the official move, a permanent hangar was completed for Navy use on the southeast tip of the island. This hangar, number 6, although partially rebuilt in early 1942, still stands today.

The move to Ford Island by Naval Aviation personnel was led by Commander John Rodgers, USN, who had relieved LCdr. Kirkpatrick. Commander Rodgers, Naval Aviator No. 2, is probably best remembered today for his pioneer flight between San Francisco and Honolulu in 1925. Records indicate that Commander Rodgers moved his small unit across the harbor a day early to avoid an approaching storm. Once the aircraft were safely in the hangar on Ford, he commissioned the new Naval Air Station. The date was January 17, 1923. The decision to move early was a wise one indeed, for the ensuing storm completely destroyed the old canvas facilities in the shipyard.

As with all new stations during peacetime, appropriations were scarce and expansion was slow. Within a few months, a high wooden water tower was constructed to provide pressure for the station's water system. A small building was erected on the top of the tank for observatory and aerological use.

By mid-1923, new aircraft, such



THIS PICTURE, 1924, SHOWS TWO HS-2'S, ONE R-6, ONE JN-4 AND ONE N-9

as the TS, F5L, H16 and DT, began to appear around busy Hangar #6. In 1926, the first FU-1's and OU's arrived to be followed soon after by VE-7's and VE-9's.

As both Navy and Army facilities continued to expand with the passing of the years, it soon became evident that there was not sufficient room for the proper development of both activities. In 1927, Rear Admiral William A. Moffett, then Chief of the Bureau of Aeronautics, stated in his annual report that "negotiations have been pending for some time with a view of obtaining possession by the Navy of the entire area of Ford Island. . . . The land owned by the Navy De-

partment is of such a small area that it is entirely occupied by station buildings and it will be impossible to continue the very necessary planned development of the station without encroaching on Army property. In view of the difficulties outlined above, it is believed to be necessary that the Navy Department be given entire custody of Ford Island."

By August 1931, four squadrons were based at the Naval Air Station. They were VP-1, VP-4, VP-6 and VJ-6. The VP squadrons flew T2D, PD1 and T4M type aircraft while the VJ unit operated with two amphibian types, the OL-8 and O2U. These planes replaced the



RODGERS, FIRST NAVY C.O. AT FORD

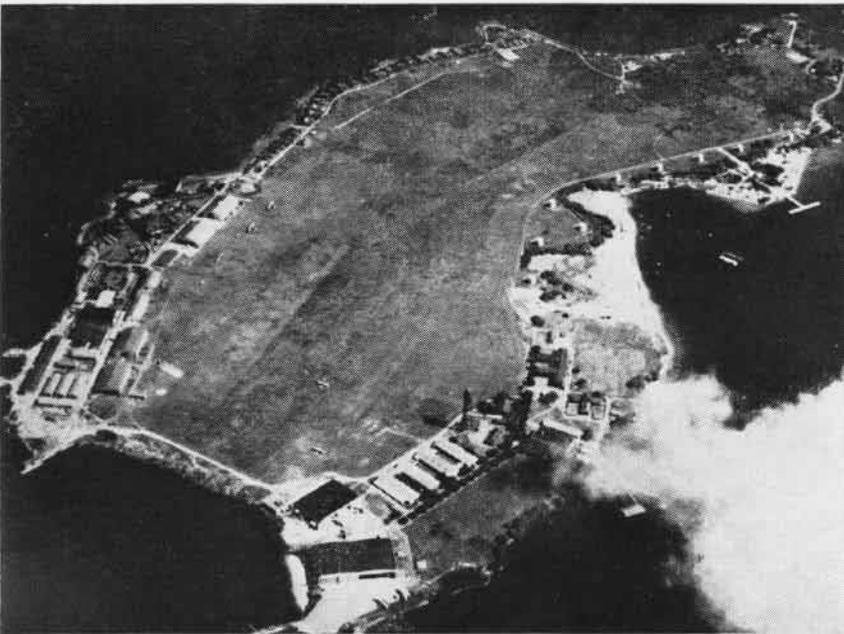
older F5L, H16 and N-9 models. In January 1934, the first P2V planes were delivered by VP-10. A few advance base flights were made to Johnston Island, French Frigate Shoals and Midway Island—but only after weeks of preparation.

In January 1934, six Consolidated P2V-1's, LCdr. K. McGinnis commanding, made a non-stop formation flight from San Francisco to Pearl Harbor in 24 hours, 35 minutes, thereby bettering the best previous time for crossing, exceeding the best distance of previous mass flights, and breaking a nine-day-old world record for distance in a straight line for Class C seaplanes with a new mark of 2,399.0 miles.

In 1936, new flood and obstruction lights were installed around the field. By June of the same year, the landing mat had been lengthened to 3,000 by 400 feet and a new hangar had been completed. About this time, Pan American Airways Clipper-type aircraft were beginning to pioneer a Pacific air route to Manila and the Far East. All Clipper air ships were serviced at NAS PEARL HARBOR from October 1936 until the early part of 1940.

On March 20, 1936, Mrs. Amelia Earhart Putnam and Mr. Paul Mantz crashed at NAS PEARL at the beginning of the second leg of their attempted round-the-world flight. The aircraft they were flying went into a severe ground loop on takeoff and crashed halfway down the runway.

All this time, Army and Navy aviation facilities were constantly expanding and both services were



THIS VIEW OF FORD ISLAND (1930) SHOWS HANGARS AND LUKE FIELD

feeling cramped. Negotiations for transfer of the Army from Ford Island were completed November 1, 1939. Within a few months, all Army air units and personnel had moved to Hickam Air Field, some five miles to the east.

When Japanese attackers arrived over the Naval Air Station during their infamous December 7th attack on Pearl Harbor, they found most of the station aircraft grouped in neat rows. As fate would have it, an inspection had been held the day before and little thought had been given to moving the closely arranged aircraft. Seconds after the initial appearance of enemy aircraft over the island, the air station came under direct attack. Fighters swept in low and methodically strafed PBV's, SOC's OS2U's and SBP's parked on the field. Almost all of the station's aircraft were disabled during this first attack.

During the follow-on dive bomber attack, a bomb, that was apparently directed at the USS *California*, fell short and hit Hangar #6, setting it afire. A dud struck Hangar #38, another bomb fell into the open courtyard of the dispensary; and a terrible explosion demolished the roadway in front of the Overhaul and Repair hangar. The landing mat fortunately escaped serious damage.

When the attackers finally departed, a hasty check was made to ascertain what harm had been done to the station. Other than the di-



THREE OF SIX P2Y-1'S OF VP-10F WHICH FLEW NON-STOP FROM MAINLAND

rect hit on Hangar #6, damage to the air facility was slight—only one man had been killed—in comparison to the burning warships which surrounded the island. The casualty at the air facility was attached to VP-21 and was on guard duty in Hangar #6. His name was Theodore Wheeler Croft, ACMI, USN.

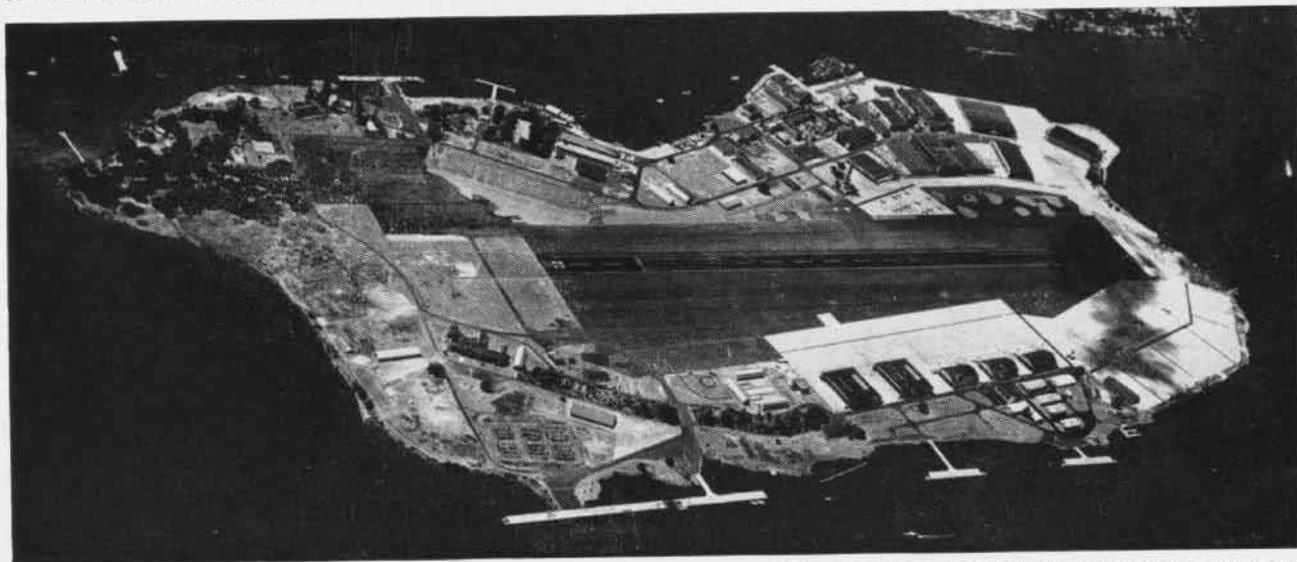
In the weeks following the attack, the station's defensive system was rapidly improved. Buildings were camouflaged and concrete retentments were constructed to protect newly arrived aircraft from another possible attack.

