

NAVAL AVIATION

NEWS



48th Year of Publication

DECEMBER 1966

NavAir No. 00-75R-3





IN MEMORIAM

'It was 0900 December 7 in Hawaii. The first and bloody hour was over. The burned and shattered bodies of more than a thousand Americans lay strewn along airfields, on charred decks, or trapped beneath the waters of Pearl Harbor. . . . Never in modern history was a war begun with so smashing a victory by one side; never in recorded history did the initial victor pay so dearly for his calculated treachery.'—Samuel Eliot Morison

NAVAL AVIATION NEWS

FORTY-EIGHTH YEAR OF PUBLICATION DECEMBER 1966

■ IN THIS ISSUE

- The Pearl Harbor Story 6** *Told by men who were there, this is a highly personalized account of the infamous Japanese attack on the Navy complex at Pearl Harbor just 25 years ago this month.*
- She's All at Sea 12** *When you take a woman, noted for having a problem with seasickness, aboard ship for a Family Day Cruise, you can count on spending a lively day.*
- Marines at War 16** *NANews continues its coverage of U.S. Marines fighting in Vietnam.*
- Ho-Ho-Ho! 20** *This issue's "center spread" depicts the ways of sailors at yuletide.*
- Look Closely 23** *The continuing series on Naval Aviation's new 3-M System features this month a close scrutiny of the activities found in the Supply Department.*
- Index, 1966 38** *For those who occasionally wish to use NANews stories for reference, this year's index is the most complete yet.*

■ THE STAFF

- Captain Cecil E. Harris** Head, Aviation Periodical Office
- Captain Paul Jayson** Editor
- Izetta Winter Robb** Managing Editor
- JOC John D. Burlage**
Dorothy L. Bennefeld Associate Editors
- Commander Walter Zebrowski**
Harold Andrews Contributing Editors
- Russell Pace** Art Director

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

Published monthly by Chief of Naval Operations and the Naval Air Systems Command to disseminate data on aircraft training and operations, space technology, missile, rocket and other ordnance developments, aeronautical safety, aircraft design, power plants, aircraft recognition, technical maintenance and overhaul procedures. Send mail to Naval Aviation News, Op-05A5, Navy Department, Washington, D.C. 20360, located at 4703 Munitions Bldg.; telephone Oxford 62252 or 61755. Annual subscription rate is \$2.50 check or money order (\$1.00 additional for foreign mailing) made payable and sent to Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. Single copy is \$.25.

■ COVERS

NANews' cover photo, taken by JOC Robert D. Moeser, is of a crewman signalling, 'Ready to launch,' aboard a Seventh Fleet carrier. The picture above was taken by PH2 J. W. Rast as the USS Coral Sea (CVA-43) passed the USS Arizona Memorial.



NAVAL AVIATION NEWS

Heroism in USS Oriskany Crew Lauded in Major Fire

Efforts by ship and air wing ordnance personnel aboard USS *Oriskany* were credited with averting detonation of large quantities of bombs, rockets and fuzes when a major fire erupted near an aircraft flare locker in the hangar deck.

Forty-three officers and enlisted men were killed, and three seriously injured, by the fire which started on the starboard side of the ship's forward hangar bay and spread over five decks.

Although fire parties were on the scene in minutes, they were hampered by the difficulty of extinguishing the burning flares. Before it was brought under control some three hours after it started, the blaze caused extensive damage to the hangar bay overhead and bulkheads, the forward elevator, electrical circuits, forward officers' quarters and catapult areas.

Several small fires started after the main blaze was put out, but they were quickly extinguished.

Along with the men who kept the ordnance from causing additional damage, *Oriskany* rescue team members and other crewmen were lauded for their efforts.

Search personnel brought several officers, trapped in their rooms by fire and caustic smoke, to safety, and plane-handling crews moved aircraft out of the area to prevent their loss. Two helicopters were destroyed and four A-4 *Skyhawks* were damaged.

"The fire-fighters were extremely brave in charging into the dense smoke and flames to quell the blaze," said Commander F. T. Brown, *Oriskany's* executive offi-

cer. "Their prompt and courageous actions were directly responsible for reducing the damage and casualties."

Oriskany crewmen who were more seriously injured were flown by helicopter to the carrier USS *Constellation* for further transfer to the naval hospital at Subic Bay, R.P. *Constellation* and the carrier USS *Franklin D. Roosevelt* also provided medical assistance.

At last report, cause of the fire was still under investigation.

Cougar Overhaul is Moved Will be Done at NAS Pensacola

In October the last TF-9J, Navy's primary jet trainer, went through Progressive Aircraft Rework (PAR) at O&R NORFOLK for VA-43.

From now on all *Cougar* PAR's and overhauls will be done at O&R PENSACOLA, except AF-9J's which are being converted to QF-9J's. This is in line with the policy of centralizing work centers for different aircraft types to increase efficiency.



THE BOEING UH/CH-46D Sea Knight medium helicopter has joined the Fleet after completing successfully its Board of Inspection and Survey trials at Patuxent River, Md. It is shown above during its BIS trials; the LPH is the USS *Guadalcanal*. The "D" model is an advanced version of the -46A Sea Knight now used in Vietnam. More powerful GE T-58-10 turbine engines and "droop snoop" rotor blades are among its new features. These two additions increase its speed and lifting capability. The first -46D's have been delivered to the Marines; the Navy version will be coming off the line later.



BURKE FLEET TROPHY UNVEILED

Ranger Wins Two Awards Cover '66 Service in Vietnam

In special ceremonies, the USS *Ranger* received what Admiral David L. McDonald, CNO, called "two of the most important awards the Navy has to offer."

On the hangar deck, Admiral Roy L. Johnson, CinCPacFlt, presented the officers and men of *Ranger* and Carrier Air Wing 14 the Arleigh Burke Fleet Trophy and the Navy Unit Commendation.

In the picture, LCdr. J. J. Dagdigan unveils the plaque while Captain W. M. Harnish, *Ranger* C.O., looks on.

The Arleigh Burke Trophy is a plaque awarded annually to one ship in the Pacific Fleet and one in the Atlantic Fleet which shows the most improvement in battle efficiency during the year. The plaque is presented on behalf of CNO and retained on the ship.

In the Atlantic Fleet, the Arleigh Burke Trophy was won by the USS *York County* (LST-1175).

The Navy Commendation to *Ranger* and CAW-14 was presented for "exceptionally meritorious service from January 10 to August 6, 1966, while participating in combat operations in Southeast Asia in support of the Republic of Vietnam's effort to resist aggression."

Captain Harnish and the former C.O., Captain Leo B. McCuddin, were awarded Legion of Merit medals for their direction of the big carrier during combat operations.

Add-On Contract Awarded New Configuration for T-28A's

Navy has awarded a \$1.9 million contract to North American Aviation for modification of 17 T-28's.

This contract calls for converting T-28A's to the T-28B configuration.

First of the modified aircraft is scheduled for delivery in April 1967, with the program to be completed by September of that year.

New Mission for NAMI Testing Test Pilot Candidates

The Naval Aerospace Medical Institute at the Naval Aerospace Medical Center, Pensacola, Fla., is now the facility for the physical examination and psychological testing of prospective Naval Test Pilot School students.

The first group in October included two Marine and eight Naval officers. The examinations they took were more comprehensive than test pilots have ever had before and required an entire week for completion. The examinations were conducted at the request of the Commander, Naval Air Test Center, Patuxent River, Md.

Cdr. Hugh S. Pratt, Jr., Medical Corps, USN, Chief of Aviation Physical Examination Division, said, "This will be an interesting group for us to do follow-up studies on in the future as part of the Institute's continuing study on the effects of aviation duty, the ageing processes, etc. This very select group will be given special atten-

tion like the 'Thousand Aviator' group which Dr. Ashton Graybiel has been studying here for many years. Included will be comprehensive vestibular, psychomotor, and disorientation tests."

Naval Aviators in the first group were LCdr. Gerald L. Atkinson, LCdr. Jack C. Presley, Lt. Donald V. Boecker, Lt. Roy R. Buehler, Lt. Allen L. Manson, Lt. John Metchak, Lt. John M. Quarterman, Jr., Lt. D. A. Sullivan, Capt. D. C. Levine, USMC, and Capt. Lloyd G. Pool, USMC.

First C-2A's Reach Fleet VR-30 Receives Two Greyhounds

Fleet Tactical Support Squadron 30, commanded by Commander Robert E. Hunter, Jr., has accepted the first C-2A turboprop carrier-on-board (COD) aircraft delivered to an operating squadron.

VR-30, based at NAS ALAMEDA, will use the planes to provide logistic support to the ships of the Pacific Fleet operating off the West Coast. They will also train the crews of units which will fly the *Greyhound* in support of forces off Vietnam and other forward areas.

Bigger, faster, and with much longer range than the C-1A, the *Greyhound* will be able to lift two complete jet engines, vital weapons components or key technical personnel from shore bases to carriers operating at sea.

The C-2A's were evaluated aboard USS *Kitty Hawk*, flying a total of 30.4 hours during one-week trials.



HOOK DOWN, C-2A PREPARES FOR FIRST LANDING ON KITTY HAWK



GRAMPAW PETTIBONE

Haste and Waste

The flight schedule squeezed one more bombing hop out of this ill-fated *Intruder* prior to its departure for PAR. Returning to homeplate to drop the racks and tanks, the driver (also scheduled to deliver the bird to PAR) noted intermittent nose gear steering and no wingtip speed brakes or flaperon pop-up. He taxied to the line area. As he waited in the chocks, the air was released from the port tire because of overheated brakes. He shut the port engine down but kept the starboard turning. It was noted that the port brake was fused, so he shut down completely and returned to the ready room while the brake was changed and the racks and tanks were dropped.

The ferry flight to PAR was to be a short one, so the pilot dismissed his Bombardier/Navigator. When the aircraft was ready, the *Intruder* driver remounted the bird, fired it up and commenced taxi without performing the normal end-of-the-line preflight control checks. The wings, still folded as he taxied from the line, were observed to spread as he approached the duty runway.

After holding for approximately one minute, the A-6 took the duty, commenced the takeoff roll and became airborne. At about 75-100 feet, the left wing was seen to fold slowly with the aircraft in a nose-high attitude. It then rolled left through the inverted position and continued at an increasing rate of roll. As he passed through the upright position, the starboard wing also began to fold. (At about this point, the ejection seat was observed leaving the aircraft.) The *Intruder* continued to roll and in a nose-down, inverted, port-wing-down position hit the ground, disintegrated and burned.

Although pushing the limits of the seat, the drogue chute deployed, the main chute partially



deployed and pilot-seat separation occurred just prior to impact. The seat struck the ground three feet to the right of the point of pilot impact, bounced and came to rest 90 feet from the point of initial contact. The pilot bounced off the ground and came to rest 45 feet from that point.

Although badly injured, the pilot was attended by medical personnel within three minutes, taken to the dispensary and is now on the road to recovery.



Grampaw Pettibone says:

Carelessness, pure and simple. Forgettin' the check-off list is about as sensible as lettin' your premiums go on your insurance. Maybe a ferry flight ain't very glamorous or excitin' but, when you get bored on any flight, you're lookin' for trouble and you'll find it.

My knees still feel a little weak after reading this one. You can bet I'll go over my checkoff list before I make my next move.

Between a Rock

After concluding a three and one-half hour brief, the young photo jockey was catapulted into a typical VFR tropical evening to complete a mission for the Operational Readiness Inspection (ORI). Im-

mediately after clearing the bow, he noted he could not retract the wheels of the RF-6C in a routine manner and received an electrical shock from the gear handle. Actuating the emergency down lock release switch, he managed to retract the gear and elected to continue on the assigned mission.

The flight was flown as briefed. Upon its completion, the anxious lad cycled the gear and experienced the same difficulty he encountered after launch. Nevertheless, he elected to return to the ship in order to get the film back for processing. Checking in with the ship, he was given marshalling instructions and an approach time of 1945. He commenced on time; however, his distance was eight miles in excess because of a spinning DME. He hit platform at 1952 and was instructed to dirty up at 1954. He did this without difficulty.

At 1959 he called the ball with a state of 2,800 pounds and was waved off for lack of an approach light. The second pass with a state of 2,500 pounds resulted in a bolt-er. During his third pass, the *Crusader* driver reported the loss of his RMI. CCA responded by starting and stopping all turns. This pass was waved off owing to line up and he turned downwind with 2,100 pounds of fuel remaining.

He called the ball on the fourth pass with 1,800 pounds and bolt-ered. After this fourth attempt, he cleaned up, commenced a climb and departed the pattern.

His composure regained, he called CCA, reported his state at 1,600 pounds and requested "Bingo." He received a negative on the Bingo and was told to return to the pattern. He re-entered the pattern with 1,500 pounds and was informed it would be two minutes before he could be tanked. Did he still desire the Bingo? The persistent youngster replied negative and would attempt a trap. He was then

given a turn onto final and shortly thereafter had an electrical failure. As soon as he had extended the RAT, he informed CCA of his plight and requested a tanker. (Fuel state at this time was 1,400 pounds and Bingo required 1,500 pounds.)

Rendezvous with the tanker was accomplished without difficulty at eight miles from the ship. The plagued driver advised the A-4 tanker pilot that he would require a tanking speed of 190 to 195 K as he was unable to clean up. All attempts to "plug in" met with failure although they tried every conceivable combination of flaps and approaches.

At 2033 the *Crusader* flamed out with an indicated fuel state of "zero." At that point, the pilot pulled the curtain.

The Martin-Baker performed normally. The wet pilot was retrieved and deposited back aboard.



Grampaw Pettibone says:

Great horned toadies! Just the right number of ingredients came together to stew this photo bird. First of all, the pilot didn't cut anybody in on his gear troubles till he was committed. Secondly, the detachment didn't have a rep in CCA to advise the decision makers as to this lad's capability and, thirdly, all information was not passed on to the responsible people.

A little diggin' showed this pilot was real shy on carrier experience, had never tanked at night and, needless to say, never in 'a dirty configuration. Besides that, he hadn't had a day or night trap in over 20 days. Somebody should've culled him off the schedule. Some pretty savvy gents decided a long time ago that things work out a lot better if you give a lad a day build-up landing after a lay-off.

Torn Tiger

An instructor and his student in F-11 *Tigers* had separated at 34,000 feet and were engaged in section tactics. They turned inbound to one another at two miles for their initial pass and crossed head-on at about 30,000 feet. While reversing and making a descending turn with an "estimated" $3\frac{1}{2}$ to 4 G's at 25,000 feet, the student pilot experienced a sharp explosion. He was thrown forward in the cockpit. His first thought was the canopy

had exploded. This was not the case and, upon checking, he noted nothing unusual except a hydraulic system failure. Another check of the engine instruments showed normal readings. He informed his instructor of his experience, noting also that his altitude had rapidly deteriorated to 15,000 feet.

The startled student, looking in the mirror, noted shreds of metal that seemed to protrude out of the area around the starboard gun bay door. For a moment, he thought the door had blown off. Upon further inspection, he found to his utter dismay there wasn't any wing to be seen on the starboard side. A visual check to port revealed the absence of the port wing also. (He could not recall how much of the wing normally was discernible from the rear view mirror.)

In desperation, the young *Tiger* driver asked his instructor how much of the wings was remaining but, owing to their separation, the instructor was unable to check visually. During these harrowing moments the student applied his prior training, aimed towards homeplate and applied military power. (He was at 12,000 feet, indicating 325 knots and 20 miles out.)

Without more ado, he declared an emergency, explaining his difficulty in controlling the aircraft (rudder and elevator only) and requested a straight-in. About this time, he tried to slow down to get into the landing configuration, but found he could not maintain control at any speed below 300 knots.

He decided to extend the flaps but after actuation noted no appreciable difference. (Rudder and nose trim were surprisingly effective.)

When he was about three miles out at 6,000 feet and forced to maintain 300 knots for controllability, he realized that a landing would be extremely difficult. At about this time, the tower, being helpful, notified the distressed lad his wings were missing.

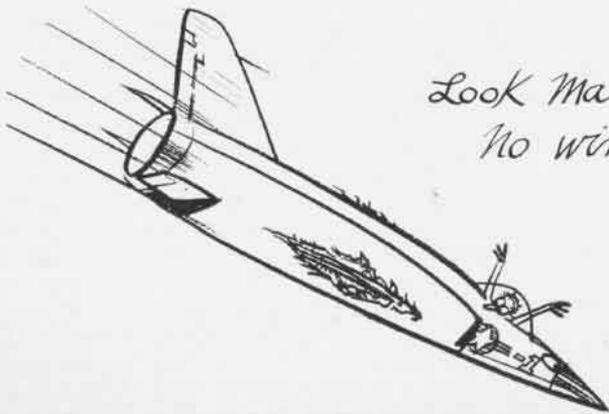
Hearing this transmission (which confirmed his suspicions) the *Tiger Tamer* broadcast his intentions and summarily pulled the curtain. The initial jolt was rough. However, the seat and chute performed as advertised and delivered this youngster to terra firma.

After the ejection, the wingless *Tiger* entered a steep dive, rolled to the right and exploded on impact in an uninhabited area. Within a matter of minutes, the helo arrived at the scene and retrieved the slightly injured student.



Grampaw Pettibone says:

Great jumpin' Jehosaphat! What a terrible way to get rid of a real game old bird. The ole *Tiger* was put together real good, but like every other airplane we fly, it too has its limitations. At the great revelation, it wouldn't surprise Gramps to find this youngster got carried away a little bit tryin' to impress his instructor. Just remember, pushin' that "G" envelope is like trying to make second base on a single or wearing an undersized girdle—it all depends on what happens in the stretch.





Twenty-five years ago

THESE MEN WERE THERE

By Izzetta Winter Robb

That Sunday morning 25 years ago when the Japanese launched their historic attack on Pearl Harbor is vivid to those who were there. The bombing strike broke the pattern of early morning rituals—getting up, taking a shower, having breakfast, going to church, reporting for duty. Each one remembers where he was, what he was doing and what he thought as explosion after explosion burst upon a stunned and unbelieving base.

For Americans stateside, a symphony concert was interrupted, afternoon meetings were cut short or abandoned, plans were abruptly

changed or cancelled. Over the radio came the news, "The Japanese have attacked Pearl Harbor." The end of peace had come as the blade of Japanese air/sea power struck the Hawaiian bastion. The United States was to mobilize its forces and plunge into the years of battle on land and sea that lay ahead, but on December 7, 1941, its citizens knew shock, astonishment and deep grief for the first lives lost.

Had there been wanting a lesson in the power of aircraft carriers specifically directed for the instruction of the citizens of the United States, it could not have

been demonstrated more dramatically or effectively, for the Nipponese came out of the skies from carriers about 200 miles away to wreak havoc on battleships, cruisers, destroyers, submarines and supporting ships, the airplanes and air stations that were the force at Pearl Harbor.

Fortunately, not one of the three U.S. Navy aircraft carriers in the Pacific was at Pearl that morning. USS *Saratoga* (CV-3) was in port at San Diego; the USS *Lexington* (CV-2) was 425 miles southeast of Pearl Harbor and the USS *Enterprise* (CV-6), 200 miles west, was on her way to the Hawaiian base.

THOSE who were at Pearl Harbor that day have no difficulty in recalling what happened to them.