By late 1942, various Fleet commands began to set up shop aboard the small island. Commander Air Force, Pacific Fleet, moved his headquarters to Ford to direct the operations of the vital carrier Fleet. A short time later, Air Transport

Squadrons, Pacific Fleet, and Commander Utility Wing, Pacific Area, moved to NAS PEARL to coordinate the vast quantities of aircraft and supplies pouring through the station en route to the war further west.

On September 12, 1942, the first flight by VR-2 of the Naval Air Transport Service inaugurated flights from Honolulu to the South Pacific and Australia. A year later, an aircraft pool was created on the station to form a reserve supply from which carriers, air groups and squadrons could draw to replace lost aircraft. For the remaining years of the Pacific war, NAS PEARL HARBOR continued to be a beehive of air activity.

With the post-World War II military cutback, operations on Ford Island declined. The advent of jet propulsion and larger air-



NAVAL AIR STATION, FORD ISLAND, AS IT LOOKED FROM THE AIR JUST PRIOR TO ITS DECOMMISSIONING IN 1962

craft soon caused those air activities that did continue to move to NAS BARBER'S POINT, some ten miles west of Pearl Harbor. Subsequently, in 1952, the field (with seadrome) was designated as an auxiliary landing facility for NAS BARBER'S POINT.

The Korean War brought a brief flurry of activity to the island. Finally on March 31, 1962, NAS FORD ISLAND was decommissioned and placed under the supervision of Commanding Officer, Naval Station, Pearl Harbor.

Today, Ford Island houses the Navy's first *Polaris* Missile Submarine Training School in the Pacific. Other commands such as Commander Anti-submarine Force, Pacific, and Commander Fleet Intelligence Center, Pacific, direct their varying activities from the tiny island.

Aviation has been left behind in a past chapter of Ford Island—gone but certainly not forgotten. The future of Ford is linked with space and nuclear power. The island and its facilities will continue to be as before—a key outpost for America's military might in the mid-Pacific.

Intrepid, CVSG-56 Win Given 'A' for ASW Proficiency

The Norfolk-based USS *Intrepid* and her assigned air group, CVSG-56, have won the coveted ASW "A" award for fiscal year 1965.

The "A" is awarded annually by ComNavAirLant to the carrier and embarked air group displaying the highest proficiency in antisubmarine warfare.

Intrepid, now having a Fleet rehabilitation and modernization overhaul at the Brooklyn Naval Shipyard, is commanded by Captain Guiseppi Macri.

ASW Carrier Air Group 56, comprised of HS-3, VS-24, VS-27 and Detachment 11 of VAW-33, is commanded by Commander Kenneth H. Lyons.

This is the third recent honor for *Intrepid*. She had already received her second consecutive Battle E for outstanding operational readiness during the fiscal year, and the "G" award for the efficiency of her weapons department.



BILL NAUGHTON GIVES THE HAND STANDBY SIGNAL TO BRUCE MCLACHLAN

BONNIE DICK STATION 'ON THE AIR'

ITS CALL LETTERS are KBHR. A few short months ago, it was only an idea. Now, however, it's a fully operational radio-television station helping to maintain a high morale aboard *Bon Homme Richard* while the carrier operates with the Seventh Fleet in the South China Sea.

One of the Armed Forces Radio and Television Service's newest seagoing outlets, KBHR has joined an elite group of shipboard radio stations broadcasting planned AFRTS programs similar to those provided by commercial stations.

KBHR radio is the brainchild of Ens. C. J. Portell, *Bonnie Dick's* public information officer, and Bruce McLachlan, JO1. It operates 16 hours a day, seven days a week, from soundproof studios built into the ship's Public Information Office. Its greatest emphasis is on the radio side of things; the studio keeps broadcasting music even when motion pictures are being shown over the closed-circuit TV. Live TV broadcasts have become another innovation. Two 15-minute newscasts are given each day.

Before it was accepted by AFRTS, KBHR "made do" with donated records and a few albums purchased through the ship's wel-

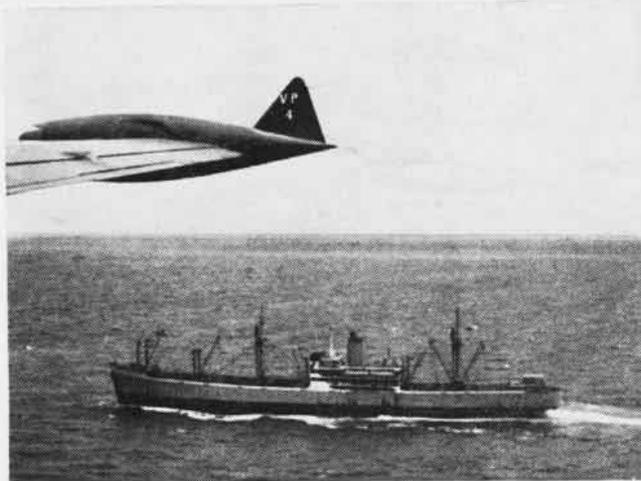
fare and recreation fund. The AFRTS acceptance brought an avalanche of new records into the studio, so now KBHR's five part-time announcers and three journalists have a wide selection.

Music is not all that fills the air, though. Sound engineers at AFRTS studios in Los Angeles edit programs from all stateside radio and TV networks, deleting commercials and tailoring the programs to meet the needs of stations like KBHR. So *Bonnie Dick* listeners are apt to get a dose of "Meet the Press" with their diet of musical enjoyment.



JIM PERKEY READIES A RECORD

PACIFIC AIR WINGS ON PATROL



A VP-4 Neptune approaches a ship during a photo run made off the coast of south Vietnam. This has been a major role of VP squadrons.



K. D. TIETZE, AN, attached to VP-4, prepares to photograph a ship off Vietnam. Looking on are two Vietnamese Navy liaison men.

VP-28 RECENTLY completed a very satisfactory Administrative/Material Inspection. All hands have been turning to in anticipation of the ORI this month.

LCdr. G. J. Sharp and LCdr. C. K. Hinger, the first two VP-28 pilots designated P-3A Patrol Plane Commanders, each recently passed the 500-hour mark in the *Orion*. The squadron's two most recent P-3A PPC's are LCdr. E. C. Copeland and Lt. W. D. Sterton.

* * *

In the traditional ceremony on July 21 at NAHA AFB, Okinawa, Commander C. D. Bolan relieved Commander D. C. Overman, Jr., as Commanding Officer of Patrol Squadron 46. Commander Bolan became the 30th officer to command the squadron. VP-46 has been in continuous commissioned service since September 1931.

* * *

Patrol Squadron One, a Fleet Air Wing Four unit, commanded by Commander F. D. Armstrong, Jr., was cited by Rear Admiral J. W. Gannon, Commander Fleet Air Wings, Pacific, in a recent ceremony held at NAS WHIDBEY ISLAND. The squadron was presented a trophy for being the top ASW squadron at Whidbey, and a totem pole for winning the Commander Fleet Air Wing Four Safety Award. It was cited for having achieved 40,000 accident-free flight

hours over the last four years. This is the second consecutive time that VP-1 has won both the ASW Trophy and the Safety Totem Pole.

* * *

On April 22, 1965, four crews of Patrol Squadron Four, flying the SP-2H, pushed the total number of accident-free hours over the 60,000-hour mark. This impressive safety record represents 74 months of flying in the Pacific from California to Vietnam and from northern Japan to Australia.

In addition to its flight safety record, the squadron currently

holds the ComNavAirPac Battle Efficiency E for the last three competitive periods. VP-4 has also earned the Arnold J. Isbell Trophy for excellence in ASW each year since 1962. The squadron is commanded by Commander E. E. Bowen.

* * *

For the second consecutive time, VP-17 took top squadron honors in the quarterly Totem Pole ASW competition held at Whidbey Island. The squadron also captured the crew competition with LCdr. G. L. Jones' crew 11 as top crew.



WHEN MISS DONNA Anzai, 14 (center), underwent heart surgery, she required two gallons of blood. Just two hours after an appeal was made, VP-28 turned out 17 donors.

The two-crew teams are graded for proficiency in several areas, including loading ordnance, navigation, photo reconnaissance, mining and delivery of weapons.

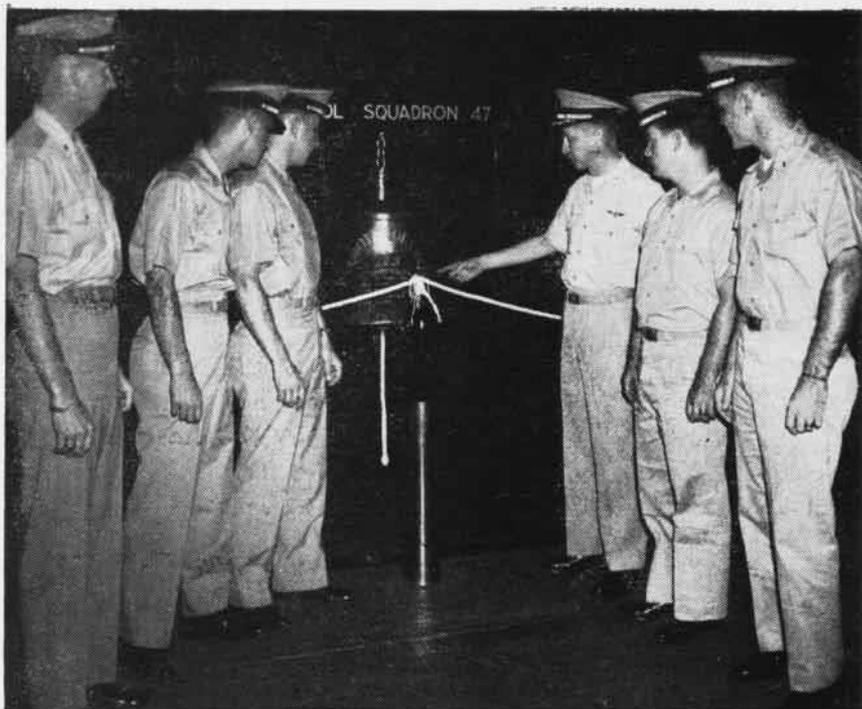
Captain D. C. Kendrick became the first Commanding Officer of Fleet Air Wing Eight on July 1, 1965. The air wing, stationed at NAS MOFFETT FIELD, is expected to fill the command gap left when a portion of Fleet Air Wing Ten deployed earlier in the year.

On June 15, 1965, a change of command took place on board USS *Currituck* (AV-7) while it was anchored in the Con Son Islands in southern Vietnam. Commander F. J. Schneider was relieved as C. O. of VP-40 by Commander H. J. Hinden. The squadron claims that this is the first time since WWII that change of command for a patrol squadron has taken place aboard ship within a combat zone.

During the change of command, aircraft of VP-40 were maintaining a continuous barrier against infiltration along an assigned segment of the southern Vietnam coast line. Since May, Patrol Squadron 40 has been involved in extensive tender operations with USS *Salisbury Sound* (AV-13) and USS *Currituck*, operating from such places as Ko Samui, Thailand, Con Son Islands, and Cu Lao Cham.

Patrol Squadron Six hosted a detachment of 80 Naval Reservists on a two-week tour of active duty training this summer. Thirty ground support personnel, including their Officer in Charge, Commander J. J. Schiesser, arrived first and were greeted by VP-6 C. O., Commander H. S. Potter and Executive Officer, Commander D. P. Riley.

During the two weeks of operational training, the reservists were under the operational control and close supervision of Fleet Air Wing Two. One staff officer commented that they had approached a Fleet level of readiness near the end of the tour. Performing without backup aircraft, the reserves flew a total of 208 hours, including transit flights, without an accident.



BEING SHOWN VP-47's historic bell by Cdr. Pickens, X.O., are LCdr. Overman, Ens. Crofteau, Scales, Johnson and Mickelson. The ensigns are on TAD awaiting orders to Pensacola.

PATROL SQUADRON Two completed its 7th Fleet deployment this summer after having spent its past six deployments in the Alaskan-Aleutian area. The squadron found itself spread over the entire western Pacific with detachments in Naha, Okinawa; Sangley Point, Philippines; Japan; Taiwan, Formosa; Bangkok, Thailand; Guam; Iwo Jima; and Danang and Saigon, Vietnam. Probably the detachment that could lay claim to being unique was that located in Vietnam, split into two units, one at

Danang and the other at Saigon. Both were led by the Commanding Officer, Commander D. A. Lane.

Seven flight crews were nominated for Air Medals while in the combat zone in Vietnam.

While in Japan, the squadron found time to support the Hofu Orphanage near Iwakuni. The Orphanage had approximately 50 children from five years through high school age. Squadron personnel first provided firewood and fuel for heating and cooking during the winter months and later provided food, clothing and other necessities.

Three hundred officers and men of VP-19 returned to their home station at NAS MOFFETT FIELD after a successful nine-month deployment at NS ADAK, Alaska.

During their 270 days on Adak, the squadron's crews flew over 6,500 accident-free hours in carrying out a wide range of missions which included ASW, shipping reconnaissance, and search and rescue. The deployment, one of the longest VP deployments on record, was marked by the first winter operations of a P-3A squadron in the Pacific. (See VP-19/*Orion* story, pp. 17-19.)



CAPT. GUMZ pins Air Medal and 2nd, 3rd, 4th Gold Star on VP-4's Lt. J. Vermillion.

SELECTED AIR RESERVE



NORFOLK'S Accelerated Training Recruits had a dramatic survival lesson with aid of HC-4 when they went overboard in groups of five.



THE VICE PRESIDENT presents posthumous decorations to father of Lt. William E. Swanson, USNR, who was shot down in Vietnam.

Reserves Fly Support Missions

In the Vietnam conflict, Naval Air Reserve volunteers have flown high priority airlifts of cargo and personnel to southeast Asia as part of their reserve training.

Some 400 pilots and crewmen of Reserve Fleet air tactical support squadrons have airlifted 1,800 passengers and over 750,000 pounds of cargo to the Far East in support of U.S. operations in Vietnam, thereby assisting the Navy's regular Fleet tactical support squadrons.

Flights by Reservists have originated at Grosse Ile, Glenview, Willow Grove, Jacksonville, Seattle, New Orleans, Atlanta, Memphis and Norfolk.

Since the establishment of the Naval Air Reserve Training Command in 1946, Air Reservists have supported the active Fleets in three major military actions. During Korea, 40 Reserve squadrons were activated. In response to the 1961 Berlin Crisis, 18 squadrons went on active duty for one year. Reservists also assisted the Fleet during the 1962 Cuban Quarantine on a strictly voluntary basis.

Vice President Honors Hero

Vice President Hubert H. Humphrey visited NAS TWIN CITIES to make a posthumous presentation

of decorations and citations to the family of a Minneapolis Navy flier killed in Vietnam action.

Lt. William E. Swanson, USNR, son of Mr. and Mrs. Marvin K. Swanson of Minneapolis, was shot down during operations against enemy aggressor forces April 11, 1965. Lt. Swanson was serving with VA-95 aboard the USS *Ranger*.

Serving as section leader of a flight of A-1H *Skyraider* aircraft on an armed reconnaissance mission, Lt. Swanson's aircraft was observed

to be suddenly enveloped by hostile antiaircraft fire. Following a steep gliding turn, the A-1H crashed in the jungle.

The posthumous citations and decorations included the Distinguished Flying Cross, Gold Star in lieu of second DFC, Air Medal, Gold Star in lieu of second Air Medal, Navy Commendation Medal with combat designating "V," and the Purple Heart.

At the formal presentation shown above are (left to right) Mr. Marvin K. Swanson, father of Lt. Swanson, Member of Congress Donald M. Fraser, Captain William J. Scott, Commanding Officer of NAS TWIN CITIES, and Vice President Humphrey.

MARTC's New Safety Record

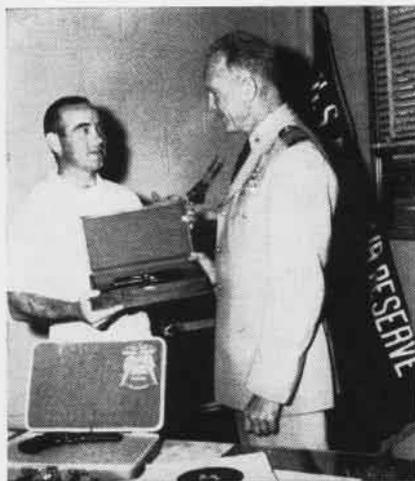
The Marine Air Reserve Training Command has established an all-time aviation safety record by setting the accident rate at 1.07 for FY 1965.

The figure 1.07 means that MARTC has had slightly more than one accident per 10,000 hours of flight. It is considerably less than the predicted all-Navy accident rate of 1.25 or 1¼ accidents per 10,000 flight hours.

In sending his congratulations to all officers and men, Brigadier General H. M. Elwood, CG, MARTC, said, "By establishing



FIFTY-SIX young men came to NAS Glenview, hoping to fill limited numbers of six-month active duty openings. LCdr. Henry Steffen, P&R Officer, said many men had waited months to try to enter the program.



D. L. HAMILTON, AD1, shows his prize, a Colt .45, to Captain J. B. Johnson, NARTU Andrews C. O. Hamilton was the first Navy winner since 1903 of the National Pistol Meet held by the National Rifle Association.

an all-time low-accident rate while flying a record number of flight hours with high performance aircraft, your squadrons have furnished ample evidence of their readiness."

Kudos for Navy Pistol Champ

Messages of congratulations from the Secretary of the Navy and the Chief of Naval Operations preceded the arrival of the 1965 National Pistol Champion to his duty station at NARTU ANDREWS AFB.

Donald L. Hamilton, AD1, became the first Navy man to win the National Rifle Association event since it was established in 1903.

At Camp Perry, Ohio, the cham-

panion fired a total of 2,645 out of a possible 2,700 points and emerged the victor over 2,250 of the nation's top pistol competitors.