"A whooping thump, plus a sudden lurch of the ship, like nothing I had ever heard or felt, scared me awake," says Captain R. J. Schneider, USN, now on duty in the Naval Air Systems Command, Washington, D. C. "From my second deck stateroom on the USS *Detroit*, I raced, barefooted, dressed only in skivvies, up the ladder, past the exec's and skipper's cabins, out on the quarterdeck. I was one scared ensign to dare set foot on the first deck, much less the quarterdeck, while not in uniform."

The *Detroit* was berthed on the keys off Ford Island, across from Battleship Row, and young Ens. Schneider heard the easily identifiable sound of diving aircraft. He got the word, "The Japanese have attacked."

While an excited officer-of-the-deck gave orders to remnants of the eight o'clock church party to pull down the canvas to clear the *Detroit's* ancient three-inch AA battery of nine guns, Ens. Schneider grabbed a .30/06 rifle from the quarter deck ready locker and commenced firing at the airplanes that, in his words, "seemed to be diving directly at me."

"Shortly," he continues, "I recognized the futility of this one-man effort, put the weapon aside and moved aft to the waist-installed three-inch battery."

"The green ammunition boxes began coming up from the after magazines. Being the only officer in sight, I took charge of the men around the guns. Grabbing knives from the galley, we cut down the rest of the deck canvas, but we had no tools to remove the soldered-on covers protecting the projectile fuzes. *Detroit's* only counter fire so far had been my rifle shots. Feeling very much alone and in charge, I ordered the guns loaded and fired, projectile fuzes camed and unset. It raised our morale. Both the gun crew and their ensign steadied."

"The noise and shudder of gun recoil served as general quarters to rouse the rest of our crew topside on the double. The fuze unpackaging and range-setting tools suddenly appeared, so spare crew mem-

bers were put to rigging all fuzes for two seconds. We fired as fast as possible, ringing the ship with an elipse of smoke puffs from the close-in bursts. Unfortunately—or so we felt—but actually fortunately for us, no Japanese aircraft seemed interested in diving through the puffs.

"With the three-inch battery at rapid fire, I turned the control over to a gunnery chief and started aft to check our two soc airplanes, perched on the catapults, fully fueled and instantly flammable if hit. Looking up, I saw an enemy dive bomber release its bomb. Just as I ducked for cover, the bomb, only a few feet clear of the airplane carrying it, detonated and blew the plane apart. Engine, tail, wings and the pilot himself were visible as they fell. Much as I wanted to believe *Detroit* had made the kill, the better guess is that the tender *Dixie*, moored in the upper end of the harbor, had caught this target with her five-inch 25 calibre battery.

"Just then, I stepped with my bare right foot on a hot shell case from one of the three-inchers. I thought, 'This war is over till I get some shoes on,' and went back to my stateroom to get them on—and don my dungarees to boot."

Once dressed, he returned to the soc's and ordered them retracted for catapulting. With both cats fully charged, he left a senior torpedo man to watch with orders to fire them over the side if either was hit and caught fire. He arrived at the gun battery just as the Gunnery Officer came aboard.

"He promptly blasted me for not having the crew wearing their steel helmets. Nor did I have my own," Captain Schneider recalls today. "Things got worse when he discovered I had ordered the crew to throw ammo boxes and empty shells overboard (they were supposed to be saved for reloading). But then he was distracted by trouble with our 50 calibre machine guns. The chief aviation mechanic of our aviation detachment had burned out all four guns, forgetting to turn on the necessary water for their cooling jackets and shooting each one in turn till it froze up.

"At this point, our acting C.O.,

the navigator, ordered me to the bridge as OOD to get the ship underway. En route I witnessed the worst sight of my career: the battleship *Arizona* blew up. An orange-red glow encompassed the entire 14-inch turret flying higher than the masthead with 12 or more men hanging 100 feet in the air, helter-skelter about it.

"On the bridge, the navigator had the ship ready to unmoor, all boilers steaming and engines on the line. He sent me forward to manage the special sea detail for unmooring and sortie out of Pearl.

"No sooner did we stand into the channel when another wave of Japanese bombers came in. CINCUS ordered all ships to stand fast. While standing obediently in the channel, our two aviators for the soc's, who had been bunking on Ford Island, appeared on the shore, waving frantically. But with no boats to pick them up, we waved goodbye and, released for sortie, headed for the exit channel. Passing the USS *Nevada*, now grounded at the channel edge, we were hailed by a motor boat and stopped to pick up our flag, Rear Admiral Milo Draemel, and his flag lieutenant, Charles Kirkpatrick. Out to sea, we joined a half-dozen DD's that had preceded us and took off northeast as a spontaneously assembled task force to scout for the attacking fleet.

"In the two hours since the attack began, *Detroit* had fired over one-third of its AA ammunition. The only damage sustained by the ship was a .30 calibre bullet in one man's locker and two bullet holes in the forward stack. A yeoman striker was wounded in the leg by a fragment of projectile dropping back on us. A torpedo intended for us went astray in launching as the incoming low-flying plane on the first wave attack met a mine-sweep division milling around a mooring buoy. The torpedo buried itself in Pearl Harbor mud 30 feet forward of our bow without detonating."

WARRANT OFFICER Stanley E. Loughlin, USN, now retired, was attached to VP-25 at Ford Island. He had his first close look at the enemy when he rushed out of his Pearl City home and "saw a

Japanese torpedo bomber directly overhead at about 300 feet." He spent the next several hours trying to get over to Ford Island. He made it by 1100 and went to work setting up machine guns and belting ammunition in preparation for further attacks.

Nor were the children exempt from excitement and usefulness. Thomas E. Davey of North Grafton, Mass., writes, "I lived on Ford Island where my father, then a Ltjg., was stationed. Our backyard faced Battleship Row. I was eight years old at the time. My brother Jim, 6, and I were playing in our room when we heard the racket. We ran out back to see what was going on and saw more planes than we had ever seen before all over

out into the halls to take cover.

"The next day, most of the kids my age were put to work loading machine gun belts with ammunition. I remember vividly the heavy black smoke of the *Arizona* forming a background for the flag flying in front of the BOQ as I stuck a yellow tracer in the belt every fifth round."

TWENTY-FIVE years ago, ADJC George W. Edmondson, USN, now a Navy recruiter at San Mateo, Calif., was an enlisted man assigned to Patrol Wing Two, Flag Unit, based at Ford Island. "My first assignment was as mess cook. This was my battle station and grandstand seat for the Japanese attack on the Pearl Harbor complex.

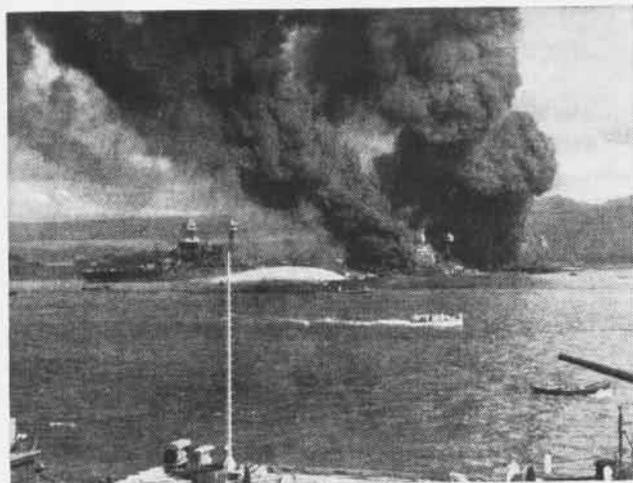
our chief master-at-arms came running through the mess hall yelling, 'Hit the deck. The Japanese are attacking.'

"For the rest of the attack," Edmondson recalls, "we mess cooks alternated between trying to find something useful to do and diving under a table with each explosion. I admit we spent more time under the table than in looking for work. Our mess hall, which was not hit in the attack, became a gathering place for the wounded and for those who had lost their ships.

"Officers and men from the battleships, which were tied up less than 100 yards from the mess hall, soon filled the place to overflowing. Many of them were wounded or badly burned from swimming



U.S. AIR POWER IN OAHU WAS ALMOST WIPED OUT



OKLAHOMA CAPSIZED 30 MINUTES AFTER BATTLE BEGAN

the sky. Our house was in a direct line of the Japanese planes once they had finished their torpedo or bombing runs. I ran into the house yelling, 'They're Japanese planes.'

"My father, realizing it was the real thing, tossed us all into a pickup truck and took us to an old dungeon, situated below the admiral's house. Bullets from a strafing plane narrowly missed my mother as we got out of the truck. Wounded men lined the passageway as we entered the shelter and joined others from our quarters.

"Several hours later, we were moved to the new BOQ on the northern part of the island. During the night there were several air raid alerts—false alarms—that woke everyone up and brought them

"That Sunday morning as we were finishing the breakfast clean-up, we heard aircraft making passes over the harbor. This made a good excuse to take a break from the swab handle, so we all went to the window to see what was going on.

"The Ford Island mess hall, which faced the channel where the battlewagons were tied up, provided a good view of planes making their run up the channel. Some of them were not more than 20 or 30 feet above water. We thought they were Army Air Force planes. I remember thinking it was a very realistic drill this time. Then one of them took a direct hit and went down in flames in the Navy Yard. About the same time,

through burning oil. I remember one big fellow especially. He was burned from head to foot, but he lay calmly on a mess table and smoked a cigarette while we covered him with petroleum jelly.

"During one of my frequent trips under the table, I ran into Red Emory, one of my shipmates who had made the trip over with us on the USS *Tangier*. Red and I had had a barracks argument not long before as to whether the United States would get involved in war. I had bet Red a dollar that we would be at war before a year was up. I reminded him of the bet, but never did collect. Sure hope old Red reads this and decides to become an honest man after all these years.

"The grandest sight of that day—and of my lifetime—was seeing the old *Nevada* under way. During the peak of the battle, she somehow got up enough steam and sailed down the channel with her ensign flying and guns pounding. This was one time we ignored the gunfire and explosions and cheered ourselves hoarse. Of course she took a hit and was grounded near the channel entrance, but we didn't know this at the time. She gave us the inspiration we needed. From then on, there was more Navy-type organization."

ANOTHER enlisted man on Ford Island, AMM2 Frank T. Carroll (now retired as a CWO), was attached to Patrol Squadron 25, commanded by LCdr. Francis Massie Hughes, VP-25 had recently returned from NAS SAN DIEGO with what Mr. Carroll reports as "12 sparkling new PBV-5's." Ruefully he adds, "In about a month, all but two went up in smoke."

On the morning of December 7, AMM2 Carroll happened to be in the hangar "looking for a better cup of coffee than one ever got in the air station mess hall." Then came the big bang. "About everyone in the hangar ran outside and stood on the apron. We weren't brave, just curious."

"We stood there watching airplanes with strange silhouettes making diving runs on the battleships, cruisers, destroyers, a tender (*Curtiss*) and a target ship (*Utah*). Occasionally, one of these strange planes, with red dots, would make a bombing run on our planes. At this point, say within five minutes of the first explosion, we got the message—'Get the hell out of here!'"

"We promptly returned from whence we came—through the doors and inside the hangar. We milled around discussing in frightened terms the facts that either the d— Army had made a mistake or we were being bombed. We were not too sure by whom."

"Shortly afterwards, we were confronted by people with authority in their voices, chiefs and senior first class petty officers. One of them told us to get out of the hangar or we would be killed. This was the first indication we had that any-



JAPANESE PHOTO SHOWS TWO KATES OVER HARBOR EARLY IN THE ATTACK

one would be so mean as to bomb us into eternity.

"The command was given to evacuate the hangar and evacuate we did. We ran outside, became thoroughly petrified by terror and attempted to retrace our steps and re-enter the hangar. As this maneuver gained impetus, another voice called, 'Come over here, you guys, and get out of the way of the planes.' The voice belonged to a warrant officer machinist (aviation), and his suggestion that we enter what turned out to be a ditch was a good one. It was being dug by Public Works to run a new water pipe to the other side of Ford Island. The ditch offered excellent shelter and gave all of us, as we were joined by other shipmates, an indescribable view of the attack."

"Almost all of us who entered the trench had received nicks or scratches. These minor injuries, however, were incurred from flying concrete, not from such a romantic source as hot lead or steel."

"Then it was all over—no more bang. But in another way, it was not over, it had just begun."

ADRC LEON G. Bowman, USN, at the time of the Pearl Harbor attack, was an AMM2, assigned to Patrol Squadron 14. He was attending the duty section muster, inside the squadron's hang-

ar, held after VP-14 had sent aloft two PBV's on regular patrol.

"We heard what sounded like live machine gun fire. Some one remarked that the Army must be playing for keeps," Chief Bowman remembers. "One of the oldtimers, a first class that had served in the Far East, walked to the hangar door, looked out and hollered, 'Army, hell! It's the Japanese.' By this time we were under strafing attack."

"Our armory being locked, we fired the old 03 rifle at the planes. As things began to get organized, our Chief Ordnanceman Johnny Finn (later awarded a Congressional Medal of Honor for this very action) arrived and opened the armory. We set up machine guns as fast as possible and began firing at the attacking planes."

"All of our planes, with the exception of one in the hangar, were damaged. During a lull in the attacks, we managed to get this one into the water. As we attempted this maneuver, the enemy's bombers approached and everyone scattered for shelter. We never did get the plane launched."

"The bombers made a direct hit on the VP-11 officer ready room, killing most of those there. Our parking and beach areas were blasted; many were killed or injured. All of our shipmates killed

during the strafing had been hit with dumdums.

"One of VP-14's planes aided in the sinking or beaching of the Japanese midget submarine at the mouth of Pearl Harbor."

ONE OF THE MOST exciting accounts of his experience at Pearl Harbor comes from Captain Bernard W. Brender, now a Naval Aviator and Commanding Officer of Fleet Air Wing Three, NAS BRUNSWICK, Maine. He was not only at Pearl Harbor, he was in the midst of the conflagration aboard the USS *Oklahoma*.

"I was a second class yeoman at the time, assigned to the gunnery office. I awoke at about 0745 the morning of December 7 and rolled up my mattress in the gunnery office where two of us were permitted to sleep. With a towel wrapped around my waist and a bar of soap in hand, I proceeded to the fireman's washroom on the second deck, portside, just forward of the office, for a shower.

"It was a warm Sunday morning, the portholes in the washroom were open and high-spirited conversation was going on in the shower with about half the places occupied. I had adjusted the water and stepped in when I heard a series of dull explosions. I said aloud, 'The U. S. Army is practice-firing again and using real ammo.' We continued showering.

"Some 30 seconds later, three sharp explosions, one after the other, were heard — and felt. Thrown off my feet, I suffered minor burns when the steam lines ruptured and sprayed steam and hot water everywhere. Others in the shower were more seriously injured. I managed to drag two or three away from the steam.

"In the next few minutes, there were two more severe explosions directly below, and I noticed a pronounced port list to the ship. I headed for the gunnery office to get my clothes, but the heavy traffic in the passageway forced me back to the shower room. The list of the ship, 45° angle to port, made it almost impossible for those in the passageway to proceed up a ladder and for the six or seven of us in the shower to reach the hatch.

"The dishes in the nearby scul-

lery began to work loose. To this day, the most terrifying sound I remember was not that of the explosions, but the terrific clatter when the entire contents of the scullery spilled over. This brought home, more than anything else, the fact the ship was in trouble.

"The daylight through the portholes looked inviting and, by that time, they provided the only exit. As I headed to the nearest one, I twice heard the words, 'Abandon ship,' over the loudspeaker. It was the only announcement I heard from the time of the first explosion to the time I left the ship.

"Two or three others were attempting to go through the portholes. I helped push a little fellow out ahead of me. With no clothes on and my 118-pound size (at that time), I had no difficulty in sliding through the porthole which was then only a few feet above the approaching water line.

"With the ship slowly rolling over towards me, I began swimming away rapidly, keeping an eye on the large masts towering directly over me. When I was well clear, I began treading water. For the first time, I was able to think clearly. I looked up at a low-flying plane. As he neared, I saw the rising sun insignia on the underside of the wings and realized we were under Japanese attack.

"About a third of the way across the Pearl Harbor channel with the Navy Yard as my destination, I saw that it too was under attack. I reversed course and headed back to the now almost overturned *Oklahoma*. Torpedoes were still being dropped by low-flying planes. Every few minutes I would dive under as a strafing plane approached. I received a minor flesh wound.

"Just as I reached a point above the submerged bow of the *Oklahoma*, the *Arizona*, tied up about 500 yards astern, blew up. I felt the concussion, but my thought at that instant was, 'How many men died in that explosion?' (Later I learned over a thousand went down with the *Arizona*.)

"I reached the bow of the battleship, USS *Maryland*, which was tied up inboard of the *Oklahoma*. I managed to rope-climb a line which someone had thrown. I just cleared the forecabin area when a

large bomb hit the *Maryland's* bow and threw me to the deck. No other injuries developed and I proceeded aft and up a ladder where I was immediately drafted as a pointer on a 1.1 pom-pom gun. Some one threw a blanket over my shoulders. From the time I abandoned the *Oklahoma*, I had been nude. For the remainder of the attack or until about 0945, I stayed on the pom-pom, firing almost continuously."

In approximately two hours, the attack on Pearl Harbor was over, but in that shattering opening of war in the Pacific, the United States had suffered a death toll of 2,403 (killed, missing or dead of wounds) and 1,170 wounded.

The eight battleships at Pearl had been hit, and two of them, the USS *Arizona* and the USS *Oklahoma*, were never to see battle again. But *Nevada*, *West Virginia*, *Maryland*, *California*, *Tennessee* and *Pennsylvania* were restored to battle readiness and played their part in WW II.

Pearl Harbor inaugurated a new era in air power at sea. Before six months had passed, the forces of the United States were tasting the first fruits of victorious offensive actions. The bombing attacks on the Marshall and Gilbert Islands, the Doolittle Raid on Tokyo and the U.S. victories in the battles of the Coral Sea and Midway demonstrated the rising effectiveness of U.S. power. The fast carrier task forces became the nemesis of Japanese might.

What happened that Sunday morning at Pearl Harbor was but the beginning. Samuel Eliot Morison, who chronicles the Navy's part in World War II, sums up the significance of the event:

"The Sabbath calm was rudely broken by bomb explosions, by the hoarse klaxon sounding General Quarters on every vessel; presently by the sharp bark of 5-inch anti-aircraft guns and the nervous chatter of machine guns. Colors were raised defiantly and the Battle of Pearl Harbor was on. In one split second, the United States passed from a precarious neutrality to full-fledged belligerency; 7 December was the first of 1,351 days of war."

AIRLANT WINS MAJOR SAFETY AWARD

IN WASHINGTON, D.C., on October 10, Vice Admiral C. T. Booth, ComNavAirLant, received CNO's "Readiness Through Safety" Award from Admiral David L. McDonald.

Admiral Booth accepted the award on behalf of the officers and men of the Atlantic Fleet Naval Air Force who contributed to the safety record achieved by the command during the year. Since aviation safety is an all-hands responsibility, major operating commands, rather than individual squadrons, competed for the award this year for the first time.

The establishment of this new award is an acknowledgement of the fact that combat readiness, economy of operations and morale are materially affected by safety. The "Readiness Through Safety" trophy is given for programs which contribute new ideas in accident prevention as well as improved safety procedures.