Training Together

Various types of squadrons are taking their two-weeks active duty training together. For example, VP-671, VP-672, VP-674 and Naval Air Reserve Maintenance Unit 671 from NAS WILLOW GROVE went to NAS JACKSONVILLE this summer. In all, there were 75 officers and 210 enlisted Reservists. While in Florida, they flew *Neptunes*, operating with the regular Fleet in the Atlantic.

A little later, VS-932 and 934 with Maintenance Unit 931, all from Willow Grove, went to NAS QUONSET POINT for their training.

The Willow Grove Reservists were hosted by CVSG-60. Two regular Navy air anti-submarine squadrons from the group, VS-34 and VS-39, absorbed the visiting contingent and exchanged their operational ASW techniques.

HS-861's First Cruise

Reserve Helicopter Anti-Submarine Squadron 861 completed its first "cruise" on board at NAS NORFOLK. This squadron, commissioned a year ago, has grown rapidly since then.

Flying SH-34 helicopters, the pilots and aircrewmembers attained a high degree of readiness. Each pilot flew 50 hours. HS-861, commanded by Commander R. J. Westbrook, is based at NARTU NORFOLK, Va.



WAVES from NARTU Jacksonville wave to the crowds during the Miss Universe Parade in Miami: (L. to R.) Darlene Billings, YN3; Sandy Horowitz, SN; Carolyn Gregory and Barbara Parslow, Seamen Apprentices.

New Patrol Squadrons

NAS NEW ORLEANS is upgrading its ASW capability with the commissioning of Patrol Squadrons 821 and 822. They will be assigned SP-2E *Neptunes* which are well equipped submarine hunters.

VP-821 was commissioned July 10 with Commander Beeman Ruthven assuming command.

A week later, VP-822 was commissioned. Commander James H. Baughn is the squadron's Commanding Officer.

As the station received its new aircraft for these units, VS-821, VS-822 and VS-823 were phased out, their personnel being assigned to the new patrol squadrons.



PERSONNEL for one of the new SP-2E *Neptunes* at Naval Air Station, New Orleans, line up beside the new aircraft for a picture.



SUPERVISED by Marine instructors, Accelerated Recruits at NARTU Lakehurst, the young men shown above qualified as expert riflemen.

Reserve Honors Announced NARTU Andrews Wins Conway

When Rear Admiral George P. Koch, Chief of Naval Air Reserve Training Command, announced the FY 1965 honors September 1, Naval Air Reserve Training Unit, Andrews AFB, headed the list by winning the Edwin Francis Conway Trophy. This was the second successive year in which NARTU ANDREWS won the Conway Trophy. In addition, five of the unit's squadrons won Noel Davis Trophies. Captain E. A. Parker, now deputy CNAResTra, was C.O. during both Trophy years. Captain John Johnson is now C.O.

The Conway Trophy is awarded annually to the station judged to be "the most efficient" in operations and training of the 18 stations in the command.

This year, NARTU ALAMEDA won the Chief of Naval Air Training Trophy for showing the greatest improvement of any activity in the command. Captain Jim Bock is Alameda's C.O.

Noel Davis Trophies are awarded to the squadrons considered "the most efficient" in training, by type.

The five Davis squadrons at NARTU ANDREWS are: VP-662, Commander Harry A. Estes, Jr.; VS-661, Commander Eddie Ball; VR-661, Commander James H. Denny; WEPTU-662, Commander Edward R. W. McCandless; and NARTU, Commander Dennis C. Evans.

NARTU LAKEHURST had two units which won the Davis Trophy: AWS-75, commanded from July 1, 1964 to December 31, 1965 by Captain Leonard D. Booth and from January 1 to the present by Captain Joseph H. McGuinness; and HS-752, commanded by Commander Donald L. Litton.

Other Noel Davis Trophy winners are NARMU-733, NAS GLENVIEW, Commander George S. Lambert, Jr.; NARDIV-731, NAS GROSSE ILE, Commander Alvin E. Katz; VR-931, NAS WILLOW GROVE, Commander Robert N. Kelly; and VA-831, NAS NEW YORK, Commander J. C. Sapinsky.

NFO Turns Naval Aviator Changes Seats in Skywarrior

After spending a tour together in VAH-13, Ltjg. D. A. Hunt and Lt. R. E. Babis flew together again—



LT. BABIS UNCHAINS LTJG. HUNT

but in a different capacity. While in the squadron as a Naval Flight Officer, Hunt flew as bombardier/navigator for Babis. After both left the squadron, they reported to the training command; one as an instructor, the other as a student.

When Ltjg. Hunt completed basic training, he reported to VT-23 and became the student of Lt. Babis. Now a designated aviator attached to VAH-10, he sits on the other side in the A-3 Skywarrior.

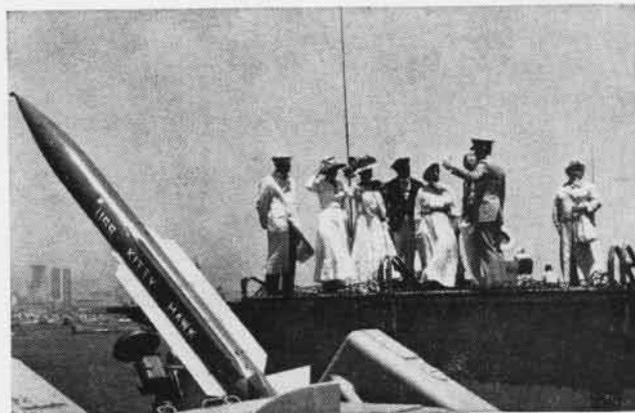
High Honor for Navy Pilot British School Awards Top Prize

Great Britain's Minister of State for Education and Science, Lord Bowden of Chesterfield, presented Lt. Gordon B. Hall, USN, the "Principal's Prize" upon his graduation in July from the College of Aeronautics, Cranfield, England.

Lt. Hall began his graduate studies in Aeronautical Engineering at the Naval Postgraduate School, Monterey, Calif., in 1962. Each year the Postgraduate School sends one student to the College of Aeronautics. Hall was the 1963 selectee.

In 1957, the lieutenant was graduated from the University of North Carolina with a B.A. in mathematics. That same year he became a NavCad. Following designation as a Naval Aviator and commissioning as an ensign, he was assigned to flying duties in multi-engine aircraft.

Prior to entering the Nav's Postgraduate Program, Lt. Hall served with VP-21 at NAS BRUNSWICK.

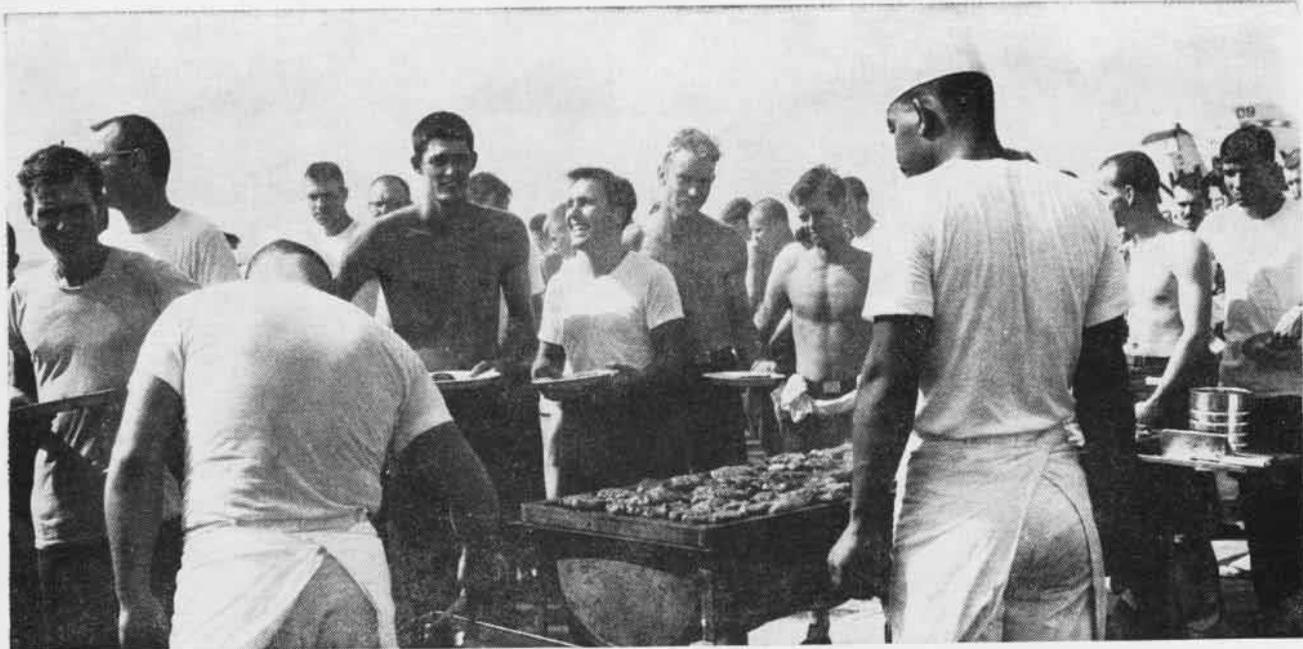


MORE THAN 300 members of the La Jolla Regional Horseless Carriage Club of America came aboard the attack carrier Kitty Hawk while it was alongside NAS North Island. Above, a small group is given an explanation of the Terrier missile by one of the ship's offi-



cers. The group, dressed in driving clothes, parked 75 of their automobiles along the quay wall. While members of the touring club spent an afternoon aboard ship, Kitty Hawk sailors spent an enjoyable afternoon inspecting the vintage cars, some of which dated to 1916.

'T WAS A BONNIE (DICK) GOOD MEAL



BON HOMME RICHARD CREWMEN COMBINE SUNBATHING AND STEAK FOR AN AFTERNOON ON THE FLIGHT DECK

How do you celebrate completing more than 40 days "on the line" as a unit of the battle-tested Seventh Fleet when the nearest liberty port is several hundred miles over a wet horizon? Well, if you're an aircraft carrier like the *Bon Homme Richard*, and you have a break in intensive flight operations, you might invite the boys up to the roof—er, flight deck—for an old-fashioned cookout. Never let it be said that this lady hasn't her men friends' interests at heart—which are, of course, their stomachs.



THE LINES WERE LONG, BUT A TON AND A HALF OF STEAK WAS ENOUGH



BONNIE DICK SAILORS PASS THROUGH SERVING LINES



THE ONLY THING MISSING ON THIS PICNIC WAS GRASS

AT SEA WITH THE CARRIERS



VA-21 ORDNANCEMEN aboard *USS Midway* guide the "dorsal fin" of a Sparrow III missile into an opening in a squadron F-4 Phantom. *USS Midway* was in the South China Sea.



A PAIR of Sparrows—missile type—are pushed toward a waiting *Midway* Phantom.

PACIFIC FLEET

BON HOMME RICHARD (CVA-31)

Piloting an A-4C *Skyhawk*, LCdr. James A. Burnett made *Bonnie Dick's* 115,000th arrested landing while the ship was operating with the Seventh Fleet.

VA-192 pilots have dropped their millionth pound of ordnance on designated targets in North and South Vietnam. The *Golden Dragons* flew their *Skyhawks* more than 1,035 combat hours in a month's time to reach that mark.

CORAL SEA (CVA-43)

Captain George L. Cassell, *Coral Sea's* C.O., received the Legion of Merit during a ceremony held while the ship was in the South China Sea. An accompanying citation from Admiral Roy L. Johnson, CinCPacFlt, commended the captain for "exceptionally meritorious conduct in the performance of outstanding service" as

CVA-43's Commanding Officer.

The award was for the period from February 7 to May 28, 1965; Captain Cassell has commanded *Coral Sea* since January 1965.

Rear Admiral Ralph W. Cousins, ComCarDiv 9, presented Air Medals and Navy Commendation Medals to flight crew members of CVW-15 during a special ceremony.

Hard-working ordnancemen aboard CVA-43 have loaded more than two million pounds of conventional ordnance aboard VA-155 A-4 *Skyhawks* since February 1965. All of it has been dropped on targets in Vietnam by squadron pilots.

INDEPENDENCE (CVA-62)

Norfolk-based *Independence* and Oceana-based CVW-7 have received a commendation from Commander Task Force 77 for their actions in the Vietnamese conflict. *Independence*, with the air wing embarked, has been on duty with the Seventh Fleet since June.

The commendation, in the form of a message from Rear Admiral

James R. Reedy, Task Force Commander, read: "The performance of *Independence* and Carrier Air Wing Seven during (their) first combat period on the line has been outstanding. The 'gung ho' attitude, ability to meet all commitments, and willingness to work around the clock day after day have conclusively demonstrated a spirit that can't be beaten. . . ."

Independence was serving as Admiral Reedy's flagship when he left the carrier as ComCarDiv 5 and returned two hours later with the additional title of CTF 77. He relieved Rear Admiral Marshall W. White of the latter assignment during an informal ceremony aboard *USS Midway*.

Another change in command status aboard *Independence* came in the form of a new commanding officer. Captain John E. Kennedy relieved Captain Robert W. Windsor, Jr., during a ceremony held while the carrier was in Subic Bay, R. P. The new skipper came from ComNavAirPac's staff; Captain Windsor was bound for duty on

the staff of Commander Second Fleet.

Ltjg. F. Paul Laubner and Gerald C. Cole, ETC, have won CVA-62's annual Thomas S. Gates Leadership Award, presented to a junior officer and to a petty officer who demonstrate loyalty, courage, and leadership that contribute to the ship's fighting capabilities.

KEARSARGE (CVS-33)

Jimmie G. Dawkins, 20-year-old EMFN aboard *Kearsarge*, has been awarded the Navy and Marine Corps Medal by President Johnson for saving the life of a shipmate.

The award, and an accompanying citation signed for the President by Secretary of the Navy Paul H. Nitze, was presented to Dawkins during a ceremony held while *Kearsarge* was operating off California.

Dawkins received the medal from CVS-33's C.O., Captain Merle M. Hershey, who described it as "one award I wish I had myself." The citation read in part: "... When a shipmate accidentally came into contact with a 440-volt heating coil and slumped into unconsciousness while engaged in the repair of electric ovens in the ship's bakery, Dawkins, realizing the power to the ovens could not be secured in time, quickly threw the weight of his own body against his stricken shipmate and succeeded in dislodging him from the coil. . . ."

The incident occurred September 17, 1964, while *Kearsarge* was operating in the South China Sea.

When "Kay" steamed out of home port, Long Beach, not so long ago, a large percentage of the persons aboard were women. The occasion was the ASW carrier's 1965 Family Day Cruise, which attracted 1,487 dependents and guests.

CVS-33's Outstanding Bluejacket Award has been presented to Rob-



R. C. LISTER, PHCA, stops the action as *Independence* crewmen line up A-4 Skyhawk.

ert E. Robinson, BM1, who was selected for the honor from a field of nine contenders.

KITTY HAWK (CVA-63)

LCdr. Robert G. Ehrman, *Kitty Hawk's* arresting gear officer, has been presented the Navy Commendation Medal with Combat "V" for his actions in Vietnam. The medal was presented by Captain Martin



ARRESTING GEAR operator in *Constellation* eyes approach in photo by Bradford, PH3.

D. Carmody, CVA-63's C.O., on behalf of the Secretary of the Navy.

The citation commended LCdr. Ehrman for meritorious service in Vietnam while he was assigned to VA-152's Detachment Zulu.

LCdr. Robert C. Good, VF-143, made *Kitty Hawk's* 34,000th arrested landing in an F-4B *Phantom*

ORISKANY (CVA-34)

Only minutes after his A-1 *Skyraider* crashed at sea about eight miles from *Oriskany*, Lt. Edd D. Taylor of VA-152 was returned uninjured to the carrier by one of the ship's helicopters.

On Aug. 29, Lt. Taylor was piloting another A-1 on a search and rescue mission. His *Skyraider* came under heavy small arms and automatic weapons fire and crashed. He was reported killed in action.

RANGER (CVA-61)

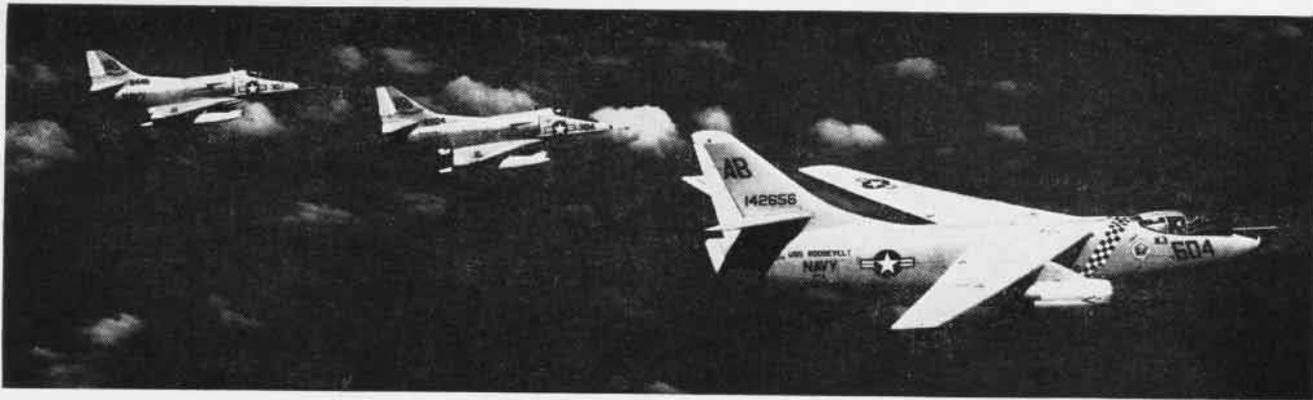
Officers and enlisted men aboard *Ranger* hosted 60 youngsters and four adults from the Hillsborough, Calif., Recreation Dept. for a visit while the carrier was in the Hunter's Point Shipyard.

YORKTOWN (CVS-10)

Yorktown has become flagship for Rear Admiral Fillmore B. Gilkeson, who relieved Captain James P. Lynch as ComASWGrue Three. The admiral formerly served as Deputy Director of Naval Warfare Analysis in Washington.



A STARBOARD turn presents a semi-profile view of USS *Ticonderoga* as the CVA operates in the Pacific. *Tico* was named a Battle Efficiency "E" winner by ComNavAirFac.