In winning the award, AirLant had over 50 percent of its units deployed either in combat or high tempo operations and yet operated below the Navy accident rate. At the same time, the command reduced its accident rate by 22 percent over the year with a saving of \$13 million. While doing this, AirLant increased the number of flights by 10 percent and increased the number of carrier landings eight percent.

Attending the ceremonies with Admiral Booth were persons representative of the various fields of endeavor whose efforts contributed to the winning of the award: Rear



ADM. HORACIO RIVERO, JR., VCNO, ADM. BOOTH, ADM. McDONALD



ADM. McDONALD WITH REPRESENTATIVES OF NAVAL AIR FORCE, ATLANTIC

Admiral Paul D. Buie, Commander of the Naval Aviation Safety Center; Captain Howard C. Lee, Safety Officer for AirLant; Captain William A. Kiernan, Project Coordinator of the Naval Aviation Safety Center and, until recently, Safety Officer for ComNavAirLant; and LCdr. F. W. Johnston, Aide to Admiral Booth and former Assistant Safety Officer for AirLant.

Others are pictured above with Admiral McDonald (left to right): AX1 Clifford Gade, AB1 Donald

Diamond, and to CNO's left, Lt. Richard Allen, a pilot with VA-42; Ltjg. Peter Dukes, a tactical coordinator with VP-49; and Mr. Walt Elver, a veteran with 36 years of civil service. These men were representative of the various fields of endeavor contributing to the winning of the award.

The Atlantic Fleet Naval Air Force had 46 accident-free squadrons during the year owing to the aggressive accident-prevention program. AirLant thus demonstrated "Readiness Through Safety."

FUN ON THE HIGH SEAS: FAMILY DAY

BEING A HIGHLY personalized account of one Navy wife's reaction to, and actions during, that most complex and complicated naval exercise, a Family Day Cruise aboard her husband's aircraft carrier. The author testifies his account is based on fact, but warns that he is endowed with the innate ability of every sailor to enhance the truth a bit so it will be classed as a worthwhile Sea Story.

By JOC John D. Burlage

"I'M SEASICK," she announced. "I knew I should have taken some Dramamine."

"Honey," I replied to my loving wife, "you cannot be seasick. We just drove through the gates of the air station. We aren't even near the pier yet."

"It doesn't make any difference," she retorted. "Just the thought of going aboard that ship makes me seasick. You should have gotten me some pills for it."

I paused long enough to recall that, seated beside me in the car, here was a girl who gets ill if she fills the bathtub too full of water. Then I told her that seasickness is purely a psychological problem, that her discomfort would leave her instantly if she would just keep her mind on other things—like her first visit to, and cruise in, the attack aircraft carrier that was my present duty station.

For today was to herald my wife's first participation in that classic example of the Navy's finest attempt to maintain good working relations with its "internal" public—the Family Day Cruise. And it was about time, too. Although I was no stranger to sea duty, and Janet, to the necessary separations that are a part of it, she had never before set foot on one of the ships that competed with her for my time and interest.

That's why I'd insisted she come along for this one. "I wouldn't think of leaving my wife at home while my ship goes on a Family Day Cruise," I declared. In the back of my mind was the thought that, if I knew what was good for me, I didn't dare leave her.

She protested that she would have to be provided with some sort of medical balm to ease that queazy

feeling she gets in her stomach whenever she gets near a body of water larger than a mud puddle. I told her she would be far too busy, once she got aboard, to be concerned about seasickness.

"Besides," I added emphatically, "that ship is about a thousand feet long and it weighs several thousand tons. The seas are calm and it's a beautiful day. Unless you go topside, you won't even know when we get underway."

My wife did not appear to be fully convinced of the truthfulness of my words.

THE NAME of the first ship to hold a Family Day Cruise is probably lost to naval history. The event may even be a holdover from the days when a man's wife, or even his sweetheart, could accompany him on cruises that lasted a bit longer than a single day and took them a bit further than an operating area near home port.

At any rate, they have become a part of modern tradition. Ask any sailor who has ever put in a tour aboard an aircraft carrier, or virtually any other ship—it doesn't matter which one. He'll be happy to provide you with a pointed opinion, based on experience, about the relative merits of embarking several hundred wives, relatives and friends for a day at sea.

If you would like to receive a favorable opinion, however, it might help if you choose a sailor who had guests aboard for his ship's last Family Day Cruise. On the whole, bachelor sailors who are not accompanied during the fun and frolic are not usually convinced

Illustrations by
LCdr. Neil F. O'Connor



'We just drove through the gates'

that such affairs are at all beneficial—or necessary.

Being a firmly married man, I think Family Day Cruises are the greatest thing since gedunks. Really. I believe they are one of the Navy's best methods of instilling in wives and families an understanding of the complexities of their sailors' lives at sea, an appreciation of the vital work they do, a tolerance for the separations that are a part of Navy life.

There is something extremely vague about "sea duty" where wives are concerned. Altogether too often, they only know that their husbands are not at their sides for long periods. Family Day Cruises are an effective means to show them how their men are vitally involved in protecting their way of life.

Properly held, these day-long junkets also give the Captain a chance to personally become acquainted with the ladies—sometimes, as I was to discover, with altogether unexpected results.

JANET AND I got aboard without difficulty; I saluted the Junior-Officer-of-the-Deck and she told him his uniform was lovely, and wasn't it a lovely day to go sailing? I hustled her down to my office as quickly as I could.

She had no trouble navigating down the ladders and through a number of watertight doors and hatches, since she was more or less

properly dressed in slacks, high-topped sweater and low-cut shoes. I'm constantly amazed at the number of old carrier hands who are unable to convince their wives that tight skirts and six-inch spike heels are just not the "in" thing to wear for a Family Day Cruise.

In the Public Affairs Office, my hard-working strikers were in a frenzy of activity; they had pamphlets to take topside, arrangements to make for photographic assignments, coffee to get perking and a dozen and one other last-minute problems to solve. My strikers were

I looked at her; she was staring, wide-eyed, at something behind me. It was my dungaree jacket and it was hanging, as usual, from the end of a bolt that protruded from a stanchion. It was swaying, ever so gently, back and forth and back and forth. . . .

ON THE FLIGHT DECK, Janet quickly forgot her fluttery stomach. She was fascinated as she watched the stupendous, intricate task of getting a *Forrestal*-class CVA away from her berth and out of the harbor. She asked dozens of questions,

middle." Janet is an extremely observant girl; she picked the island out of the crowd instantly.

In response to her next question, I said, yes, it was possible for us to go up to the navigation bridge and to look for the "steering wheel"—if the place wasn't too crowded already. So, as we passed under a certain well-known bridge on our way to the Pacific, we entered the superstructure and started to climb.

The bridge was jammed with humanity. It gets crowded whenever the Special Sea and Anchor Detail is called away, anyhow, but when



'She told the JOOD he had a lovely uniform' 'Seated very comfortably in the Captain's chair'

not married, but they still smiled when Janet told them their office was lovely, and wasn't it a lovely day to go sailing? I couldn't help but wonder if they would have smiled quite so broadly if I hadn't been there.

I got Janet a chair just as the Boss brought his wife in, and for a few minutes the conversation went swimmingly. I was congratulating myself on the accuracy of my early prediction—that Janet would not be troubled by seasickness once she got aboard—when I noticed she was strangely quiet.

many of them intelligent, including, "Where is the ship's steering wheel?"

I should point out, perhaps, that I have tried over the years to avoid instilling in Janet the use of the slang and terminology so common to sailors and ships; one "salt" in the family, I figure, is enough. In this respect, I have succeeded magnificently.

I told her the ship's "steering wheel" was housed in a structure called the "island" which was located on the starboard (I said "right") side of the ship "near the

you have two or more persons for each station—the watchstander, his wife and sundry other relatives—there is not too much room for fancy footwork.

This is a fact that tends to make the Captain, the Exec, the Navigator and the Officer-of-the-Deck a bit edgy. Somehow, though, they always manage to survive and carry on—and so does the ship, for that matter.

I got Janet within hailing distance of the helmsman, who was a bachelor. Nonetheless, he was delighted to give her a quick run-

down of his duties, and he even told her all about the operation of the Engine Order Telegraph located next to his "lovely steering wheel." The description was hers, not his.

(There was some mention before he began his discourse of needing a color picture of the ship to send to his sweet old gray-haired mother in Waukegan, and did I have any idea of where he could get one?)

I excused myself as he talked—thereby becoming exposed to the danger that, soon, Janet would know more than I did about a helmsman's job—and went to see if I could scrounge a cup of coffee from the quartermasters.

When I returned, Janet had left the helmsman's side; he did not seem altogether unhappy about her absence and he did not know where she went. I found her quickly enough. She was engaged in a lively, animated conversation with none other than the Captain.

The skipper's interest in Janet was understandable enough. Not being one to pass up a chance to rest her tired feet, she had seated herself comfortably in his bridge chair almost immediately after he got up to chat for a minute with the Navigator's wife. He and Janet were getting on so well I saw no reason to interrupt the discussion.

Just out of sight, but still within earshot, I heard the Captain explain to Janet, that, yes, there were certain reasons why there were only two such comfortable chairs on the bridge and that it would be nice if everybody could have one, but . . . He stopped in mid-sentence. I couldn't stand the suspense any longer. I peeked.

The Captain was staring at Janet. She was staring, too, wide-eyed, at his binoculars, which were hung, as usual, from their strap in front of his chair. They were swaying, ever so gently, back and forth and back and forth. . . .

I AM A BORN OPTIMIST, so I figured that getting his chair back would mean more to the Captain than the memory of my stepping on his foot as I dragged Janet from his presence and virtually abducted her from the bridge.

Once away from the swaying bin-

oculars, Janet recovered quickly. For several hours—it seemed to me to also be several miles—we ranged the length and breadth of the ship. I was able to get her into spaces that were off the beaten track, so to speak, and many of my friends were glad to tell her at length about their duties (there were a few more mentions of color pictures).

Then they piped down chow.



'I believe she would have eaten'

Now, chow in the Navy—anywhere, and at any time—can be an experience that is hard to forget. But when there's a Family Day Cruise being held, the day's meal can take on special significance.

For instance, as Janet and I waited in line, trays in hand, we overheard one lady tell her husband: "Okay, wise guy, you buy me all the equipment they have in this galley, order me the same kind of food they serve you, and make sure I have a full complement of mess cooks for assistance, and I'll feed you this well."

Not all comments, as you might expect, are quite that flattering. The crew's opinion of their ship's chow often changes from day to day—or from meal to meal—and the current consensus of the quality of the food is often reflected by the attitude of visiting dependents.

The accuracy of this observation was supported during our cruise by the sight of one lady who brought along a large picnic basket, fully loaded. "I'm not taking any chances," she muttered.

She wasn't kidding. She marched past us, her family (including her hapless husband) in tow. She found an open area in the mess decks and drew from her basket a checkered tablecloth. "Sit!" she commanded; her family sat. Then she drew from that basket one of the most succulent-looking picnic meals I'd ever seen. They began to eat with gusto; the cooks' morale deteriorated.

Janet stood up well. She even let them put food on her tray. To this day, I firmly believe she was going to eat it. But, as I started to wolf down my own helping, I glanced at her; she was staring, wide-eyed at something behind me. It was a commissaryman's apron, and it was tied by its strings to an overhead pipe. It was swaying, ever so gently, back and forth and back and forth. . . .

THE ROAR of the aircraft overhead and the explosion of ordnance took Janet's mind off her purely psychological problem once again. It was quite an air show, and my wife enjoyed it immensely. She enjoyed the rest of the day's program, too, right up to the moment the last line went over after several busy little tugs got the ship back to the pier.

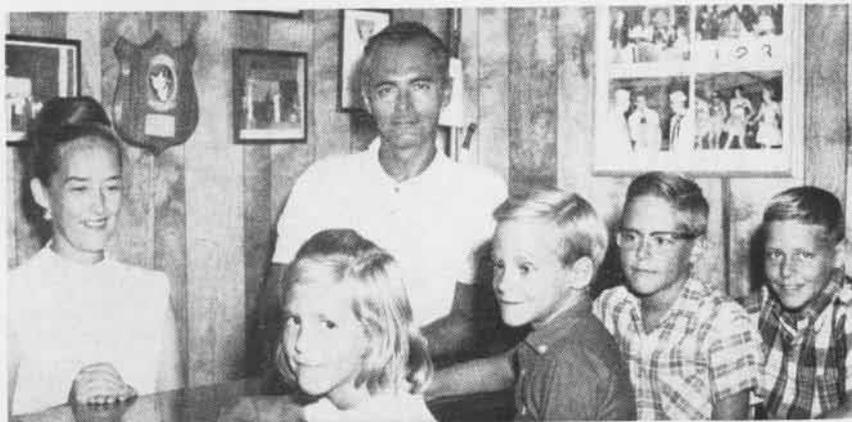
As we returned to the office to retrieve some gear we'd left there, we ran into the Boss and his wife again. We sat down and, over the last of the coffee, tried to unwind and talked about what a great Family Day Cruise it had been.

We all got quite a laugh over Janet's problem. As a matter of fact, the Boss, his wife, the strikers and even the Junior-Officer-of-the-Deck were still chuckling as Janet and I left the ship—at flank speed.

You see, during the course of the conversation Janet got quiet once again, and I didn't have to look this time. I had forgotten to take that blasted dungaree jacket off its peg, and the thing was still there swaying, ever so gently, back and forth and back and forth. . . .

TODAY LCDr. Joseph A. Pursch, USN, born in Chicago 38 years ago, is a psychiatrist-flight surgeon at the Naval Aerospace Medical Institute at Pensacola.

A man is the sum of all the moments of his life. For Dr. Pursch, the road of life led from Chicago to the rugged land of Yugoslavia, the refugee camps of war-torn Europe, through a welfare office in New York, then along ice-covered window sills of Detroit skyscrapers and a four-year stop at the University of Indiana's School of Medicine to flight surgeon training at the Pensacola aero-medical center.



LCDR. PURSCH WITH HIS WIFE AND CHILDREN AT HOME IN PENSACOLA

THE LAND OF OPPORTUNITY—STILL

When he was 18 months old, his parents returned to their native Yugoslavia. He grew up in relative affluence, played soccer instead of baseball, and sometimes day-dreamed of shining cities in the land of his birth. When he was 14, the retreating Germans took him, with 500 other children, to refugee camps in Czechoslovakia.

His parents having been killed, he fended for himself. In the closing weeks of WW II, he escaped from camp. "My uncle had a friend who was the cook in a school for girls. She hid me in a closet in the daytime and let me out at night." From there he made his way to Salzburg, Austria, where he lived in an abandoned boxcar in a bombed-out railroad station.

"It was a no-man's land—the Germans had already left and the Americans hadn't arrived." When they did, his joy was short-lived. He showed them his birth certificate, which pleased them, but when he said, "I no speak English," they thought he must have stolen it.

He had awaited the Allied invasion with mixed emotions—both fear of, and trust in, his own people: fear because the Americans had dropped bombs and trust because his parents had always told him how friendly the Americans really were. But now he resolved to stay away from them and make his way to Mannheim, avoiding all main roads, walking approximately 400 miles and living off the land.

Eventually he met an American

girl whose father helped arrange a passage to America for him. He arrived in New York in 1947 without a cent to his name and unable to speak English. When the social worker, interviewing him in halting German, said, "The people of the United States present you with a gift of \$30 and welcome you to this country," the hard-boiled young refugee felt deeply moved and knew he had arrived in the land of opportunity. He was determined to succeed.

Two days later, he was in Detroit and, much to his own surprise, started life in America "at the top" as a window-washer on the tenth floor. He made "a fortune" (\$37 a week) but he also recalled, "I had never known what cold really meant until I had to kick icicles off the sills and pour alcohol in my bucket so the water wouldn't freeze on the glass. Of course, that didn't keep my hands from freezing."

He learned English rapidly and three years later established his own window-washing business. In 1951, he met his wife, daughter of a Lutheran minister, and, encouraged by her, entered Detroit's Wayne University after passing an entrance examination.

He got married, bought himself a light airplane, obtained a private pilot's license and joined the Michigan National Guard. In 1955, he entered medical school. By the

time he took flight surgeon training, he already had four children.

The next two years he spent aboard the USS *Forrestal*. Gradually he realized that he would most like to work with the emotional aspects of his patients' health. Prior to reporting to Pensacola, he trained in his specialty at the Bethesda Naval Hospital, Washington, D.C.

While in Washington, Dr. Pursch was assigned as flight surgeon to the Secretary of the Navy and accompanied him on several trips, including one to Vietnam. He also wrote a number of articles for this magazine and received two annual awards from the Armed Forces Writers League. He is working on other aero-medical articles.

"I plan to make the Navy my career," he says. "I want to study further, particularly psychiatry—and tackle such problems as pilot loss. For example, why does a man who cost the government thousands of dollars to train suddenly want to stop flying?"

When Dr. Pursch was asked what impressed him most about this country, he replied with a quotation from Thomas Wolfe: "So then, to every man his chance—to every man, regardless of his birth, his shining, golden opportunity—to every man the right to live, to work, to be himself, and to become whatever thing his manhood and his vision can combine to make him—this, seeker, is the promise of America."

By JOSN Gary L. Reed

WITH THE MARINES IN VIETNAM

By LCpl. Robert Pitner
and Cpl. James Paynter

Vietnam Anniversary

In September, Marine Aircraft Group 36 completed its first year in the Republic of Vietnam.

From a desolate stretch of desert and jungle, on a peninsula not two miles from Viet Cong-infested territory, the men of the group built one of the busiest air facilities in Vietnam. They did it with picks and shovels, earth-moving machines, hammers, nails and lumber—and with muscle and sweat.

Composed of seven squadrons, MAG-36 was the first complete Marine Aircraft Group to arrive in Vietnam. Living conditions were crude at first; the Marines slept in



THESE UH-34D helos of Marine Aircraft Group 36 lift out of a landing zone after depositing cargo of U. S. Marines for search/destroy operation (other photos top of p. 18).

tents and ate C-rations. The working hours were long and gallons of sweat were shed before an operational helicopter pad was constructed. Once the pad was in place, the work went a little more smoothly. A mess hall was built and frame buildings began taking the place of tents.

MAG-36 began its part in the war in Operation *Harvest Moon*. Since then, it has participated in every major operation in the "I" Corps area from *Double Eagle I* and *II* on.

In its first year, the group flew more than 69,148 hours, killed more than 600 VC and rescued and evacuated countless Marines and

South Vietnamese troops. MAG-36 men have been awarded 182 Purple Hearts, 21 Navy Commendation Medals, 2,867 Air Medals, six Bronze Stars, five Silver Stars and 17 Distinguished Flying Crosses.

Chopper Fixers

A 16-man team of aircraft repairmen has had the opportunity afforded few civilians of observing at first hand Marines on the job in Vietnam. The Civil Service employees from NAS NORTH ISLAND arrived in Vietnam to effect several modifications on the CH-46A helicopters used by HMM-164 and HMM-265.

Six of the sixteen are shown in



SIX WEST Coast Civil Service men stand by new filter they helped install on MAG-16's CH-46A's to prevent sand from entering engines.