OPERATING from USS *Franklin D. Roosevelt* in the Caribbean, a VAH-11 A-3 Skywarrior prepares to refuel two A-4 Skyhawks. FDR later joined the Sixth Fleet in the Mediterranean for the 16th time, relieving USS *Saratoga*. The CVA has spent almost 11 years in Med.

ATLANTIC FLEET BOXER (LPH-4)

Captain Walter M. Sessums, *Boxer's* C.O., has been presented the Bronze Star Medal for "exceptional meritorious achievement during the initial phase of the Dominican Republic crises." A report from the LPH gave this background:

"On 27 April Captain Sessums became the tactical commander of . . . *Boxer* and USS *Raleigh* (LPD-1). In this position, Captain Sessums conducted a highly successful and necessary show of force at a most crucial time in which he simultaneously maneuvered these ships to permit utilization of both flight decks for receiving the first civilian evacuees by helicopter from the strife-torn city of Santo Domingo.

"These operations continued well into the night of 28 April when *Boxer* conducted the launch, control, support and recovery for . . . night helicopter assault landings of United States Marines. . . . Five hundred and sixty armed Marines and their supporting equipment were flown ashore from *Boxer* while almost 700 civilian men, women, and children were simultaneously evacuated back to the ship on return flights."

ESSEX (CVS-9)

Essex returned to home port, Quonset Point, R. I., completing a Midshipmen training cruise that included participation in Operation *Match Maker* exercises and

port calls at Boston, New York, and Norfolk.

Rear Admiral George C. Bullard assumed duties as ComCarDiv 18 and CTG 83.3 when he relieved Rear Admiral John J. Lynch during a ceremony held aboard *Essex* while the ASW carrier was at NAS QUONSET POINT. Admiral Bullard reported from the Office of the Chairman of the Joint Chiefs of Staff. Admiral Lynch is the new CNABaTra.

An aircraft piloted by Lt. Ray L. Sullivan of VS-39 made CVS-9's 126,000th arrested landing.

A ComNavAirLant award for completing FY 1965 without an accident has been presented to *Essex*-based HS-9. The award, which also marked the squadron's 10,000th accident-free hour, was presented to HS-9's C.O., Commander A. L. Phillips, by Commander R. L. Metzger, CVSG-60 skipper.

ENTERPRISE (CVAN-65)

Captain Richard E. Fowler, Jr., is credited with becoming the first

commander of Reconnaissance Attack Wing One to carqual in the RA-5C *Vigilante* when he qualified aboard *Enterprise* in the Atlantic.

SHANGRI LA (CVA-38)

The four-star flag of the Navy's top man in Europe flew from *Shangri La* when Admiral John S. Thach began his first inspection of the Sixth Fleet since he took command of U. S. Naval Forces in Europe.

Admiral Thach's visit to *Shangri La* at sea had personal significance. It came almost 20 years to the day when the Admiral, then air operations officer for Fast Carrier Task Force 38, flew aboard the ship to lead around-the-clock air strikes near the end of WW II.

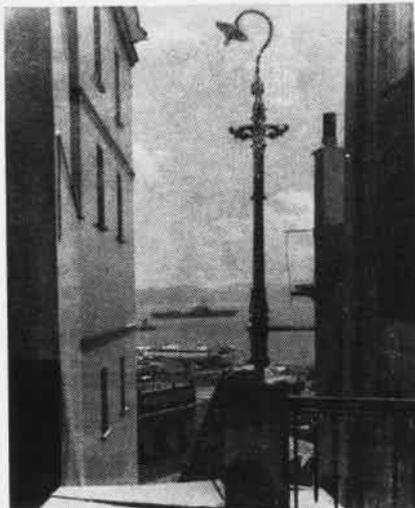
Also scheduled for a visit by Admiral Thach was USS *Franklin D. Roosevelt* which he commanded from May 1953 to April 1954.

F. D. ROOSEVELT (CVA-42)

A report from *FDR*, now operating with the Sixth Fleet in the



S-2 TRACKER is catapulted from USS *Intrepid* in the Atlantic. Now in the New York Naval Shipyard at Brooklyn for overhaul, CVS-11 is near date for return to Fleet.



STREET SCENE in Gibraltar shows the USS *Franklin D. Roosevelt* at anchor offshore.

Mediterranean, credited the carrier's assistant navigator, Lt. Dwight C. Owings, with the ship's 142,000th arrested landing.

INTREPID (CVS-11)

A scheduled October 15 completion date moved closer as work continued on a Fleet Rehabilitation and Modernization (FRAM) overhaul being made on the "Fighting I" at the New York Naval Shipyard, Brooklyn. *Intrepid* entered the yard April 16; finishing touches are to be made at Bayonne, N. J.

SARATOGA (CVA-60)

A six-month maintenance and upkeep period at NS MAYPORT, Fla., that will cost about \$4 million was reported underway aboard *Saratoga*.

Writing in the *Mayport Mirror*, Chief Journalist Jerry Short reported, "... The Navy's unprecedented plans for the *Saratoga* were revealed by Navy officials who are pleased (with) having ship work performed here. They point out that past practice has been to send aircraft carriers to other East Coast ports for maintenance and upkeep..."

Repairs are being accomplished during a restricted availability, Chief Short wrote. He said the ship will continue to operate out of Mayport throughout the period.

"The majority of the work required on the ship will be accom-

plished by local shipbuilding and repair firms on a contract basis," he reported. "All contract ship repair work will be done under the supervision of Commander R. C. Rice, Industrial Manager Supervisor of Navy shipbuilding in Jacksonville."

Chief Short's report stressed that *Sara* will not be drydocked; work is being handled in a manner that enables the ship to get underway on short notice.

"Captain Jack M. JAMES, *Saratoga's* Commanding Officer, initiated the request for local repairs to allow an increase in home port time," the senior JO wrote. "The huge vessel returned July 12 from an eight-month Mediterranean deployment and has spent 14 of the last 18 months away from Mayport."

One problem caused by the proposed maintenance was a lack of adequate short steam and power facilities for carriers, but Captain J. S. Swope, the station's skipper, said a crash program was started to obtain the necessary equipment. Plans called for *Saratoga's* emergency generators to meet about 60 per cent of the ship's electrical needs.

"Rear Admiral Robert Goldthwaite, Commander Fleet Air Jacksonville, said he was pleased that Navy approval was given to perform the *Saratoga's* work here," Chief Short wrote. Congressman Charles Bennett of Jacksonville



SINGLE AND DOUBLE Centurions, Lts. Pat Harney and Ted Dyer, pose aboard CVS-39.



TAKEN FROM drydock floor, photo depicts yard workers replacing *Forrestal's* screw.

wired a congratulatory message from Washington.

FORRESTAL (CVA-59)

Commander Hugh B. Baumann, new C.O. of VF-74, made his 500th carrier landing during operations aboard *Forrestal*. The squadron flies the F-4B *Phantom*.

LEXINGTON (CVS-16)

Lexington's 127,000th arrested landing was made by Commander Walter P. Ziarnik, the ship's weapons officer, in a C-1A *Trader* co-piloted by Lt. Norbert H. Padilla during a "Fleet Week" aboard the CVS.

"Fleet Week" aboard *Lex* is held approximately every fifth week when the ship provides carrier landing services for Atlantic Fleet squadron pilots. This is in addition to its primary mission of conducting carquals for basic and advanced student pilots assigned to the Naval Air Training Command.

Eighteen Royal Canadian Sea Scouts reported aboard *Lexington* for a five-day underway cruise held for carquals off Corpus Christi. The group was visiting the U.S. as part of an exchange program between American and Canadian youth organizations.

Homeported at NAS PENSACOLA, *Lexington* is commanded by Captain G. A. Snyder. Her primary operating area is the Gulf of Mexico,

LOGISTICS DATA FOR CH-53A

ON JUNE 30, 1965, two station wagons pulled up at the Naval Aviation Supply Office (ASO), Philadelphia. They carried a shipment of cardboard containers, packed with thousands of pages of paperwork. Not a glamorous cargo, but for ASO, it was more than worth its weight in—well—weapon systems.

The bound volumes of facts and figures represented the first full application of Bureau of Naval Weapons Specification WR-30 to a new weapon system, the CH-53A, a Sikorsky helicopter. Into the specification had gone more than two years of planning by Sikorsky, vendor contractors, BUWEPS, the Fleet, O&R activities and ASO.

The WR-30 spec is new in that it makes the contractor responsible, prior to contract award, for determining the maintenance program, personnel requirements, training programs, publications, replacement rate and range of spare parts and special support equipment. In the past, the specification was applied *after* the contract award when most of the design work had been completed.

When the contractor has prepared and documented the groundwork in accordance with the provisions of Specification WR-30, his recommendations are prepared in the form of Maintenance Engineering Analysis Records (MEARs). These are reviewed, modified if necessary, and, when acceptable, approved by BUWEPS' Integrated Maintenance Management Team (IMMT) which consists of Navy and contractor representatives. For the CH-53A, the IMMT met on nine occasions to review in detail the contractor recommendations, rationale and data.