AN F-4B Phantom II of Marine Fighter Attack Squadron 323 is first plane to engage newly installed arrested landing gear at Da Nang.

the photo (p. 16): T. E. Allen, J. L. Vigel, F. G. White, R. E. Small, J. D. Floyd and F. C. Lawrence.

During the team's stay at the Marble Mountain Air Facility, four miles south of Da Nang, the men worked and lived under the same conditions as the Marines.

Team leader Ferris G. White, a 27-year veteran in the Civil Service, said, "We had many Marines working with us and they are outstanding men, all of them. The



MARINE *helo* makes one-wheeled landing on top of outpost known as "Rock Pile."

squadrons were wonderful to us."

The primary modification on the CH-46A *Sea Knights* was a barrier filter designed to keep sand out of the jet engines. Another change was a new inter-com system to improve communications between the helicopter pilot and the crew.

Rock Pile

Four and a half miles south of the demilitarized zone stand two sheer, stone pinnacles known to the Marines as "Twin Peaks." The higher peak, 1,000 feet, they call the "Rock Pile."

Strewn with boulders and honey-combed with caves, the area serves the VC guerrillas and North Vietnamese infiltrators who make the airspace around the mountain among the deadliest in Vietnam.

When 1st Lt. Hugh Wilson and his crew from HMM-263 were



CAPT. James Tully of VMO-2 helps a Vietnamese orphan try on his first pair of shoes.

called upon to supply a Marine reconnaissance team pinned down on top of the Rock Pile, they did not expect an easy mission—and it wasn't.

Wilson's UH-34D helicopter would not be alone during the resupply mission. A *Huey* gunship was to cover the chopper as it dropped into the zone. The plan was to hover just above the ground while the crew chief, Cpl. Thomas L. Hopkins, unloaded the badly needed ammunition to the recon team.

Everything went as planned. Air controllers directed the fixed wings as they made their bombing and napalm runs against the suspected VC antiaircraft positions. Then the supply helicopter went in to drop its load.

Hopkins gives this account: "Nearing the Marine position, we could see the defenders on all sides of the uppermost peak crouched down so as not to make a target for a VC sniper.

"On the final approach, I began to give the pilot corrections so as to put the plane over the drop zone in the middle of the peak. Smoke from a flare obscured our view momentarily until the rotor wash blew it away.

"Getting as near the drop zone as possible, I kicked the three boxes of grenades over the side and was about to say, 'All clear,' when a .50

caliber slug ripped through the cabin. At that moment, all I can remember saying is, 'Let's get the hell out of here!' and we did."

Although Wilson and Hopkins received slight shrapnel wounds, they returned safely. The Rock Pile was robbed of another victim.

Tons of Gifts

As a result of Marine Capt. James Tully writing a letter to a friend, a reporter on the Santa Cruz (Calif.) *Sentinel*, 20 tons of gifts have been sent to the needy children in Vietnam.

The journalist, Wally Traber, wrote a column asking for contributions, and the response was immediate. Other papers picked up the story and gifts began pouring in from all over the country. They included medicine, clothing, school supplies and other necessities.

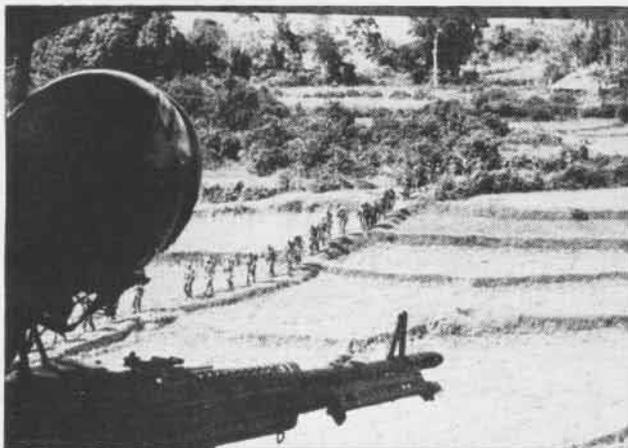
One week in September, the largest shipment received to that day, arrived—1,000 pounds of supplies sent by the children of the Bay View Elementary School at Santa Cruz. The supplies were shipped by a local Naval Reserve unit.

In the Book

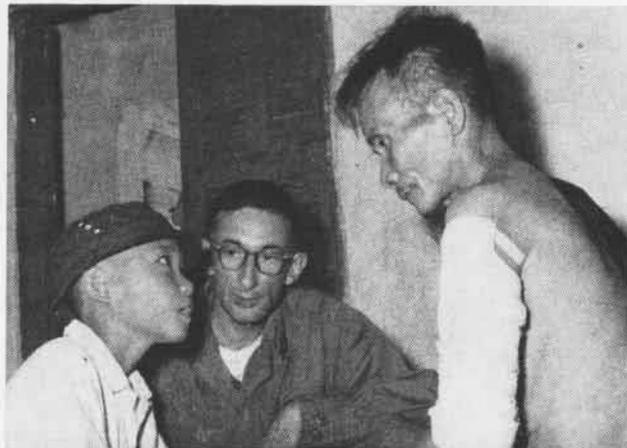
If Maj. Gerald Mueller, a pilot with HMM-161, becomes a bookworm, he has good reason. If it weren't for a book he was carrying,



MAJ. MUELLER holds *Emergency Procedures Manual* which blocked bullet from leg.



READY TO HELP in case of need, Cpl. Ray Dixon mans M-60 machine gun as he watches Marine platoon move into enemy territory.



YOUNG Nguyen Daiy Binh (nicknamed "Charlie") interprets for Corpsman M. S. Fisher as old man describes how he injured arm.



U.S. MARINES board UH-34D helicopters of Marine Medium Helicopter Squadron 361 for operation to be conducted south of Chu Lai.



HELICOPTER transport makes for swift attack on enemy strongholds. Upon landing, Marines are ready to plunge into action at once.

he would probably be walking with a limp today.

Maj. Mueller was flying copilot on an emergency resupply of besieged Marine ground forces northwest of Dong Ha when a North Vietnamese bullet ripped through the side of his UH-34D helicopter.

"It felt like something brushed my leg," he said, "but I thought it went through the helo."

Close inspection on the way back to the base proved otherwise. The .30 caliber slug was lodged between the pages of the Emergency Procedures Manual Maj. Mueller carried in a pocket of his flight suit. But for the manual, the bullet would have entered the calf of his leg.

Although he is keeping the old manual as a souvenir, he plans to get another and bigger book—say, a one-volume encyclopedia.

Peeping Tom

It's getting so a peeping Tom just can't snoop around any more. At least, that was the experience of one VC suspect who tried to sneak up on the Marine helicopter detachments based at Dong Ha.

Capt. Jay Davis, VMO-2, was piloting his UH-1 back for refueling when he spotted a suspicious-looking Vietnamese a half mile south of the airstrip.

As he flew in for a closer inspection, the man dropped what appeared to be a satchel charge and dove into a clump of bushes.

Then Capt. Davis was relieved by another *Huey*, flown by 1st Lt. Alan Barbour who made a series of low passes in an attempt to flush the intruder from his hiding place. Meanwhile, by still another helo, a five-man reconnaissance team was

dropped in about 50 yards away.

As soon as the Marines were on station, the *Huey* made another pass and dropped a colored smoke grenade within a few feet of the hide-out. Realizing he was caught, the suspect surrendered to the airborne posse.

Friendly Warning

"Hey, Russ, you're on fire!"

First Lt. Russell Williams, directing air strikes, heard the voice of Capt. Jesse Harmon who passed, in a VMA-223 *Skyhawk*, under Williams' observation plane.

Heading for home, Williams continued to direct the jets to their targets. He made the eight miles safely back to base.

It was not the first time the two pilots had cooperated. Before joining MAG-16, Lt. Williams had been a jet pilot with VMA-223.

Corsair II in the Fleet

VAdm. Booth Accepts the A-7A

Vice Admiral C. T. Booth, ComNavAirLant, formally accepted the Navy's newest airplane, the A-7A *Corsair II* light attack bomber, into the Navy October 14 in ceremonies at Cecil Field, Florida. The on-schedule delivery of the LTV aircraft came only 13 months after the airplane's initial flight September 27, 1966.

The first aircraft, flown from Dallas, was turned over to Admiral Booth by W. Paul Thayer, President of LTV Aerospace Corporation. Also participating in the program were Rear Admiral H. H. Caldwell, ComFAir Jax; Captain Jack Christiansen, Commanding Officer of CRAW-4; and Commander Don Ross, Commanding Officer of VA-174 which flies the *Corsair II*.

In addition to carrying multiple combinations of weapon stores, the *Corsair II*'s long-range capability can be traded off for reconnaissance time over the target area. The plane, designed to provide a stable bombing platform at low level, also has the agility and performance of a fighter aircraft at that level.

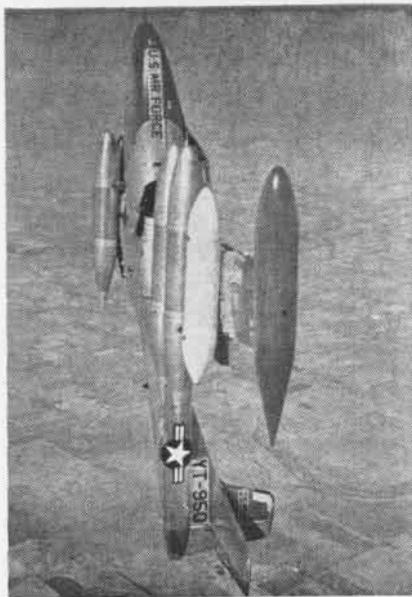
Designed for invulnerability, *Corsair II* provides a high degree of protection for the pilot through cockpit armor, fuselage armor, self-sealing fuel tanks in critical areas and a dispersal of critical airframe components* to minimize damage from hostile fire.

The *Corsair II* is powered by a Pratt & Whitney TF-30-P-6 non-afterburning engine. This 10,000-pound-thrust engine is a twin-spool, axial flow turbo-fan with full-length fan ducting, giving it a very high thrust and flexibility.

AF Aircraft Tested at Pax Climb Angle Proves Impressive

A short while ago, a strange, squat little airplane with USAF markings made its appearance at NATC PATUXENT RIVER, Md.

At first sight, it appeared to be an AF T-37, a basic trainer manufactured by Cessna. But there were differences. These included six bomb racks, two tip tanks and a



YAT-37D'S STYLE IN STEEP CLIMB

small Gatling gun in the nose of the airplane. Even more impressive were the reworked engine fairings which held the J-85 non-afterburning engines that more than doubled the thrust.

Tower personnel, who grudgingly gave clearance for an unrestricted climb, were impressed by the 30-40 degree climb angle immediately after takeoff.

The YAT-37D evaluation included its flying qualities and performance, weapons systems, service suitability and general acceptability for possible Navy use.

Navy's evaluation team, headed by Lt. G. F. Wheatley of the U. S. Naval Test Pilot School, included LCdr. D. L. McConnell, Lt. W. R. McGowen, Lt. L. E. Blose, and Lt. R. V. Sallada, each representing one of the test divisions of NATC.

VF-126 Scores in Safety For a Total of 53,000 Hours

The *Fighting Seahawks* of VF-126, one of the seven squadrons in Carrier Replacement Air Wing 12, have amassed over 53,000 accident-free hours in sweptwing jet aircraft.

VF-126 provides jet instrument flight training at NAS MIRAMAR for F-4, F-8, A-3 and A-6 Fleet pilots. Certain pilots are also furnished a jet refresher course in the TF-9J.

The squadron requires the ser-

vice of 22 pilots, 3 ground officers and 190 enlisted men in order to qualify approximately 400 pilots for the Fleet each year.

Maintenance Awards Made

VP-49, VP-17 Declared Winners

The first CNO Aircraft Maintenance Awards for Patrol Squadrons go to VP-49 in NavAirLant and VP-17 in NavAirPac.

These two units are the winners of the new trophy which is to be given annually to the best land or seaplane squadrons—one in the Atlantic and one in the Pacific—for outstanding maintenance. The trophies are the gift of the Lockheed Company.

Winners will hold the trophy for a year and receive a scroll as a permanent reminder of excellence.

In announcing the winners, CNO sent his congratulations for the individual professionalism and effective supervision which characterized their maintenance records, adding in his message a special "Well Done."

HMM-365 Tops in Safety

Flies 25,000 Accident-free Hours

On September 16, 1966, Marine Medium Helicopter Squadron 365, commanded by Maj. Kermit W. Andrus, completed its 25,000th consecutive accident-free hour of flight time. At the controls on the record-making flight were Capt. Lawrence Gaggero, pilot, and 2nd Lt. Andrew Parker. They landed their helicopter on the deck of the USS *Boxer* (LPH-4).

HMM-365 is part of the Second Marine Air Wing. The squadron is currently deployed to the Caribbean; its permanent base is MCAF NEW RIVER, N. C.

HMM-365's achievement was accomplished in 29 months, 9 days, during which the squadron flew the H-34B aircraft, a medium transport helicopter. The 25,000 accident-free hours include 13 months of flight time in the Far East where HMM-365 was engaged in action against the insurgent forces in the Republic of Vietnam.

In 1965, the squadron was awarded the CNO Award for Combat Readiness Through Safety.



NOT JUST AT

But throughout the year, Navy officers and men faded into memory, 1966 brought similar occasions scattered as South Vietnam, San Diego and the Navy giving, and the guests were royally entertained with food and music for a harvest festival. The spirit of Christmas





CHRISTMAS . . .

reach out to those in need. As Christmas 1965
ns, long to be remembered, in places as widely
e East. The gifts were wrapped in the spirit of
eats as varied as donkey rides on the hangar deck
as lasts, with helping hands, all the year round.



VT-27 Sets Safety Record

Logs 50,000 Accident-Free Hours

In October, Lt. R. M. Allen, flight instructor of VT-27, posted the squadron's 50,000th accident-free flight hour.

Since April 1965, when the safety record began, 331 flight students have successfully completed the squadron's multi-engine advanced flight training program. Included in the 50,000 hours are more than 127,000 landings—involving 3,300 carrier arrestments—and more than 26,500 student instruction flights.

VT-27, home-ported at NAS CORPUS CHRISTI, Texas, is led by Commander Robert N. Radtke.

Class 44 Graduates 20

Pax School Honors Top Pilot

A few weeks ago, 20 students of Class 44 completed the eight-month academic and flight syllabus at the U.S. Naval Test Pilot School, NAS PATUXENT RIVER, Md.

Mr. Philip F. Oestricher, an employee of the General Dynamics Corporation, graduated with honors as the Outstanding Student. He was the first General Dynamics test pilot to receive this award from the school.

The school is one of four test pilot schools in the Free World. All of the Navy and Marine Corps members of the astronaut group are graduates of the school.

From the time the school opened in 1948, it has trained not only Navy pilots but also aviators and non-aviators from foreign states, major aerospace contractors and agencies of the U.S. Government.

Four-striper a Parachutist

Qualifies in his 33rd Navy Year

Captain Floyd M. Symons, who commands Naval Operations Support Group, Atlantic, recently became the first person of his rank to qualify as a Navy parachutist at the Naval Air Technical Training Center at Lakehurst.

Fifty-one years of age, Captain Symons has served 33 years in the Navy. As commander of the Support Group, he is in charge of the UDT, SEALs and Beach Jumper Units of the Atlantic Fleet Force.

The special instruction Captain Symons received was conducted by the Aircrew Survival Equipment School at the Training Center.

150,000th Plane Guided In

GCA #26 Celebrates at Atsugi

At NAS ATSUGI, Japan, Ground Control Approach Unit 26 "talked down" its 150,000th aircraft September 26. A VR-21 C-1A flown by Ltjg. W. W. Beeuwkes claimed the honor. Aircraft Commander, Commander W. A. Ellsworth, was riding as copilot.

Handling the honors for the 150,000th "talk down" on the ground were GCA Duty Officer, Lt. Jack Enochs, AC1 G. D. Zeitler, AC1 C. E. Shiroky, AC2 J. D. Olson, AC3 J. T. Badgett and ETC A. E. Gould.

The 150,000th GCA was made under IFR weather conditions with a 600-foot ceiling and two miles visibility. Members of the aircraft crew and GCA unit marked the event with the traditional cake-cutting ceremony.

Unit 26 transferred to NAS ATSUGI from NAS MINNEAPOLIS in 1951. At that time, the unit had 11,144 runs logged. An average of about 750 runs per month has been regularly recorded by the unit.



HEAVE-HO. The Army lends the Navy a helping hand as one of its CH-47A Chinook helos transports a T-2A Buckeye from NAAS Meridian to Overhaul and Repair, NAS Pensacola. The helo hoist of a 5,000-pound aircraft reduces the cost of dismantling the trainer and packing it for rail shipment.

XC-142A's Non-Stop Flight

Two Unofficial Records Made

The XC-142A V/STOL transport flew non-stop from Edwards AF Base, Calif., to Dallas October 7, setting two unofficial world records for that type aircraft.

Piloted by USAF's Lieutenant Colonel Jesse Jacobs and Army's Maj. Robert Chubboy, the world's largest V/STOL airplane made the 1,080-mile flight in three hours and 43 minutes, the longest non-stop flight ever made by a V/STOL aircraft, according to LTV Aerospace Corporation. The flight also chalked up a record for endurance for that type since the flight was made without inflight refueling.

The plane returned to LTV's Dallas plant to undergo further contractor flight testing. Three other XC-142A's continued operational flight testing at Edwards.

Since Sept. 29, 1964, when the XC-142A made its first flight, the planes have made a total of 367 flights for 294 hours in the air.

Jindivik Back at Pt. Mugu

To be Used in Fleet Training

Jindivik, an Australian recoverable jet target, is back at the Naval Missile Center, Point Mugu, for another tour of duty.

Developed in 1952, the piloted version of *Jindivik* was the first all-Australian-designed jet aircraft to fly.

The name comes from the Australian aboriginal word for "the hunted one." The *Jindivik* is a subsonic target with an altitude range of approximately 65,000 feet. It can change speed rapidly.

NMC POINT MUGU conducted target flight evaluation tests on the *Jindivik* for the Navy in 1963.

"With *Jindivik's* high maneuverability," Frank McJohn, Targets Department project manager at NMC, says, "it is a realistic challenge to Fleet units. We expect to get six operational flights out of each *Jindivik*."

In the current program, 18 *Jindiviks* will be used as operational targets by Pacific Fleet units.

The program is expected to run for the next 16 months. Ling-Temco-Vought is operating contractor.



SUPPLY DEPARTMENTS UNDER 3-M ARE ABLE TO GET PARTS AND COMPONENTS TO MAINTENANCE MEN QUICKLY

3-M and 3-Level Maintenance

SUPPLY AND THE SYSTEM: A CLOSE-UP

Fifth in a Series

By JOC John D. Burlage

NAF Andrews Photographs by PH2 M. J. McNally

LOCATED A FEW miles from Washington, D.C., the Naval Air Facility tenanted at Andrews Air Force Base, Md., is nicknamed "Crossroads of the Navy" because so many transient aircraft land there.

NAF ANDREWS is a busy place for other reasons, too. Its runways are used for proficiency flights by desk-bound Naval Aviators from offices in and around Washington, and it also supports some tenants of its own: Under its jurisdiction are a Naval Air Reserve Training Unit, a Marine Air Reserve Training Detachment, a Marine Flight Section and a helicopter detachment based at the Anacostia Naval Station in the District.

A visitor to the facility might liken it to a busy little town in the heart of a big city. Staffed by about 1,000

officers and enlisted men, it has many of the requirements and problems of a larger, more complex Naval Aviation activity—such as nearby Patuxent River, Md.—but it escapes many of the responsibilities and logistics headaches.

Although its personnel must maintain and operate a widely diverse assemblage of airplanes, for example, the facility has no operational squadrons assigned. Nor is it the home port for any large ships.

NAF ANDREWS does not, of course, have an Overhaul and Repair Department; unlike many of its "big brothers," its hangars, offices and related buildings are virtually within hailing distance of each other.

Because it's small compared to most of its kindred activities, but still has many of their features, NAF

ANDREWS is an excellent place to go for a look at an organization operating under the new Standard Navy Maintenance and Material Management (3-M) System for Aviation.

More specifically, the best starting point for any study of 3-M, as it's practiced at Andrews, would be the facility's Supply Department.

And, in that department, a good person to ask questions of would be Ltjg. Donald J. Gibbons, a Supply Corps officer who heads the department's Data Processing Division. The questioning might take this form:

How big an operation are we talking about?

"Well, the NAF ANDREWS Supply Department does about a fifth of the business of a typical naval air station, and about a twentieth of a really big outfit such as Norfolk," the personable young officer replies. "Even so, we can expect to issue to the maintenance people of NAF, NARTU and the Marines maybe 55 different types of aviation items a day.

"These include such things as 'black boxes' [as-



NAF ANDREWS' RICHARD FINLEY REQUESTS COMPONENT

sembled radio and navigation systems, for example] and related equipment. We also have about 60 different general items on hand, and there are about 2,100 different pieces of gear in our 'pre-expended bins.'

[The 3-M Manual, "bible" for implementation and operation of the system, says "pre-expended bins" contain, logically enough, "pre-expended material"—low-value, fast-moving consumable items technically released from supply control and physically located in the maintenance area. Their establishment, upkeep and replenishment are Supply responsibilities.]

"All our basic supply operations—and that includes data processing and administration—are contained in a single building that was completed in 1961. It even includes our warehouse, which has a gross storage space of 79,000 square feet."

How long has NAF ANDREWS been on 3-M?

"We started on the system a year ago last July, when our data processing equipment was installed, and began filing our first reports [under the *Maintenance*

Data Collection facet of 3-M, one of three broad areas it includes] the same month."

How did it go at first?

"The first few months, frankly, were pretty bad; we had many inaccuracies in reporting because we were so new to the system and because we had no trained personnel to operate the data processing equipment. Shore-duty billets for enlisted machine accountants are scarce, and we were told we'd have to train the personnel we had in the operation of the gear.

"We also found we'd have to modify some of the data processing programs 3-M requires so they could be fed into the computer. We made some changes to the machinery, too, to solve a problem of the computer's failure to provide certain information.

"But once we made the necessary changes and had our people trained to operate the equipment, the data processing part of the program began to function well."

What changes took place in the Supply Department?

"If you mean physical changes, they ranged from



REQUEST IS TAKEN BY SUPPLY'S HARRY SCHNEIDER

having a wall knocked out to make a space big enough for the data processing gear to installing and staffing the intra-departmental organizations the 3-M Manual requires.

"If you mean mental changes—changes to the way we did things before 3-M—they included a crash program to teach our mechanics to fill out the raw data forms, the intensive training of our own personnel and a requirement on the part of everybody to accept the idea that things were going to be different."

ALTHOUGH installation and operation of computerized equipment is a major aspect of 3-M aboard any facility, the change from past practice that is most noticeable—especially to the mechanics—is the one which takes place in the methods used by the Supply Department to take requests from an activity's maintenance organization and get parts and equipment to them. This "new way" is a part of 3-M known as *Improved Maintenance and Material Control Procedures*.

While there is enough flexibility to the system to

allow the new supply setup to be tailored to meet the specific requirements of a given activity, the 3-M Manual makes no bones about making the change. It says the new supply organization *will* be created.

The manual stipulates, specifically, that each station's Supply Department will establish an internal organization called the *Supply Support Center (SSC)*. The single point for liaison between the Supply Department and the maintenance organizations, the SSC has three sections: a *Supply Response Section (SRS)*, a *Component Control Section (CCS)* and a *Supply Screening Section (SSS)*.

The SSC, the manual says, is to function primarily to satisfy the requirements for material of the station's organizational (squadron or other operating unit) and intermediate (the aircraft maintenance department) activities.

"There is nothing new or revolutionary about the concept of the SSC," the manual points out. "In the past local supply departments have established such ancillary organizations as 'Auxiliary Stores,' 'SERV-MARTS,' 'JETMARTS,' etc., as expediciencies to Fleet support.

"However, these organizations were primarily involved with the physical issue of material. In most instances, little or no emphasis was devoted to interfaces with the maintenance organization regarding work being performed. It is in respect to this area of concern that the SSC differs. The SSC will not only be involved with the issue of material but will also be charged with many additional responsibilities incident to the support of the maintenance effort."

Although it can be next to impossible to provide terse definitions for any activity incorporated in a program as diverse and massive as 3-M, the SSC's three sections might be described this way:

Supply Response Section—It receives requests for material from the station's maintenance units and causes the issue and delivery of the parts or components.

Component Control Section—This is the SSC section that has accounting responsibility for all off-aircraft components processed by the station's intermediate maintenance activity. Additionally, it must maintain records on the status of all rotatable pool components. Generally, these items consist of repairable ready-for-issue (RFI) components normally positioned in the same location as the SSC. They're reserved primarily to satisfy requirements for components to replace parts turned in for intermediate level repair.

Supply Screening Section—It screens and starts disposition action on all components that can't be repaired by the aircraft maintenance department.

As indicated, these are only "bare-bones" descriptions of the SSC sections. More complete details concerning their activities will be incorporated into an upcoming segment of this series that deals with the relationship between organizational and intermediate level repair facilities and the Supply Department.

It's sufficient to say now that, through its three sections, the Supply Department's SSC is supposed to obtain, maintain, store and deliver every part or component needed to keep an aircraft aboard a station in

good repair—in short, in top operational condition.

While the 3-M Manual is adamant about the creation of an SSC when a station's Supply Department goes on the system, it leaves the center's physical location to the discretion of the local command—and that's where the flexibility of the program comes in.

"However," the manual declares, "every effort should be made to position the SSC so that maximum response can be offered in satisfying material requirements.

"As previously discussed [both in the manual and in this series], where maintenance is performed in widely separated areas it may be feasible to splinter the SSC. For example, if the avionics shop is located at one end of the ship or station and the power plant shop is located at the opposite end, it would be practical to have an SSC, or sections of it, supporting the avionics shop and another SSC, or sections of it, supporting the power plant shop.

"Conversely, where the avionic shop and the power plant shop are in one immediate area, a single SSC can service both. In some cases, it will be desirable to position the SSC *in* a hangar area; in other instances, it will be more advantageous to locate the SSC in an area adjacent to that of maintenance; while in still other instances, it might be best to locate the SSC in the main supply department."

AT NAF ANDREWS, the latter course has been followed. To understand why, a visitor must remember that the facility is relatively small and uncluttered. Ltjg. Gibbons provides additional details:

"We have three hangars; they line the NAF-NARTU ramp next to the facility's Admin-Ops building. The first is called the proficiency aircraft hangar, and it contains our maintenance department's work and shop spaces. I should add that more than half our enlisted personnel are assigned to some aspect of aircraft maintenance. When you consider that proficiency pilots average 1,900 flights a month and more than 250 transients land at Andrews during the same period, you can see why.

"The second hangar houses the necessary maintenance support facilities for the NAF transport operations, and the third is the NARTU-MARTD hangar.

"The hangars are close together, readily accessible to the Supply Department complex, and they don't require an SSC within their confines."

That explains why Andrews' SSC is located in the new Supply Department building, a visitor might say, but how does the center actually operate?

"Well, I could tell you the basics," is Ltjg. Gibbons' reply, "but we've got a man who has a thorough knowledge of our SSC. Let's find him."

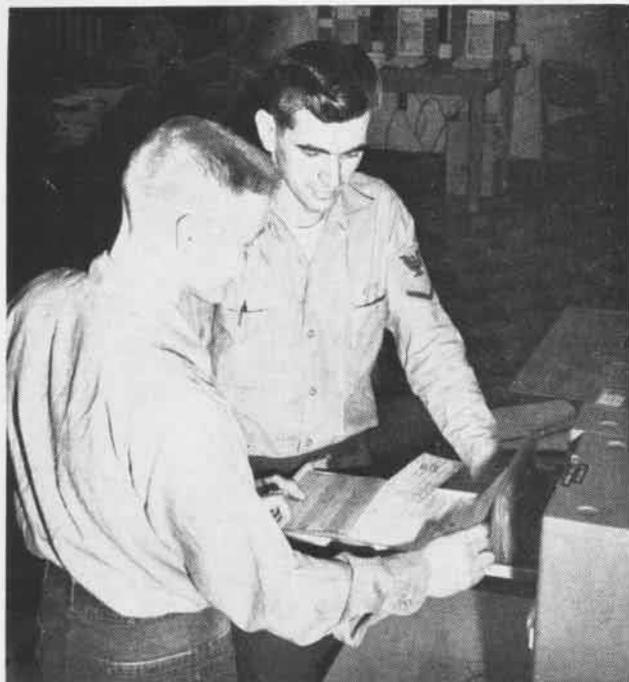
Donald F. Weaver is a first class aviation storekeeper who is rapidly nearing the day when he will enter the Fleet Reserve. Years of experience have given him a good background in the ways of Navy supply—and he seems to have adapted well to the new methods 3-M requires of persons like him.

"When we first went on the system, we didn't have some of the 'niceties' we have today," he recalls. "For instance, instead of Tel-Autowriters [facsimile trans-

mitting and receiving devices common to 3-M installations] we used a 'hot phone line.'

"We had a contact point in each of our supported activities, and it was from that point that our response section would take calls for components. The response section took the stock number and whatever other information was provided, made a stock check and, if the item was available, prepared the necessary paper work to transfer the component to the user.

"After a short while, we got permission to go on the Tel-Autowriter system. This meant we set up a Supply Response Section, put three receivers in it and



AVAILABILITY CHECK BY SCHNEIDER, CHARLES FISH

installed a transmitter in each of our supported activities."

Weaver shows the visitor the receivers; they're lined up against a wall and one of them is operating. It's one of the near-magical devices created by the wonder of electronics. As the requestor (in this case, an individual in the NARTU maintenance office) handwrites his request onto the transmitter, every stroke he makes is duplicated exactly on the receiver.

"We use a local form in these machines," Weaver points out. "While it's common to the Tel-Autowriter, it's been modified to suit our needs. It duplicates, line for line, information required by the DD-1348's [*DoD Single-Line Requisition System Document*], so it facilitates typing them.

"Our SRS has three persons assigned: There's a Wave who does the typing, a man on TAD from NARTU who takes care of NARTU requests and another man who handles the Marine and NAF receivers. One of them takes the form from the 'writer, makes a stock check and gets the 1348 typed.

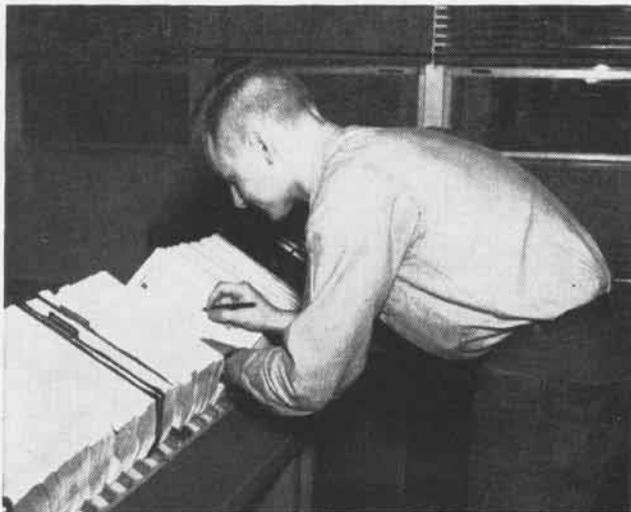
"It's at this point that the SRS personnel must com-

pletely check out every demand, from the part number right down to the 'good' stock number, the price and the overhaul point for the item if it's an exchange component. In other words, SRS must completely check every requisition from a technical standpoint. That's a job that wasn't done by the old Technical Section before 3-M; it used to be handled by the person who was in charge of FUR [*Failure, Unsatisfactory, Removal*, an obsolete term] items.

"Now, all documents are earmarked by the SRS with the proper—and correct—information, so not much research is required at the component control or supply screening levels. All they have to do is take the action 3-M requires of them—either get the part to AMD for repair or ship it off.

"If our SRS people find the item is available from stock, the paper work goes back to the warehouse and to the locator file where it's time-stamped. This is done to insure a good delivery time; 3-M sets up priorities, remember, that run from one hour to two or three hours and so on.

"The 3-M Manual calls for delivery to a designated area—the airplane or a designated shop or hangar—but we have asked our maintenance people to let us



FEDERAL STOCK NUMBER IS TAKEN FROM STOCK LIST

deviate from this requirement for a very simple reason: We have a problem with our drivers; they're inexperienced around aircraft and we have no desire to add to a 'down' plane's problems by smacking into a wing.

"So, we asked for, and got, permission to deliver components to two central points, one for NARTU and the Marines and one for NAF. Deliveries to NARTU are made to its material control office and NAF gets its goods at its shops store.

"Once the material is delivered, it's up to the user to call the shop and have someone pick up the item. Each work center, of course, has a number and the call usually goes to the work center supervisor; he dispatches a man to make the short trip for the pickup.

"We've had no difficulties with this approach. It's a departure from the usual procedure, but the size of

the facility enables us to work it this way without cutting too deeply into the time of maintenance personnel. So far, it's worked well."

AND SO FAR the visitor is impressed. But he wants to know if delivery time has been improved and, if it has, by how much?

"All our priorities are well within the hour," Weaver replies. "We used to deliver, say, twice in the morning and maybe twice in the afternoon and if we got a hot one we might dispatch a truck right then—if we had a truck available, and usually we didn't."

"Now an item is pulled from stock and delivered almost as soon as the requirement gets to the warehouse."

Commendable. But hasn't the improved service required an increase of personnel?

"Not really," is Weaver's answer. "There are 18 civilians and 16 Navy men working stock now. We have five truck drivers, 15 persons in storage [that's issuing, receiving and storing], four in traffic [shipping and packing], four in our auxiliary stores in the hangars, three in equipment and labor [forklift operators, for instance] and three in supervisory jobs."

At this point Ltjg. Gibbons speaks up:



WAVE DONNA KING TYPES A REQUISITION DOCUMENT

"It might be worthwhile to point out that NAF ANDREWS has about 500 individuals working in direct support of 3-M, but they include maintenance and other support personnel as well as those in supply."

Although the fast delivery of components and parts is an aspect of 3-M that allows maintenance personnel to readily appreciate the need for it, there are other points to be made in favor of the system that may not be so obvious.

Not the least of them is the fact that 3-M's requirements for increased supply responsibility under its *Improved Maintenance and Material Control Procedures* necessitate the generation of original ideas that make the program even more practical.

At NAF ANDREWS, for example, some changes, designed to make the supply operation smoother, include:

- A new method for finding parts in stock. From a complicated procedure that required referencing a part's group and class, among other things, before it could be found, Andrews' supply personnel have set up a system using federal identification numbers that cuts the time in half.

- The use of the facility's computerized equipment to help maintain the parts at hand which are most often needed by maintenance personnel. The procedure is a bit complicated, but it boils down to allowing the computer to tell the Supply Department when and if a given component is ordered enough times



TERRY HYDE TIME-PUNCHES REQUEST IN WAREHOUSE

over a certain period to warrant keeping it in stock. The job used to be done by hand—when it was done.

The visitor is now sold on the benefits of the system. He wonders if it was that easy to sell to the personnel at Andrews. Weaver has an answer:

"As far as our personnel are concerned, it goes back to the old saying that if you're gonna make a change to standard methods, you gotta prove to the people affected by the change that it's an improvement.

"I know there were as many problems from the maintenance side as there were from ours when the system first started—especially when it came to having the mechs fill out the forms the data processing people have to have.

"So when we started going into this, we got an instant reaction: 'It'll never work.'

"Well, it's been working for quite a few months now, and we've found that, generally, those who were quite certain it'd never get off the ground are the ones who are most happy with it now."

Next: The system's all at sea.

FLEET AIR WINGS ON PATROL



CDR. R. F. Falkenstein, VP-11 C.O., held a squadron inspection and awards ceremony.

VP-11 Holds Honors Inspection

At a recent inspection, Commander R. F. Falkenstein, the Commanding Officer of Patrol Squadron 11, presented awards and special commendations.

ADJ1 William J. Farrar received a Letter of Commendation for his work in VP-11's power plant shop. Farrar has been serving as petty officer in charge of the shop, a position usually held by a senior chief petty officer.

ATI Richard J. Martinez was presented the Freedoms Foundation Award, "George Washington Honor Medal," for his letter entitled, "I am an American." He had submitted it in 1965.

Several other awards were given, including aircrewman wings, good conduct medals and certificates for those who had completed their high school GED test. The Sailor of the Month Award went to AMH2 Gerald Goldman for his outstanding military appearance and behavior.

VP-2 Returns from Vietnam

When the Commanding Officer, Commander H. C. Ragsdale, touched down his SP-2H *Neptune* October 7 on the runway at NAS WHIDBEY ISLAND, he brought to an end a six-month WestPac deployment for Patrol Squadron Two.



VP-18 SUPPORTS Roosevelt Roads activities. Here AO2 Jerry Scholey (kneeling) and AOC John Brown help Little Leaguers fire antique cannon taken from an old Spanish ship.

Four of the six months were spent in the combat zone at Tan Son Nhut air base in Saigon.

The deployment was VP-2's second tour of duty in the combat zone in a little more than a year and a half. They flew out of Saigon March through May in 1965 and from June through September this year.

The first VP-2 *Neptunes* began to arrive at Whidbey October 1. Dur-

ing the next few days, C-54 transport aircraft brought back some 250 non-flight crew members who comprise the ground support and maintenance personnel of the squadron. Commander Ragsdale's P-2 and one other *Neptune* were the last two of the 12 squadron aircraft to return. There are some 350 officers and men in the squadron.

In Vietnam, VP-2 flew as the airborne unit of the *Market Time* patrol force, assisting them in keeping track daily of several thousand assorted junks, sampans and commercial vessels, some of them of hostile origin.

On June 19, VP-2's Crew Nine, commanded by LCDR. Jim Calhan, located a suspicious steel-hulled ship far out at sea, photographed it, and reported the vessel to *Market Time* surface units. These units later that same night intercepted and captured it after a fierce fire fight. The vessel was attempting to transport 250 tons of guns and ammunition for the Viet Cong. It was the largest single cache of weapons captured in South Vietnam to that date. The vessel is now on display in Saigon.