The Integrated Maintenance Management Program considers all logistics required for the accomplishment of a coordinated maintenance program. ASO needs provisioning documentation which accurately portrays all the contractor-furnished equipment and the recommended spares and spare parts required for the support of the system. ASO is using this documen-



RADM. KUEHL GETS LOGISTICS DATA

tation to establish technical file records, obtain Federal stock numbers, determine initial requirements and allocate material that will support the total logistics effort.

The arrival of the CH-53A provisioning documents marked not only the arrival but also an improved method of weapon systems support. The actual delivery of the documents was made by John Lewis, Chief of Sikorsky's Spare Parts Department, to Rear Admiral H. F. Kuehl, SC, Commanding Officer, Aviation Supply Office.

Hour-Saving Device Made VX-6 Turbine Problem Is Eased

Faced with a rash of turbine section failures during the past oper-



VX-6 DEVICE SAVES 50 MAN-HOURS

ating season, Billy J. Saunders, ADJ1, of VX-6's Power Plant Division, decided a way was needed to replace the section in the squadron's ski-equipped C-130's without removing the entire engine from the wing.

He enlisted the help of D. M. Miller, AMSC, and D. Maurer, AMS2, of the VX-6 Airframes Shop. Using an idea Saunders brought forward, the Navy men developed a device which serves as a platform for the assembly. The complex, but easy-to-use, device worked successfully in repeated turbine changes. VX-6 believes this to be the first time hot section repairs have been finished with the engine installed.

Primary benefit of the new installation method is a savings in man-hours. Compared to the old method, the "Saunders System" (for lack of a more definitive title) eliminates 50 man-hours from the job.

XC-142A's at Edwards AFB

Shipboard Tests to be Included

In August, the Air Force accepted delivery in Dallas of the second XC-142A tri-service V/STOL aircraft from Ling-Temco Vought, Inc. The aircraft was then flown to Edwards AFB, Calif., in order to undergo an extensive flight test program.

Operational suitability testing will be conducted at Edwards through the latter part of 1966 by Army, Navy, Marine Corps and Air Force pilots. Tests will include operating from unprepared landing areas, high altitude terrain and aboard ships.

The first delivered XC-142A was flown from Dallas to Edwards July 9, with Major Gay E. Jones, USAF test pilot, as chief pilot and Lt. Roger Rich, USN, as copilot. The second XC-142A was flown to Edwards by Army Majors Robert Chubboy and Billie Odneil.

LTV Aerospace Corporation has built five of the XC-142A aircraft for operational flight evaluation. Two additional planes will be delivered to Edwards later this year, with one remaining in Dallas for company flight tests. The four planes in flight status have made a total of 147 test flights to date.

'LIGHT WATER' QUELLS FIRE IN SECONDS



THE UH-2B APPROACHES FIRE IN SIMULATED CRASH MEN DROPPED FROM THE UH-2B RESCUE DUMMY PILOT

THE USE of a helicopter as a complete rescue vehicle was recently demonstrated at NAS MIRAMAR when a UH-2B approached a fiercely burning wreck and completely extinguished the fire in 16 seconds. A dummy pilot was rescued seven seconds after the helicopter arrived.

This breakthrough was made possible by the use of the fantastic extinguishing agent called "Light Water," and was the culmination of a 15-year search to perfect the helicopter as a complete crash-fire rescue vehicle. Success came to Dr. Richard L. Tuve and a team of scientists at the Naval Research Laboratory in Washington. The entire development was under the sponsorship of the Bureau of Naval Weapons, General Equipment Division, headed by Marvin H. Sedon, Division Director.

Heretofore, the helicopter has been used to assist rescue teams by transporting to the crash scene the fire-fighting team and a heavy, externally slung protein foam or dry chemical unit. With the regular protein foam, the rotor wash blows the foam off the extinguished fuel, allowing back-flash or re-ignition. But this is not the case with "Light Water." Amazingly, the non-toxic, water soluble "Light Water" is six to 12 times more powerful in quelling fire than any other agent. When it is used, the fuel cannot re-ignite.

In 17 flight tests at NAS MIRAMAR, a Kaman UH-2B helicopter was

piloted by Chief (Aviation Pilot) J. L. Culbert of Miramar and LCdr. A. L. Stingl of BUWEPs. All types of fires ignited by different fuels of varying amounts (50 to 300 gallons per fire) were extinguished in eight to 18 seconds.

By configuring the helicopter with a foam nozzle at the end of a retractable eight-foot boom, the pilot can maneuver the helicopter to cut a path for rescuers through the fire in seconds. The approach is made downwind at a height of approximately 20 feet.

The rotor wash contributes considerably to the suppression of the fire and pushes the flame and smoke away as the pilot approaches.

Also, the "Light Water" is forced down directly on the fire by the rotor wash.

A relatively small amount of "Light Water" is carried, 60 gallons, allowing a permanent installation on a helicopter by using a tank carried on an external stores rack. Any number of tanks could be carried commensurate with the need and the lifting capability of the helicopter.

BUWEPs' General Equipment Division is reviewing all data to determine the action required to provide this capability to all its activities and to furnish information to other interested military and civilian agencies.



FIRE IS OUT IN 16 SECONDS: NOTE LIGHT WATER FOAM ON THE FUSELAGE

TURBULENCE



THERE ARE FOUR BASIC TYPES OF TURBULENCE: (1) GROUND TURBULENCE (2) CONVECTIVE TURBULENCE, (3) OROGRAPHIC, AND (4) CLEAR AIR TURBULENCE.

GROUND TURBULENCE DEVELOPS IN THE LOWER LAYERS OF THE ATMOSPHERE AS A RESULT OF THE DISTURBING EFFECT OF THE EARTH'S SURFACE ON THE WIND. THE TURBULENCE APPEARS AS GUSTS, WHICH ARE THE RESULTS OF EDDY MOTIONS.



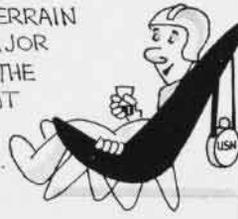
USUALLY THE GUSTS ARE CLOSE TOGETHER, INDICATING THE PRESENCE OF EDDIES OF SMALL DIMENSIONS, BUT IN THE VICINITY OF CERTAIN TOPOGRAPHICAL FEATURES, THE EDDIES MAY BE OF A LARGER SIZE AND RESULT IN SUBSTANTIAL UPDRAFTS AND DOWNDRAFTS.

WINDS OF 20 TO 30 KNOTS UNDER THESE CONDITIONS CAN CAUSE FLUCTUATIONS OF 100 TO 150 FEET IN THE HEIGHT OF AN AIRCRAFT ON THE FINAL APPROACH.



GROUND TURBULENCE FORMS MORE READILY IN AN UNSTABLE ATMOSPHERE. ONCE TURBULENCE HAS FORMED, THE STRONG MIXING WILL GENERALLY PRODUCE A NEAR ADIABATIC LAPSE RATE.

HIGH WIND SPEEDS, UNSTABLE AIR AND A ROUGH SURFACE TERRAIN ARE THE MAJOR FACTORS IN THE DEVELOPMENT OF GROUND TURBULENCE.



Ship Averts an Oily Mess Crewmen Clean Cannes Beaches

What could have been a community relations disaster of the first order was neatly salvaged by fast thinking and hard work after 3,000 gallons of black oil were accidentally pumped from USS *Shangri La* into the ocean while the carrier was anchored off Cannes, France—4,000 yards from some of the world's most valuable beaches.

Cause of the mishap was laid to a miscue in an attempt to pump one of the carrier's voids dry during repairs to catapult steam lines. Oil escaped from the ship for about

five minutes before it was stopped.

Shangri La crew members began to battle the black, sticky liquid before the tide could carry it all to shore. They used carbonized sand to sink about half of it, then carried the fight onto the beaches.

Working through the night on a three-mile stretch that actually became contaminated, *Shangri La* sailors used more sand, emulsifying chemicals, shovels, small boats, a helicopter, and a bulldozer to clear the area. They also cleaned up boats, diving boards, stanchions, pontoons, paddleboats, and everything else that came into contact with oil that was washed ashore.

An inspection the next morning indicated the area was clear except for traces at one point that the city engineer said he could handle.

Public reaction was best summarized by the Paris edition of the New York *Herald Tribune*, which reported: "American sailors turned a U.S. public relations disaster into what one tourist official called a 'miracle' today by cleaning up 3,000 gallons of diesel (sic) oil accidentally dumped off the Cannes beaches by a U.S. aircraft carrier."

The paper quoted the secretary-general of the Cannes Beach Operators Association as saying, "They realized a miracle. We thought that our season was compromised, but in a dozen hours they have been able to repair their error for the benefit of our interests."

A message sent by Admiral David L. McDonald, Chief of Naval Operations, said in part, "... The rapid reaction of the Sixth Fleet personnel in correcting its mistake in Cannes is a wonderful demonstration of how to handle a particularly ticklish diplomatic problem. An incident that could have left us with nothing but shame has instead created an opposite feeling of pride, all because of the prompt response and wholehearted effort to rectify a bad situation. My personal congratulations to the personnel who are responsible for the corrective operation."



CAPTAIN G. L. Bliss, C.O. of ALF Ellyson Field, congratulates 1st Lt. C. W. Glaser, USMCR, as the 8,000th helicopter pilot to complete training. Glaser made his final training hop in a UH-34 Sikorsky Seahorse.