Additional operations included flying normal antisubmarine search and reconnaissance missions as a unit of the Seventh Fleet. On a normal nine-hour patrol, VP-2



LCDR. B. D. Johnson, VP-2 PPC, gets hug from son at Whidbey on return from WestPac.

crews would investigate some 100 surface vessels. On such a patrol September 19, Lt. Don Swendsen flew low to investigate a coastal junk and saw a sign on the deck reading, "ingine broken" [sic]. On the plane's next pass, the junk had hoisted on its mast a sign which read, "boat is accident, pliaise save" [sic]. Lt. Swendsen radioed the coastal surveillance center at Vung Tau which dispatched a U.S. minesweeper to rescue some 32 Vietnamese aboard the craft.

Navy's Youngest PPC?

Patrol Squadron Eight claims that it has the youngest P-3 Patrol Plane Commander in the Navy. Ltjg. John H. Corradi qualified as a PPC in April 1966 at the age of

and the modus operandi of the *Orion* in *Market Time* and *Yankee Team* operations were discussed.

Later, VP-28 representatives were given a guided tour of the P-3B production line and a close look at the mockups of the advanced P-3C and Lockheed's SST entry.

VP-30 Hosts RAF Group

This fall 21 RAF officers and men of the Maritime Operational Training Unit (MOTU) visited VP-30 at Patuxent River and VP-30 Detachment at Jacksonville. The two squadrons exchanged ideas on current and future ASW training and compared methods and courses.

MOTU was given a thorough briefing on the functions and methods currently used to train pilots,

with current news after their long voyage from "down under," VP-28 prepared a special package of daily newspapers and magazines to include in the drop container.

The *Taciturn* was easily located on radar about 180 miles south of Oahu. After a radio contact was established, a "low and slow" drop was made about 100 feet forward of the bow. The sailors quickly fished out the container.

After the drop, the skipper of the *Taciturn* thanked the P-3 crew and permitted them to conduct a variety of ASW exercises as the submarine proceeded to Pearl Harbor.

VP-31 Commended

Patrol Squadron 31, the Combat Replacement Patrol Squadron for



LT. DONALD M. Swendsen, assigned to VP-2's Crew 12, is shown at the controls of *Neptune* as he flies track of *Market Time* patrol area.



VP-28's C.O., Cdr. C. L. Von Schrader (right), and selected squadron men are shown P-3B production line at Lockheed's Burbank plant.

23 years, 4 months. He won his Wings of Gold in June 1964 after 20 months in the U.S. Naval Air Training Command.

VP-8, home-based at Patuxent River, Md., is currently on duty at Sangley Point, R.P., in support of the Seventh Fleet.

VP-28 Men Visit Lockheed

A trip through Lockheed's Burbank plant was made by Commander C. L. Von Schrader, Commanding Officer of VP-28, and a selected squadron team, to discuss operation of the P-3 in the squadron's recent seven-month deployment in Southeast Asia. Aircraft maintenance problems, supply in a forward area

navigators and operators of electronic gear. The RAF men also took a demonstration flight in the P-3B *Orion*.

MOTU is currently flying the *Shackleton*, a patrol aircraft which is powered by four engines with counter-rotating propellers.

Good Will Drop

At the request of Commander Submarine Division 11 at Pearl Harbor, VP-28 recently made an airborne delivery of essential equipment to HMS *Taciturn*. The British T-class submarine was en route to Hawaii for an official visit after an extended Australian tour.

To provide the submarine crew

the Pacific Fleet, has been commended for its work in developing a method for air-dropping electronic gear to ships on station.

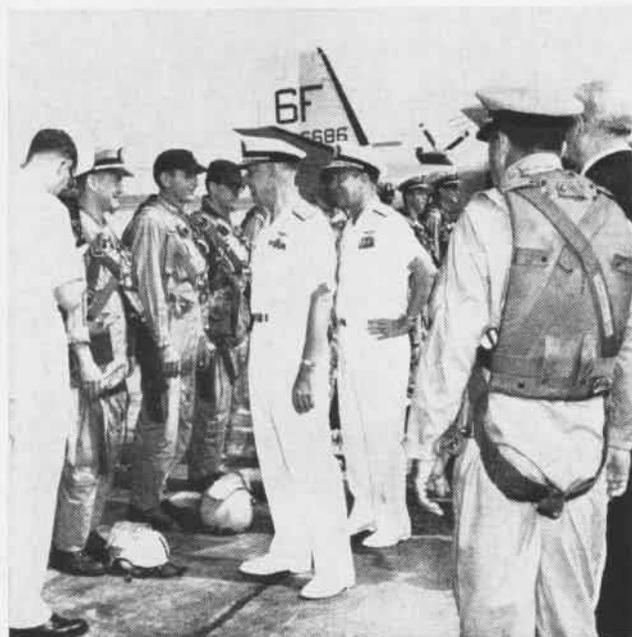
The experimental development of the technique was assigned to the Naval Aerospace Recovery Facility at NAF EL CENTRO which, in turn, called upon Commander George Prassinis, VP-31 C.O., to provide aircraft service.

The C.O. of the El Centro facility wrote a letter of appreciation to Commander Prassinis, praising the professional competence of pilots and crews of both the parent squadron at NAS NORTH ISLAND, flying P-2 aircraft, and the detachment at Moffett Field which flies the P-3.

SELECTED AIR RESERVE



CAPTAIN Richard B. Law, NAA President, presents NAA Safety Trophy to Captain William F. Krantz, C.O. of NAS Twin Cities.



VICE Admiral Alexander S. Heyward, CNATra, and Rear Admiral Fowler meet a crew that participated in training exercise, ResGulfEx.

NAA Trophy to NAS Twin Cities

On September 28, the Naval Air Association (NAA) Safety Trophy for fiscal year 1966 was presented to NAS TWIN CITIES, Minneapolis, Minn. Captain Richard B. Law, NAA President, presented the trophy to Captain William F. Krantz, NAS Commanding Officer.

Three years ago, NAA presented the trophy to CNAResTra for use in the annual safety awards program. NAA is composed of naval officers and enlisted men who are or have been affiliated with Reserve units at NAS NEW YORK.

The trophy is awarded to "the naval air station or naval air reserve training unit which has demonstrated outstanding achievement in aviation safety during the fiscal year." Stations and units are scored on percentage of aircraft hours flown accident-free, annual safety inspection grade and contributions to aviation safety.

To win the award for NAS TWIN CITIES, approximately 40 active duty and 140 Reserve pilots flew

nearly 49,000 accident-free hours in six types of aircraft.

Ten Squadrons in 'ResGulfEx'

An area of 10,800 square miles was the arena for several hundred Air Reservists from ten squadrons who participated in Operation ResGulfEx in September.

From Atlanta, Dallas, Glenview, Olathe, Memphis and Jacksonville, they came to NAS NEW ORLEANS to join forces in the 64-hour exercise.

Displaying highly effective teamwork in the submarine tracking/detecting exercise, the Reservists flew 39 missions for a total of 173 aircraft hours in successful runs on the target, a submarine, USS *Threadfin*. LCdr. E. A. Beaumont was the sub skipper.

Commander David H. Stringfield, NAS NEW ORLEANS, acted as Operations and Plans Officer for the exercise.

Rear Admiral Richard L. Fowler, Chief of Naval Air Reserve Training, sent this message to all hands, "Success of ResGulfEx

noted with pleasure. . . . Please convey my congratulations to flight crews and support personnel for splendid performance."

Following Dad

John A. Cooper, son of Naval Reserve Lieutenant Commander and movie actor Jackie Cooper, was a recent graduate of the four-week accelerated recruit training program at NARTU MEMPHIS.

AA Cooper then reported to NATTC MEMPHIS for a two-week course in aircraft familiarization. He is presently attending a 15-week photo-intelligence school at Lowry AFB, Denver, Colo. His training completed, Cooper will be stationed at NAS LOS ALAMITOS.

Anniversary Events

NAS WILLOW GROVE, Pa., climaxed its 50th Anniversary festivities with an open house and the Annual Military Personnel Inspection by Rear Admiral Richard L. Fowler, CNAResTra. Also in-

cluded in the two-day October event were dedication ceremonies for the new stained glass windows at the station's chapel and a Fiftieth Anniversary Ball. The *Navigators*, Naval Air Training Command Choir, participated in the dedication ceremonies and sang at the ball.

NAS SOUTH WEYMOUTH, Mass., anniversary events included a Golden Anniversary Banquet, an Anniversary Ball, a Naval Air Reserve Day, and a proclamation by the governors of the New England states naming August as Naval Air Reserve Month. Captain John C. Doherty is skipper at South Weymouth.

Observing the Anniversary, NAS LOS ALAMITOS, Calif., held an open house in November. Featured at the two-day event were the *Blue Angels*. Captain James G. Hendrick is the Commanding Officer of the Los Al air station.

Haydon Burns, Governor of Florida, signed a proclamation honoring the Anniversary. Captain Carl D. Simonsen, NARTU JACKSONVILLE'S C.O., was among those witnessing the signing.

Recruiting Aid

A 1967 Chrysler convertible was recently presented to NARTU JACKSONVILLE, Fla., by local members of the Navy League.

Mr. Harold A. Martin, President of the Jacksonville League, presented the car to Captain Carl D. Simonsen, C.O. of the NARTU. The League's Regional President, Peter Kirill, was also present at the ceremony.

The Navy League donates 18 of these cars annually to Naval Air Reserve Stations and Training



PRESIDENT Lyndon B. Johnson was welcomed aboard NAS New York in October by the station's C.O., Captain John E. McQuary, and Mrs. McQuary. The President then greeted station personnel and their dependents.

Units. The cars are used by Naval Air Reserve recruiting teams on their visits to university and college campuses.

Graduation

At NARTU NORFOLK, Va., this year, 57 young men from Virginia, North Carolina and Pennsylvania graduated from Phase I of the Naval Air Reserve summer accelerated training program.

The accelerated program enabled the young Reservists to complete a normal 9 to 11-week course in 42 days.

Captain G. R. Crittenden, NARTU C.O., presided at the graduation ceremonies. After the ceremonies, each graduate received a "man-sized" slice of cake (see photo) and a cup of "Navy" coffee.



CAPTAIN Simonsen accepts Navy League car from Mr. Martin as Mr. Kirill looks on.



AA Oliver F. Jedlick, Virginia Beach, Va., takes a 'healthy bite' of graduation cake.

Retention Trophy

NARTU LAKEHURST, N.J., is the FY 1966 winner of the Richard K. West Retention Trophy.

The trophy is awarded annually to the Naval Air Reserve Training Command activity achieving the highest retention percentage. NARTU LAKEHURST re-enlisted 99.05 percent of its personnel.

The award was presented to the C.O. of the NARTU during the Naval Reserve Association's 13th national conference in Denver in October.

Captain Norman E. Berg, NARTU C.O., said, "To me, it's the most important trophy. It reflects a total 'All Hands' effort."

Three Time Winner

At ceremonies marking the end of the summer accelerated training program at NAS WILLOW GROVE, Pa., Robert P. Courtney, first in a class of 63, was presented three awards for outstanding leadership.

Captain Nelson R. Charles, Commanding Officer of the NAS, presented the American Spirit Honor Medal and a Letter of Commendation to Courtney. The medal, established by the Citizens Committee for the Army, Navy and Air Force, Inc., of New York City, is presented to enlisted personnel who display outstanding qualities of leadership best expressing the American Spirit—honor, initiative, loyalty and high example—while undergoing basic training.

Senior Chief Petty Officer Henry A. Zerby, Jr., President of the station's Chief Petty Officers' Association, presented Courtney the Association's Award for the Honor Student at Willow Grove.



HONOR student Courtney (center) with Captain Charles (right) and Zerby (left).

AT SEA WITH THE CARRIERS



HER FLIGHT DECK CROWDED WITH AIRCRAFT, FDR STEAMS WITH INTREPID IN GULF OF TONKIN OFF VIETNAM

PACIFIC FLEET

INTREPID (CVS-11)

As *Skyraiders* and *Skyhawks* were launched from *Intrepid* on combat missions into Vietnam, CVS-11 crewmen recalled a day in 1804 when the first *Intrepid*, a ketch-rigged fire ship, entered Tripoli harbor to destroy enemy shipping and was blown up, sinking with all 13 crewmen aboard.

The fourth ship to bear the name, today's *Intrepid* is operating in the combat zone off Vietnam as a light attack aircraft carrier.

The *Fighting F's* 100,000th arrested landing was made by Lt. Frederick J. West, VA-95, in an A-4B *Skyhawk*. Another *Intrepid's* pilot, VA-15's LCdr. Peter R. Schoeffel, made a personal landing record when he set an aircraft down on the ship's flight deck for the 500th time.

F. D. ROOSEVELT (CVA-42)

After 34 continuous days of launching strikes against military targets in North Vietnam, FDR's pilots and crewmen got a chance for some "R&R" as the ship left the Gulf of Tonkin for a period in

port. Throughout the CVA, plans were being made for some well-earned liberty—but not before the day's business was finished: A strike was launched against the Ninh Binh military facility.

ORISKANY (CVA-34)

When Ltjg. H. J. Meadows, VF-111, left *Oriskany's* flight deck recently, he was on a most unusual mission. Instead of manning a bomb-laden F-8 *Crusader* for a strike over North Vietnam, he climbed aboard a helicopter loaded with ice cream and cake.

His mission: Deliver the goodies



E-1B TRACER overflies *Oriskany* after returning from mission over North Vietnam.

to the destroyer *USS Frank E. Evans*, whose crewmen rescued the pilot when he was forced to eject from a *Crusader* after it was launched off *Oriskany*.

It may have been classed as a "ransom" by some, but Ltjg. Meadows said he was delighted to make the payoff.

Another *Big O* pilot who made it through a "hairy one" is LCdr. Thomas Tucker, OinC of VFP-63's Det. Golf (see cut). Shot down by ground fire during a photo reconnaissance mission near Haiphong, he was rescued by helicopter from deep within Haiphong Harbor.

LCdr. Tucker heaped praise on his wingman, LCdr. Foster Teague, VF-111, who damaged a menacing North Vietnamese junk, sent five others back to the beach to avoid being hit and silenced a flak site while he was at it. "If it hadn't been for Teague, I would never have been around when the heli-

copter arrived," he said.

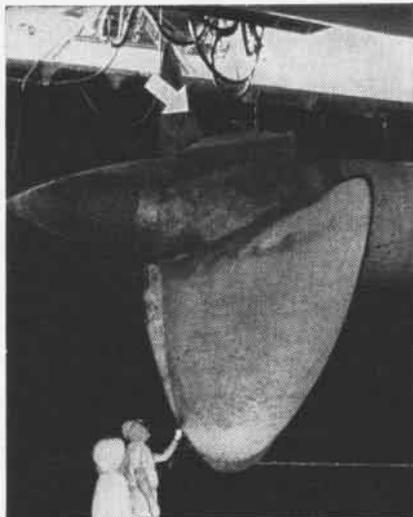
"Crossdeck operations" with a British carrier, the *HMS Victorious*, were conducted by *Oriskany* crewmen while their CVA was bound for a visit to Hong Kong. CVA-34 *Crusaders*, A-4 *Skyhawks* and A-1 *Skyraiders* landed aboard *Victorious* while British *Bucca-*

it, *Big O* crewmen marked their 100th underway replenishment in the Seventh Fleet when they pulled alongside the supply ship *USS Pollux* recently.

Lt. Dick Wyman, VF-162, made *Oriskany's* 113,000th arrested landing in a *Crusader*.

CORAL SEA (CVA-43)

Coral Sea is back on the line. The carrier returned to the



CORAL SEA C.O. inspects propeller after one of the blades broke off (see arrow).

neers, Sea Vixens and *Gannets* landed on the *Big O's* flight deck.

Oriskany crewmen have joined the record-claiming crowd. They say the ordnance they took aboard from the ammunition ship *USS Mt. Katmai*, at a rate of 436.7 tons per hour, beats anything else the Fleet can offer. While they were about



RESCUED from deep within Haiphong Harbor, LCdr. Thomas Tucker is hoisted into helo.

waters off Vietnam for her second combat cruise "with the avowed intention," a report said, "of sustaining her reputation as the 'fighting-est carrier in the Fleet.'"



BOMB-LADEN A-4 Skyhawk assigned to VA-22 aboard *Coral Sea* is lined up on a catapult prior to launch for a combat mission.



REAL tigers are *Intrepid's* catapult and arresting gear teams, who received free coffee mugs from the Humble Oil Refining Co.



HANCOCK pilot Ltjg. P. V. Vampatella describes how he shot down an enemy MIG-17.



CONNIE crewman W. A. Brunelle holds one of 250 children from the Tala Leprosarium.



LOADED with bombs, an F-8 is launched off Tico as the CVA receives more ordnance.

Big words, but perhaps deserved. The ship's first combat tour lasted 331 days—the longest, the claim goes, of any combat ship since WW II—and 160 of those days were logged on the line while ship's pilots flew more than 10,000 combat sorties. If nothing else, many *Coral Sea* crewmen have plenty of experience with the kind of war that's being fought in the skies over Vietnam.

Coral Sea was forced to make a slight detour before she returned to the waters off Vietnam, however, when a blade broke off one of the ships' huge propellers (see cut). This forced a stopover at the Ship Repair Facility (SRF) in Yokosuka, Japan. SRF workmen completed repairs to the ship in only eight days.

CONSTELLATION (CVA-64)

Connie pilots struck at a variety of military targets in Vietnam as their carrier continued to operate in the combat zone. On the receiving end of bomb runs and cannon fire were petroleum-oil-lubricant (POL) storage facilities, North Vietnamese PT boats, bridges, barges, flak sites, trains, trucks and buildings.

Busy as they were, however, *Constellation* crewmen found time to dig into their pockets for donations

to the Tala Leprosarium near Manila, R.P. Credit for mustering support for the leprosarium went to *Connie* crew member BMI William A. Brunelle.

Captain Jerome S. Roth, operations officer on the staff of Commander Carrier Attack Striking Force, Seventh Fleet, recently received one of Navy's highest awards, the Legion of Merit, before he went to other duty. He is now assigned to the staff of CNAResTra at NAS GLENVIEW.

Commander John L. Chambers, C.O. of VF-151, was credited with making *Connie's* 50,000th arrestment in an F-4B *Phantom II*.

BENNINGTON (CVS-20)

Three musical groups and two recording stars kept the party lively when almost 1,000 underprivileged youngsters from the Los Angeles area visited *Big Benn* while the ship was in Long Beach.

ENTERPRISE (CVAN-65)

Enterprise returned to home port, Alameda, Calif., after a week of drills and aircraft operations off the California coast.

The nuclear-powered carrier's Executive Officer, Captain Isham W. Linder, made the *Big E's* 65,000th arrestment in a C-1A *Trader*.



KITTY HAWK, an ammunition ship and an accompanying destroyer steam in close company as they prepare for an ordnance transfer during underway operations in Pacific waters.

IWO JIMA (LPH-2)

Seventh Fleet Marines from the Navy Amphibious Ready Group struck by sea and air at enemy positions just two miles south of the demilitarized zone that separates North and South Vietnam.

The battalion-sized special landing force went ashore in surface craft and helicopters from a six-ship task force, including *Iwo Jima*, that steamed into the objective area from the South China Sea before dawn.

KEARSARGE (CVS-33)

Exercise *Silverskate* became a simulated "hot war" when an exercise submarine "attacked" *Kearsarge* in waters west of Luzon. An ASW exercise, *Silverskate* was conducted by Seventh Fleet units and two ships of the Royal Navy in Philippine waters.

The simulated attack came while the destroyer USS *Cochrane* was alongside *Kay* for refueling. The fuel transfer was broken off immediately and the *Cochrane*, two helicopters and two s-2 *Trackers* were dispatched to conduct simulated attacks on the submarine.

PRINCETON (LPH-5)

Princeton returned to home port, Long Beach, after a combat cruise to WestPac that started February 17, 1966. During the deployment, the ship steamed more than 37,650 miles—most of them in coastal waters off Vietnam.

TICONDEROGA (CVA-14)

Tico and *Bennington* were participants in *Eager Angler*, a First Fleet exercise designed to ready ships for their combat roles in WestPac. Over-all commander of the exercise was Vice Admiral Bernard F. Roeder, ComFirstFlt.

ATLANTIC FLEET

AMERICA (CVA-66)

A team from the Fleet Training Group boarded *America* to observe refresher training of the CVA's crew while the ship operated in Caribbean waters.

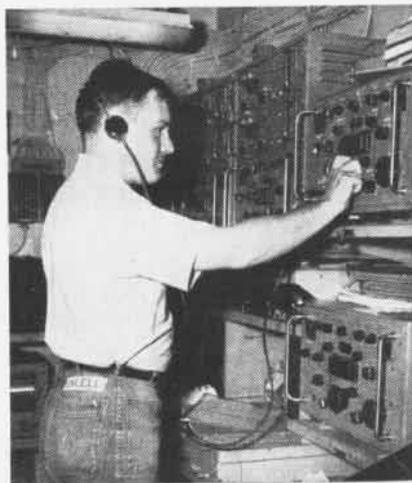
ESSEX (CVS-9)

Essex's 130,000th arrested landing was made by a VS-22 s-2 *Tracker* crew that included Lt. Jerry Goodman, pilot; Ltjg. Joel O. Holmes III, copilot; and aircrewmembers Richard W. Mundell and Robert E. Greer.

FN Lawrence A. Sauve, crewman of the destroyer USS *F. T. Berry*, was recovering from an emergency appendectomy performed aboard *Essex* after he was flown to the CVS in a helicopter piloted by LCdr. Guy D. Nickerson and Ltjg. Thomas E. Rogers, HS-5.

INDEPENDENCE (CVA-62)

Arrestment number 90,000 was logged aboard *Independence* by Marine 1st Lt. Clarence E. Castleberry in an A-4E *Skyhawk*. *Independence* was operating with the Sixth Fleet in the Mediterranean when the landing was made.



BRITISH subject, but American sailor, is AG3 John Excell serving in *Independence*.

The *Independence* crew has taken on an international flavor, thanks to AG3 John Excell, who hails from Britain but who joined the U.S. Navy after he arrived in America some time ago.

LEXINGTON (CVS-16)

LCdr. Robert W. Hepworth, flying *Lexington's* C-1A *Trader*, made his 500th arrested landing aboard the CVS and was honored as one of the *Lex's* "Quintuple Centurions."

RANDOLPH (CVS-15)

Captain William J. Moran relieved Captain William B. Morton as *Randy's* C.O. during shipboard ceremonies at a NS NORFOLK pier.

SHANGRI LA (CVA-38)

Captain Hope Strong, Jr., is *Shang's* new skipper. He relieved Captain A. W. Elliott during a ceremony held while the ship was in home port, Mayport, Fla.

Commander A. J. Nemoff, *Shang's* X.O., made his 1,000th carrier arrested landing aboard the CVA while the ship was operating off Jacksonville, Fla. Commander Nemoff was flying an F-8D *Crusader*.

CVA-38 crewmen celebrated their ship's 22nd "birthday" with an appropriate cake-cutting ceremony while the ship was in port.

With their new skipper at the helm, *Shang* crewmen took their ship out of home port to start her fifth deployment to the Mediterranean. She was scheduled to relieve *Saratoga*.

SARATOGA (CVA-60)

Another new carrier C.O. is Captain Joseph M. Tully, who relieved Captain Harold Lang as *Saratoga's* skipper during a ceremony held while the CVA was anchored off Palma, Mallorca.

WASP (CVS-18)

The Boston-based *Wasp* steamed into the harbor at Halifax, Nova Scotia, to detach two embarked Canadian air squadrons that operated from *Wasp* in ASW exercise.

FORRESTAL (CVA-59)

Some 30 Icelandic political leaders were treated to a tour of *Forrestal* as a stop on a five-day visit to Hampton Roads area naval activities. The tour was sponsored by the U.S. State Department and the U.S. Information Service.

CVA-59 crewmen recently celebrated the 11th anniversary of their ship's commissioning with a cake-cutting party in Norfolk. Special guest was Michael V. Forrestal. The ship bears the name of his late father, James V. Forrestal, first Secretary of Defense.

CLIMATE

WEATHER IS USUALLY CONSIDERED AS A COMBINATION OF ELEMENTS SUCH AS PRESSURE, TEMP, PRECIP, ETC. SPECIFICALLY, WEATHER IS DEFINED AS A MOMENTARY STATE OF THE ATMOSPHERE.



CLIMATE, ON THE OTHER HAND, IS A GENERALIZATION OF THE DAY TO DAY CONDITIONS, NOT JUST THE AVERAGE WEATHER. CLIMATOLOGY IS PRIMARILY CONCERNED WITH THE LONG TERM STATE OF THE ATMOSPHERE.



VARIATIONS OF CLIMATE ARE THE RESULT OF MANY INTERACTING FACTORS: LATITUDE, ELEVATION AND THE DISTRIBUTION OF LAND AND WATER MASSES. ALSO IMPORTANT ARE FEATURES SUCH AS MOUNTAIN BARRIERS, OCEAN CIRCULATIONS AND CURRENTS.



THE SUN IS THE MOST IMPORTANT CONTROL OF CLIMATE. HOWEVER THE AMOUNT OF SUNLIGHT THAT ANY PORTION OF THE EARTH RECEIVES DEPENDS UPON THE ANGLE AT WHICH THE RAYS REACH THE SURFACE.



THE DURATION OF SUN IS SIGNIFICANT IN CLIMATOLOGY. DURING THE WINTER ABOUT 6 HOURS OF SUNLIGHT OCCURS IN THE LATITUDE OF THE U.S.-CANADIAN BORDER DURING THE SUMMER 15 HOURS OF SUNLIGHT IS OBSERVED.



ALTHOUGH THE SUN IS THE MAJOR INFLUENCE ON CLIMATOLOGY, OTHER CONDITIONS ENTER INTO THE VARIATIONS OF CLIMATE. IF THE SUN WERE THE SOLE CONTROL, THEN ALL PLACES ON THE SAME LATITUDE WOULD HAVE THE SAME CLIMATE.



F-8's are to be Modernized Range Extended, BLC Included

Ling-Temco-Vought, under an \$18 million letter contract from the Navy, will modernize and remanufacture F-8D and F-8E *Crusaders* to extend their service life. The contract supplements two earlier contracts totaling \$13,200,000 for materials, engineering, tooling and production of parts for *Crusaders* now active from aircraft carriers in the Vietnam area.

Changes to be made in one or both models of the *Crusader* include installation of new wings,

with provision for carrying fuel tanks to extend range, incorporation of boundary layer control, new landing gear and other features.

Designation of the F-8D's and F-8E's will be changed to F-8H and F-8J once the modernization features are incorporated.

Navy Lithographs Ready Are Available for Official Use

Pictures of Navy air and sea power, reproduced by a fine lithographic process (NANEWS, March 1966, p. 38) proved so popular that an additional 12 have been

selected, making a total of 24 now available upon request. Of the first 12 offered, more than 160,000 have been requested and distributed.

The pictures are suitable for mounting in standard 20x16" frames. All of them are available without charge for official use.

Frames are not provided with the pictures. It is suggested, however, that the local Regional GSA office or depot be contacted, when ordering, as some areas have economical frames available. GSA has alerted all regions to this requirement; the stock number of the standard 20x16" black frame is FSN 7105-053-0170.

Pictures are to be ordered on MILSTRIP format DD 1348 in accordance with the Navy Stock List



ENGLAND, SACRAMENTO & RANGER

of Forms and Publications (Nav-SandA 2002). The pictures are not stocked as a set; each must be ordered on a separate Milstrip.

The 12 new pictures are listed by title and stock number: *USS England, DLG-22, USS Sacramento, AOE-1, USS Ranger, CVA-61* (0619-000-0012); *Navy Vigilante, RA-5C* (0619-000-0013); *USS Rowan, DD-782* (0619-000-0014); *USS Arcadia, AD-23, and Navy Orion, P-3A* (0619-000-0015); *USS Ranger, CVA-61, and USS England, DLG-22* (0619-000-0016); *Navy Phantom, F-4, in Vietnam* (0619-000-0017); *USS Salisbury Sound, AV-13, and Navy Marlin, P-5M* (0619-000-0018); *Navy Skyhawk, A-4, Launching* (0619-000-0019, shown on back cover of this issue of NANEWS); *Vertical Replenishment* (0619-000-0020); *Replenishment at Sea Underway* (0619-000-0021); *USS Osburn, DD-846, Fires ASROC* (0619-000-0022); and *Ocean Minesweepers, MSO* (0619-000-0023).

Editor's Corner

LITTLE MARVEL. Nine-year-old Marion Bynum came to the rescue of the Overhaul and Repair Department at MCAS Cherry Point, N. C., recently.

Reworking an F-4B *Phantom II*, department personnel came up with a real headache when they discovered nobody had arms small enough to get through a 2½-inch access hole so four small bolts could be placed inside the wing to attach a wing hinge assembly. (It was the department's first attempt at this operation.)

What to do?

Enter little Marion's father, an O&R engineer. He volunteered to bring his daughter in to see if she could help. She arrived the same evening and, after a short indoctrination, had the bolts in place and installed the tools needed to tighten them.

Matter of fact, the "world's smallest mechanic" did the job twice. When her "employers" found a smaller set of bolts would be more effective, she was happy to repeat the performance.

An Amphibious Carrier? PacFlt tank landing ships (LST's) have been given so many odd jobs in the Vietnam conflict — ranging

from river gunboat to floating hospital—that hardly anyone in San Diego was surprised to see the USS *Holmes County* come home from a seven-month Far East tour with a Navy F-8 *Crusader* nestled on her main deck.

Seems economy-minded Navy airmen loaded the jet aboard in Hawaii where the LST stopped en route home; the plane was bound for NAS NORTH ISLAND for repairs.

GROUNDED PARACHUTIST. In the Roosevelt Roads Naval Station's *Mira Que Pasa*, the following "twisted fate" story was reported under "Parachute Club News": "Club member Steve Anderson was back in the air after a lengthy stay on the ground due to a motorcycle accident."

If You Owned the Navy? The Newport News Shipyard *Bulletin* is the source for the following "think producer":

A successful man was asked the secret of his success. "It was a small trick I played on myself," he replied. "No matter where I worked,

I pretended I owned the place—lock, stock and barrel."

Now ask yourself this question: If you did indeed "own the business," would you change your work habits? By investing your time and talents on the job every day, you certainly have a big stake in the business.

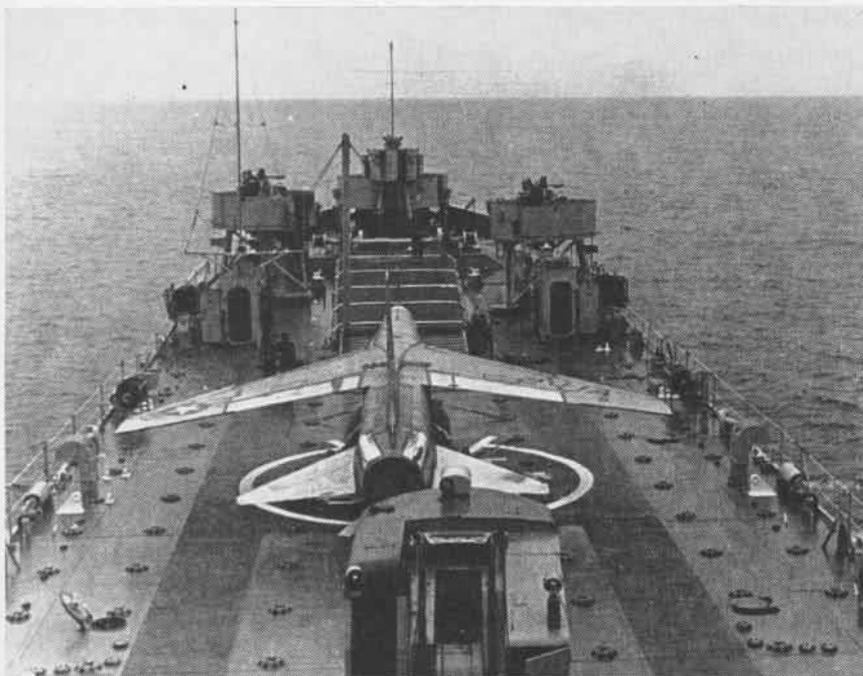
If you owned the business, would you be more courteous to visitors and fellow employees?

Would you be on the job daily, other than when prevented by illness or other valid reason?

On the job, would you make an extra effort to work safely and carefully, exploring every avenue to cut down on waste in time and materials?

If the answer is "yes" to these questions, you have the secret of being a stronger and more valuable employee.

QUICK THINKING. When a pilot assigned to VA-23 was shot in the leg with a 14.5mm shell while he was on a combat mission, he knew he'd have to do something in a hurry—and he did. To stop the flow of blood from his shattered leg, he quickly cinched up the elastic strap on his kneeboard and used it as a tourniquet. His quick thinking, some smelling salts and a helpful wingman were enough to get him and his plane back to his carrier.



LST CREWMEN THOUGHT JATO MIGHT HELP ON THIS SHORT FLIGHT DECK



ENEMY SHELL (ARROW) THWARTED

NANEWS INDEX JAN. TO DEC. INCLUSIVE 1966

Subject	Issue	Page	Subject	Issue	Page	Subject	Issue	Page
A								
Aerial observers (Marine)	Jul	37	Awards			CNO's pilot	Aug	10
Aircraft			Admiral's cup	Oct	13	Coast Guard (50th anniversary)	Aug	6
A-4 (bombs on Vietnam)	Feb	2	<i>Bloodhound</i>	Apr	5	College courses on <i>Constellation</i>	Jun	27
A-4F (flight tests)	Oct	2	Britannia	Nov	17	College juniors and Naval Aviation	Oct	18
A-6			Burke Fleet trophy	Nov	2	Combat readiness, VMF(AW)-332	Apr	27
Tanker pix	Aug	3	CNO safety	Oct	2	Computers		
Trainer	Feb	13	Clark, Sheldon	Oct	3	Aircraft control	Mar	16
A-7A			Coates (nominations)	Jun	28	In 3-M	Apr	21
USAF purchase	May	3	Conway trophy	Oct	3	Maintenance	Mar	6
USAF selection	Mar	3	DAC	Jun	2	Operations research	Mar	12
Accepted	Dec	19	DAR	May	3	U-REST	Jul	27
Bomb loading devices	Jun	24	<i>Dipper</i>	Apr	3	<i>Condor</i> missile	Jun	3
Delivered	Nov	40	Flatley	Nov	17	Control centers		
First anniversary	Nov	17	James, Thurston H.	Sep	2	Automation for New York	Mar	23
First Fleet pilot	Oct	3	Lockheed (maintenance)	Jul	2	FACSFac	Mar	16
Instruction begins	Mar	3	Noel Davis trophies	Dec	19	CTF-72: a unique task force	Apr	14
Maintenance trainer	Sep	12	Readiness through safety	Oct	3	Cunningham, A. C. (Hall of Fame)	Jan	6
Pix (preflight)	Jun	3	Vietnam	Dec	11	CVA (new nuclear-powered)	Apr	2
Preliminary evaluation	Apr	40		Oct	13			
Technicians trained	Oct	37	B-C					
B-1 (North Island)	May	40	Badge for AS's	Nov	38	DCNO (Air) gets new Admiral	Nov	6
B-26 (teaching tool)	Aug	36	Barking Sands (PMR)	Jun	24	<i>Deckhouse II</i>	Oct	7
C-2A (to Fleet)	Dec	3	Bearing shop (NAS North Island)	Aug	26	<i>Deep Freeze</i>		
E-2A			BIM for helicopter blades	Jan	36	'67 commences	Oct	2
SACE facility	Sep	38	<i>Blue Angels</i> (history)	Jun	12	Man flown out	Aug	37
To East Coast	Jul	14	Bombing Derby cancelled	Jun	2	Names	Jan	35
F-4 (trainer for AF)	Sep	37	Bombing (North Vietnam fuel storage)	Sep	10	New quarters (McMurdo)	May	58
F-4J			Bombing range at Jacksonville	Jun	29	New station	Feb	2
First flight	Jul	2	British test pilot school	Jan	8	Parachutists' award	Feb	40
New engine	Oct	40	<i>Bullpup B</i> (test)	Apr	2	Station built in record time	Apr	15
F-4K (Great Britain)	Aug	17	Bush airline in Vietnam	May	16	Defense budget	May	6
F-5B (evaluation)	Jun	40	Camera mount for helicopters	Aug	19	Dengler escape	Nov	18
F-8 (DLC)	Jun	35	Carrier, aircraft			Dependents' cruise	Dec	12
F-111 (500 hours)	Mar	3	<i>Boxer</i> (retrieves test <i>Apollo</i>)	Apr	3	Direct lift control (F-8)	Jun	35
<i>Hercules</i> (rescue)	Jul	13	<i>Constellation</i>			Electrical shops on CVA's	Jun	38
KC-130 (speed record)	Oct	40	College courses	Jun	27	Ely, Eugene B. (Hall of Fame)	Jan	6
N-9 (to museum)	Apr	10	<i>Essa 2</i>	May	33	Enlisted ratings (new)	Jul	16
OV-10A			<i>Coral Sea</i>			FACSFac	Mar	16
Evaluation	Jun	28	Anniversary	Jul	11	Family day on a carrier	Dec	12
New contract	Sep	40	Pictures	Jan	29	Fiftieth anniversary, Reserves	Jul	6
Second model flies	Jan	3	<i>Enterprise</i> (home from Vietnam)	Sep	6	Firefighting, new method	Sep	3
Tests	Jun	28	Floodlighting	Aug	3	Flights against malaria	Mar	23
USAF purchase	Oct	3	<i>Forrestal</i> (overhaul)	Sep	36	Forecasters support the Fleet	Oct	8
P-3 (new support facility)	May	2	<i>Independence</i>			Fuel school	Oct	14
QH-50D (tests)	Sep	13	Jet V/STOL	Sep	19	<i>Gemini</i>		
SH-3D (for Great Britain)	Sep	13	Returns	Feb	18	6 and 7 recoveries	Feb	14
T-2B			<i>Kearsarge</i> (VSF-1 trials)	Feb	29	9, launch and recovery pix	Aug	15
Pix	Jun	40	<i>Lake Champlain</i> (CH-53A tests)	Apr	9	10, pix	Sep	17
Training Command	Mar	2	LPH-11 (keel laid)	May	13	11, pix	Nov	25
Student carquel	Nov	17	<i>Midway</i>			H-L		
TA-4F (delivery)	Jul	3	Home from Vietnam	Jan	13	Hall of Fame (Ely, Cunningham, Read)	Jan	6
U-1B (<i>Otter</i> retires)	Apr	37	Overhaul	Mar	22	Helicopters		
V/STOL			Modern carrier organization			CH-46 (rework program)	Mar	40
Trainer	Oct	37	Air department	May	24	CH-46D (to Fleet)	Dec	2
Various types	Feb	26	Engineering department	Mar	24	CH-53A		
VTOL (research)	Oct	38	Navigation department	Jan	24	Characteristics	May	3
X-22A (tested)	Jun	11	<i>Orikanay</i>			Compatibility evaluation	Apr	9
XC-142A (carrier trials)	Jul	20	Fire	Dec	2	First delivery	Nov	3
XV-6A (carrier trials)	Sep	19	Return	Feb	18	Blade inspection method	Jan	36
Storage (Davis-Monthan)	Feb	29	<i>Randolph</i> (in Germany)	Oct	36	In Vietnam	Apr	20
	Jul	18	<i>Ranger</i>			Nov	20	
Aircrwoman insignia for corpsmen	Nov	40	Losses plankowner	Jan	34	New hoist	Nov	24
Antarctic names	Jan	35	Awards	Dec	3	Pilots		
Antisubmarine warfare			<i>Roosevelt, F. D.</i> (goes to war)	Nov	26	Instrument rating	Nov	38
A-NEW tests	Feb	13	<i>Wasp</i> (<i>Gemini</i> mission)	Feb	14	Training	Sep	2
Air control	Apr	36	Carrier school	Jun	27	<i>Sea King</i> flies again	Mar	38
Mission for dedicated men	Jan	16	Carrier to Saigon—danger ahead	Feb	20	Tacco's	Oct	13
Quarterback, Tacco	Mar	19	Challenge of operations research	Mar	12	UH-1E (add-on contract)	Nov	3
Technicians	Apr	29	<i>Chaparral</i> test-fired	Oct	37	UH-2		
Trainer	Oct	24	Charting by satellite	Jul	26	Rescue net	Jan	3
Westpac	May	18	Chevalier Field closed	Jan	38	<i>Seasprite</i> (twin engine)	Jan	2
<i>Apollo</i> test flight	Apr	3	Christensens, Naval Aviators	May	15	XH-51A (tested)	May	14
Astronauts named (19)	Jun	10	Christmas	Dec	20	Helmets (new)	Mar	14
Automated air control (N. Y.)	Mar	23	Chronology, 1965	Feb	6	History (Reserves)	Dec	40
Aviation ABF school	Oct	14	<i>Cleansweep HIB</i>	May	29	Hurt, Robert M., Cdr.	Aug	10
Aviation Schools Command	Jun	26				Inspection, annual yardstick	Mar	20
Aviation Supply Office	Apr	12				Jet engine repair (Naples)	Jun	23