Editor's Corner

Antarctic Moon Fever? Those who wonder why Navy men volunteer for second tours in Antarctica, may find an answer (taken from *Antarctic Projects Bulletin*) in the following description of wintering-over duty:

"As the sun disappears during the four dark midwinter months, the moon remains completely visible 24 hours daily for approximately 10 days, then rises and sets at various times for 4½ days followed by 8½ days when it remains below the horizon before beginning to rise again. The Antarctic moon appears especially large and bright through the clear, polar atmosphere and, when reflected by snow and ice, it illuminates the entire landscape, providing remarkable appearances, and this ever-changing celestial display always fascinates and astounds those privileged to see it."

ALL WEATHER, 1930 STYLE. A. G. "Slim" Russell, retired Naval Aviator who is now Chief Engineer with Bell Aerosystems Flight Test and Operations Division, calls attention to the following item about instrument flying in the Royal Navy's *Flight Deck Magazine*:

"A balloon to indicate the position of the aerodrome was let up through the fog, which extended up to a height

of about 100 feet. A machine took off and climbed through the fog. It approached the balloon on a predetermined course. As he passed the balloon, the pilot shut off his engine and glided down through the fog until a stick suspended below the fuselage (10 feet long) touched the ground. This caused a red light in the cockpit to burn and the pilot pulled the stick back and landed."

Said Russell, "The Navy is very well oriented towards night and all weather flying. In talking with the young tigers and even the old 'fuds,' I encounter little opposition to this special way of life. It wasn't this way a few years back."

Vietnam Guesstimate. Because of heavy foliage in target areas of Vietnam, pilots often have difficulty in providing estimates of damage resulting from bomb drops. One pilot from Marine Jet Fighter Squadron 542, for example, reported: "Expended 8,000 pounds of bombs on a reported VC position. Damage: removed all the dirt and trees (and, I guess, VC) from one side of the valley to the other."

ADVERTISING PAYS. Last March the PM-3A nuclear power plant went into operation at McMurdo Station, Antarctica, providing heat and light to the wintering-over party. When the plant is in operation a 4-by-16-foot sign

consisting of 40 red electric light bulbs flashing "PM-3A" tells the entire population of the remote station that nuclear power—and not fuel oil—is providing the power. The sign is located several hundred feet up the slope of Observation Hill and is visible to all points of the station.

Antarctic Weather Report. With the approach to fall and winter, Grampaw Pettibone's bones start aching. They did a double shudder after reading the following in the *Antarctic Projects Bulletin*:

"Palmer Station has been very fortunate with the weather so far this winter. The first week of March was clear and warm (36 to 40 degrees) with very mild nights. During the second week, the station received six inches of rain, followed by more rain and a little snow the third and fourth weeks. High winds on the 25th, of approximately 75 knots, bent the station's flag pole at mid-point to a 25-degree angle. April found the men at Palmer with more snow and sleet and colder temperatures, although still above zero. Approximately 18 inches of snow fell over a six-hour period during the second week of the month."

At McMurdo Station, meanwhile, the high temperature for March was 14 degrees, the low a minus 46 degrees F.

NO BEAUTY CONTEST TODAY. "The beauty pageant to determine Miss Mayport 1965 was cancelled. Reason: Only one entrant. What's more she didn't count—she was from Cecil Field." (Item in the *Mayport Mirror*.)



REGULATION FOOTPRINT. To meet U.S. Air Force regulations, Naval Aviators, assigned to MATS, made imprints for the record.



TWIN JAYGEES. Pilots Ted and Tom McClard, of VF-162 and VF-164, meet daily on USS Oriskany's flight deck in South China Sea.

Rescue in Three Minutes HC-2 Helicopter Saves A-4 Pilot

On a local practice instrument approach to NAS LAKEHURST, Lt. Leif Elstad, flying as copilot of a UH-2A *Seasprite*, spotted a Navy A-4 crashing through the trees after its engine quit just after takeoff. At 2:07 P.M. the plane came to a stop in a cloud of dust a few hundred yards off the end of runway 24.

By this time, the helo pilot, Lt. Howard Cobb who had been on instruments and the aircrewman, Howard Humphrey, ADJC, and a passenger, Ltjg. James Hitch, who assisted as an aircrewman, had the plane in sight and the crewmen were preparing the hoist and rescue equipment.

At 2:09 the helicopter was on the scene hovering over the downed airman, Lt. J. S. Bull, a Naval Air Test Facility test pilot. Bull climbed into the rescue sling and was hoisted into the helo.

At 2:10, just three minutes after the plane crashed, Bull was discharged at Lakehurst West Field, put aboard an ambulance and taken to the station hospital for a medical check-up.

Computers to Speed Supply IBM to Aid Fleet Marine Forces

U.S. Marine Corps delivery orders for equipment to create a computerized logistic system—the first capable of almost instantaneous response to a world-wide military commitment—have been received by the International Business Machines Corporation.

The computer-directed system will handle inventory control and logistics management functions governing some 380,000 supply items for the Fleet Marine Forces. The items range from tiny transistors to huge tanks.

The orders call for five IBM System/360's to be installed at three USMC locations. Hub of the system, designated as the inventory control point, will be at Philadelphia, Pa. Remote Storage Activity (RSA) installations will be at Albany, Ga., and at Barstow, Calif. All locations will be interconnected through AUTODIN, a Defense



COMPUTER EXPERTS VIEW MODEL

Communications Agency global data transmission network.

In the photograph above, USMC Quartermaster General (2nd from left), Major General Paul R. Tyler, and members of the USMC Data Systems Division, inspect a model of System/360 with Ralph A. Pfeiffer, Jr., an IBM vice president. Left to right are Colonel Charles H. Greene, Jr., Gen. Tyler, Mr. Pfeiffer, Maj. Daniel F. Layman, and Lieutenant Colonel Kenneth R. Bland.

New Data System Tried Cherry Point Prototype Activity

MCAS CHERRY POINT is the prototype activity that is implementing the workload control application of the Uniform Automatic Data Processing System (UADPS). BuWeps designated Cherry Point because that station is the place where the initial stages of planning and designing the system were worked out. Upon successful implementation and testing of the system it will be implemented at the other six industrial Naval and Marine Corps Air Stations.

The system is designed to forecast, control, and report the progress of workload in the Overhaul and Repair Department. It will insure the availability of manpower, material and facilities prior to scheduling work into the department.

In the system the Supply Department will store information on thousands of items of material and be able to retrieve information about any of these items in a fraction of a second. The computer will locate the material, print out an issue document, update inventory files and order replenishment

material automatically. The necessary financial accounting data will be captured by the computer during the processing of workload and supply operations and maintain financial records up to date.

VR-21 Safe Pilots Honored 1,000-Hour Letters are Presented

The WestPac Carrier on Board Delivery (COD) Detachment, VR-21, based at NAS Atsugi, Japan, has announced that more than 60% of its pilots have attained over 1,000 accident-free hours of flying while attached to the unit.

In recognition of this feat, Commander David I. Draz, OinC, has presented letters of recognition. Each letter reads in part: "As a Fleet Tactical Support Squadron 21 Detachment, Japan, C-1A pilot, you have flown in excess of 1,000 accident-free flight hours in COD support of the Seventh Fleet. In so doing, you have contributed materially toward maintaining the reputation of this detachment as a safe, operationally ready unit."

The officers cited were: Commander W. A. Ellsworth, LCDrs. I. S. Oswald, Ormand G. Pringle, R. G. Sonniksen, Ion D. Simpson, D. P. Wilson, R. D. Miller, Lemovne F. Truesdell, D. E. McGinnis, Lts. L. W. Sisson, John A. Mason, Douglas A. Patton, L. G. Lutz, and Ltjgs. P. A. Sippert and N. D. Pewitt.

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-9455A (confidential) *Fleet Ballistic Missile Weapon System—Introduction* (U). Introduction to over-all system (U). 24 minutes.

MN-9902A2 (unclassified) *Rigid Seat Survival Kits*. Pilot ejection, descent procedures, and techniques. Water and ground-landing techniques, survival equipment. Helicopter water rescue. 15 minutes.

MN-10054A (unclassified) *Aircraft Inspections—Periodic Inspection of Jet Aircraft*. 20 minutes.

MN-10054B (unclassified) *Aircraft Inspections—Periodic Inspection of Reciprocating Engine Aircraft*. 20 minutes.

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



SQUADRON INSIGNIA

Because its first C. O. was of Scottish descent, Attack Squadron 46 became known as the Clansmen. Identified on the East Coast by its plaid markings, VA-46 was commissioned in 1955 at Cecil Field. It usually deploys with Carrier Air Wing Ten aboard the Shangri La. Its present Commanding Officer, Commander Merle P. Mead, will be relieved in November by the X.O., Commander Robert L. Lawler.





E IS FOR MORE THAN EFFICIENCY

NAVAL AVIATION
NEWS

E stands for Efficiency. And Excellence. Effectiveness, too. To be an effective, excelling, efficient force, the Navy needs to retain on board more of its trained men with their professional and technical skills. How does your ship or unit score in its promotion of Career Motivation? Is every man of worth being told of the career opportunities available? *Retention is an all-hands job.*