Subject	Issue	Page	Subject	Issue	Page	Subject	Issue	Page
Jet V/STOL trials	Sep	19	Flying test beds	Oct	22	Readiness trophy	Oct	3
Jet training (advanced)	Apr	6	Weapons wizardry	Sep	22		Dec	11
Life rafts	Apr	17	Naval Aviators in Vietnam	Jun	6	Saigon: logistics problem	Feb	20
Lighting, SATS	Oct	38	Naval Station Roosevelt Roads (pier)	Jun	11	Satellites		
Lithographs	Dec	36	Naval Research, Office of, 20 years	May	3	Charting	Jul	26
M			Navigation (<i>Omega</i>)	Feb	24	<i>Essa III</i>	May	33
McNamara's budget statement	May	6	Nelson Tyler camera mount	Aug	19	4-A (5th year)	Aug	40
Maintenance			NROTC students and Naval Aviation	Oct	18	System for aircraft navigation	Aug	36
Electric power	Jul	36	O-Q			SATS night lighting	Oct	38
Flying test beds (Pax)	Oct	22	Oceanographic office (magazine)	Sep	38	Seaplane tender (new role)	Aug	16
3-M			<i>Omega</i> : global navigation	Feb	24	Sea survival	Oct	23
NAAS Meridian	Jun	20	ONR's vicennial year	May	3	Sea survival rafts	Apr	17
NAS Miramar	Nov	36	Operations			Seventh Fleet		
3-M series			<i>Deckhouse II</i>	Oct	7	Adm. Hyland assumes command	Feb	3
Easiest way to keep 'em flying	Jun	16	<i>Game Warden</i>	Sep	2	Report	Oct	6
Introduction to a new way	Mar	6	<i>Starlight</i> (Vietnam)	Jul	12	Special services	Feb	28
Of computers and key-punch cards	Apr	24	Pacific Missile Range (summary of operations)	Sep	3	Task Force 72	Apr	14
Supply and the system	Dec	23	Patrol plane commander	Oct	26	Shinn, A. M., VAdm. (NASC background)	Nov	7
Supply: key to maintenance success	Aug	11	Pearl Harbor (looking back)	Dec	6	Ships		
Toolboxes (photo spread)	Oct	20	Photography (new camera mount)	Aug	19	<i>Corpus Christi Bay</i> (USNS)	Aug	16
Trainer for the A-7A	Sep	12	Pictures (official Navy)	Dec	36	<i>Duluth</i> (LPD)	Aug	19
Overhaul plants	Jul	40	Pier at Roosevelt Roads	Jun	11	<i>LaSalle</i> (tested for MOL)	Sep	26
Malaria, flights against	Mar	23	Pilot for CNO's	Aug	10	<i>Roarh</i> (named for pilot)	Feb	38
Marines			Pilots, test, class 44	Dec	22	<i>Wichita</i> (supply)	Aug	40
AO's	Jul	37	Power outlets (Miramar)	Jul	36	<i>Skyriders to Skyhawks</i>	Mar	11
In Vietnam	Jan	14	Preliminary evaluation (aircraft)	Nov	37	Squadrons		
	Apr	18	Private flyers, new breed of	Sep	14	HC-1, Det. 29 (in Vietnam)	Nov	3
	Nov	20	Purch story	Dec	15	HS-2 (award)	Aug	19
	Dec	16	Quietest bombing around	Jun	29	HS-9 (<i>Dipper</i> award)	Apr	3
MCAS Cherry Point (PAR)	Mar	40	R			VA-55 (safety)	Oct	40
Memphis flying club	Sep	14	R and R for 7th Fleet sailors	Feb	28	VA-83 (to Cecil Field)	Sep	40
Military airlift command (Navy phase-out)	Jun	3	Range facility established	Jul	3	VA-95 (<i>Skyhawk</i> transition)	Mar	11
Missiles and rockets			Ratings (new aviation)	Jul	16	VAW-12 (gets E-2A)	Jul	14
<i>Bullpup B</i> test	Apr	2	Read, RAdm. A. C. (Hall of Fame)	Jan	6	VC-5 (safety)	Mar	18
<i>Chaparral</i> test-fired	Oct	37	Recovery (USAF method)	Jul	13	VC-6, Det. 1 (target drones)	Jan	37
<i>Clean sweep III</i>	May	29	<i>Regulus</i> (to museum)	Jul	2	VC-7 (safety)	May	13
<i>Condor</i>	Jun	3	<i>Regulus II</i> (last flight)	Feb	40	VF-14 (to Oceana)	Mar	2
DAR-3 tested	May	14	Reorganization			VF-126 (safety)	Jul	12
<i>Finebee</i> , as simulated enemy aircraft	Nov	37	NASC	Nov	7	VF-174 (redesignated VA)	Sep	27
Found at sea	Sep	3	Navy	May	10	VP-17 (Lockheed trophy)	Dec	19
<i>Hydra-Iris</i> , rocket probe	Aug	40	DCNO (Air)	May	12	VP-22	Jul	29
<i>Phoenix</i>			Repair, jet engine (Naples)	Jun	23	Eye bank help	Jul	29
First full test	Nov	3	Rescue (Antarctica)	Aug	37	Tacco	Jun	37
Pix	May	33	Research			VP-44 (safety)	Oct	13
Tested	Oct	40	A-NEW tests	Feb	13	VP-49 (Lockheed trophy)	Dec	19
<i>Regulus</i>	Feb	40	Barricade tested	Sep	37	VP-50 (Vietnam)	May	32
	Jul	2	<i>Clean sweep III</i>	May	29	VR-3		
Mk 46 torpedo	Aug	2	DAR-3 rocket launched	May	14	Safety	Jun	25
MOL			How eye searches	Jul	38	To MAC	May	33
Pilots	Aug	2	Hydra-Iris rocket probe	Aug	40	VR-8 (toolboxes)	Oct	20
Ship tested	Sep	26	India, flight to	Jul	36	VR-21		
Monsoon in Vietnam	Nov	22	MOL amphibious ship tested	Sep	26	Safety record	Nov	3
Multimillion dollar investment	Apr	6	New method of firefighting	Sep	3	Vietnam	Sep	18
N			Patuxent River			VR-24 (move)	Oct	38
NASC: origin, present and future	Nov	7	Flying test beds	Oct	22	VS-28 (<i>Bloodhound</i> award)	Nov	17
Naval Air Engineering Center	Jul	22	Preliminary evaluation	Nov	37	VS-34 (<i>Bloodhound</i> award)	Apr	3
Naval Air Stations			Weapons wizardry	Sep	22	VS-39 (safety)	Mar	22
Crows Landing, ALF	Oct	17	QH-50D (tests)	Sep	13	VSF-1 (trials)	Feb	29
Glyco, NATTC			Satellite navigation system	Aug	36	VT-3 (record)	Aug	36
ASW controllers	Apr	36	SH-3A (tested)	Jun	3	VF-4		
Basic jet navigation	May	13	<i>Skyhook</i> (tests)	Sep	13	Gets T-2B	Nov	2
Lakehurst, NATF (barricade tests)	Sep	37	VTOL	Oct	38	Safety record	Feb	2
Meridian, NAAS			X-22A (tested)	Jun	11	VT-7 (gets T-2B's)	Mar	3
Admiral's cup	Oct	13	XC-142A (carrier trials)	Jul	20	VT-9 (safety)	Dec	22
Five years old	Sep	40	XV-6A (carrier tests)	Sep	19	VT-22 (training)	May	13
Mitamar			Washing system	Jun	25	VT-27 (safety)	Aug	18
Power outlets	Jul	36	Reserves anniversary (First Yale Unit)	Nov	14	VT-28 (safety)	Jul	40
3-M	Nov	36	Reserves (50th anniversary)	Jul	6	VT-29 (safety)	Apr	14
Norfolk (SACE)	Sep	38	S			VW-1 (safety)	Jun	40
North Island			SACE for E-2A	Sep	38	VW-4 (safety)	Jun	24
Bearing shop	Aug	26	Safety			VX-6	Aug	38
Blade inspection	Jan	36	CNO awards	Oct	2	Antarctic names	Jan	35
Rebuilt F-4 for AF	Sep	37	Harnesses for deck personnel	Feb	23	Builds station	Apr	15
Safety	Mar	40	Helmets (new)	Mar	14	Last <i>Otter</i>	Apr	37
Oceana (building program)	Nov	2	Navy record	Jun	2	Squadron and Unit insignia		
Pensacola (new buildings)	Nov	17	New life rafts	Apr	17	HS-2	Sep	C3
Naval Air Technical Services (organization)	Aug	22	S			HS-9	Jun	C3
NATC Patuxent River			NASC awards	Oct	2	HS-11	Mar	C3
Preliminary evaluation	Nov	37	Harnesses for deck personnel	Feb	23	NATC Flight Test Center	Nov	C3
			Helmets (new)	Mar	14	VA-23	Feb	C3
			Navy record	Jun	2	VA-192	Dec	C3
			New life rafts	Apr	17	VA-216	May	C3
						VF-102	Apr	C3
						VF-143	Jul	C3
						VR-1	Jan	C3

Subject	Issue	Page
VP-40	Oct	C3
VX-5	Aug	C3
Squadrons, Marine		
HMH-463 (first CH-53A)	Nov	3
HMM-261 (record)	Jul	12
HTG-30 (established)	Jul	3
VMA-223 (record)	Aug	3
VMA-225 (<i>Bullpup B</i> tested)	Apr	2
VMF(AW)-232 (combat readiness)	Apr	37
VMFA-513 (returns to Cherry Point)	Jan	3
Storage of aircraft	Feb	29
	Jul	18
Survival kit	Nov	38

T

Tacco	Mar	19
In helicopters	Oct	13
"U"	Jun	57
Target drones (VC-6, Det. 1)	Jan	37
Task Force 72	Apr	14
Telemetry station (Puerca Point)	Jul	3
Television (Vietnam)	Jun	24
	Nov	40
Testing new aircraft	Nov	37
Test Pilot School (Empire)	Jan	8
Today's pilots for today's conflict	Jun	6
Three generations of Naval Aviators	May	15
Toolboxes (VR-8)	Oct	20
Torpedo (Mk 46)	Aug	2
Training		
A-7A technicians	Oct	37
Advanced jet	Apr	6
Advanced jet (VT-22)	Aug	18
Antisubmarine air controllers	Apr	36
ASW technicians	Apr	29
ASW trainer	Oct	24
Aviation Schools Command	Jun	26
B-26 as teaching tool	Aug	36
College courses on a carrier	Jun	27
College juniors and Naval Aviation	Oct	18
Fuels school	Oct	14
Helicopter pilots	Sep	2
Jet		
Advanced	Apr	6
Navigation (Glynco)	May	13
PPC	Oct	26
Sea survival	Oct	23
VP-22's Tacco "U"	Jun	37
V/STOL simulator	Oct	37

U-Z

U-REST computer	Jul	27
Unitas VII	Oct	3
Vertical replenishment (<i>Sacramento</i>)	Jun	9
Vietnam		
Airlift (MAC)	May	29
Airlift support	May	16
Airlift to carriers	Sep	18
Aviator escapes (Dengler)	Nov	18
Awards	Mar	2
	Oct	13
Carrier to Saigon	Feb	20
Coastal patrol	May	32
Command, Navy	Jun	2
HC-1 Det 29 (operates helos)	Nov	3
HS-2 (record)	Aug	19
Major fuel storage areas struck	Sep	10
Malaria (flights)	Mar	23
Marines	Jan	14
	Apr	18
	Nov	20
	Dec	16
Northeast monsoon	Nov	22
Operation <i>Game Warden</i>	Sep	2
Pilots	Jun	6
TV aircraft	Jun	24
	Nov	40
Two-year summary (7th Fleet)	Oct	6
VP support facilities	Sep	27
V/STOL (simulator)	Oct	37
Water in fuel, measuring	Apr	38
Wave solos	May	33

Subject	Issue	Page
Weapon wizardry	Sep	22
Weather		
Aids Fleet	Oct	8
Arctic flt ops	Jan	38
Northeast monsoon in Vietnam	Nov	22
Weathergrams		
Atmospheric heating	May	38
Climate	Dec	36
Hurricane research	Sep	38
Noctilucent clouds	Oct	38
Ozone	Nov	38
Project Pocibo	Feb	38
Sun	Apr	38
Thunderstorms	Jun	38
Warm cloud lightning	Jul	38
Washington weather	Aug	38
West Coast has a "big brother"	Mar	16
Yale Unit, First	Nov	14

Army Ordnance at NATC

Mohawk Weapon-Power Tested

U.S. Army has had its ov-1 *Mohawk* under test at NATC PATUXENT RIVER, Md., to determine what types of armament it can safely carry and release.

Originally the *Mohawk* was flight-tested for the Army by the Navy. Since that time, the *Mohawk* has seen extensive service in Southeast Asia. As combat pilots gained experience with the airplane in the new environment, they realized that new and additional weapon capabilities would be required.

The Ordnance Branch of the Weapons Test Division at Patuxent had all the facilities for aircraft ordnance testing, so the Army turned to the center.

The Ordnance Branch test pilots have dropped or fired a wide variety of weapons from the ov-1, different types of high-explosives, fragmentation, smoke and napalm bombs; folding-fin aircraft rockets, such as the 2.75" *Mighty Mouse* and 5.0" *Zuni*; special packages, such as cluster-bomb units, land mines, grenade launchers, leaflet disseminators, machine gun pods and flare dispensers. All these have been loaded and employed on the *Mohawk*.

The Ordnance Branch is carrying out the *Mohawk* projects under the direction of Lt. Bill McGowen.

New Members of C-130 Club

Each has 1,000 Hours in Hercules

The *Hercules* 1000-Hours Flying Club recently added seven members from Naval Air Transport Squadron Three. Member-

ship in the Lockheed-sponsored group signifies that each member has accumulated over 1,000 flight hours in C-130's.

Captain Stanley Montunna, USN, VR-3 Commanding Officer, presented the new members with lapel pins and a certificate of membership at flight line ceremonies conducted at McGuire AFB. Receiving the silver pins were: Commander John Paul Jones, Lt. John F. McKenna, ADJC W. M. Foster, AD2 J. J. Thompson, ADJ1 S. E. Fernanac, Jr., AMH1 S. J. Bakley, Jr., and AD1 N. C. Smith. These new members joined the ranks of over 125 other VR-3 crewmen who are 1,000-hour pin holders.

VR-3, assigned to the U.S. Air Force, is under the operational control of Brigadier General R. J. Barnick's 439th Military Airlift Wing.

New Publication Available

History of Naval Air Reserve

An appropriate climax to the 50th Anniversary of the Naval Air Reserve is the publication this month of its history.

The book covers all facets of the Naval Air Reserve's mission and accomplishments from its early beginnings to its role in Vietnam today. Included are histories of inactive units as well as the 18 NAS/NARTU units in the Naval Air Reserve Training Command.

CNAResTra worked closely with the publishers to insure a factual and complete history.

The book (\$5.50 per copy) is available through the Public Affairs Office at any Naval Air Reserve station or unit or it may be purchased directly from Walsworth Publishing Co., Inc., 1216 Granby Street, Norfolk, Va., 23510.

PHOTO CREDITS

The pictures used to illustrate the feature, "With the Marines in Vietnam" (pp. 16-18), are the work of these men:

Pfc. E. Cole
Pfc. R. G. Cowen
Cpl. Gregg Gillespie
Sgt. Rich Groscost
Cpl. Paul E. Johnson
SSgt. Gene Jones



The 'Golden Dragons' of Attack Squadron 192 received the Chief of Naval Operations Aviation Safety Award for 1966 in the light jet attack category. The award was the culmination of 21 months of accident-free flight operations in the A-4 Skyhawk. During this period the squadron was involved in two combat deployments to the Western Pacific in support of operations in Vietnam. VA-192 flew over 2,518 combat sorties and amassed more than 3,137 day and night carrier landings. Led by Commander Allen E. 'Boot' Hill, VA-192 is currently deployed to WestPac aboard USS Ticonderoga as part of CVW-19. Commander Hill says of the squadron, 'We're a Golden Dragon team from plane captain to maintenance specialist. It is this teamwork that guarantees safe flight and mission accomplishment.'





NAVAL AVIATION

NEWS