

NAVAL AVIATION

NEWS

JULY 1972



NAVAL AVIA

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Rear Admiral William R. McClendon Assistant Deputy Chief of Naval Operations (Air Warfare)



The camera of PH1 T. Milton Putnam, Combat Camera Group, Atlantic Fleet, caught the launching of Nimitz (CVAN-68) at Norfolk, Va. The back cover was taken on the flight line at NARU Washington. VAQ-134, Whidbey Island, is flying the EA-6B Prowler, above.

AVIATION NEWS

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EDITOR'S CORNER

The terms "ship-of-the-line" and "capital ship" seem to have passed from current naval usage except in historical discussions. However, in actual fact, these ships still exist and the current type has been the backbone of American naval power for 30 years.

Today's ship-of-the-line is, of course, the attack aircraft carrier — armed with a mix of modern naval aircraft capable of delivering a far greater striking force than the most powerful battleship ever built and at ranges far beyond the imagination of the most visionary big-gun enthusiast.

Last month the first of a new class of nuclear-powered attack carriers was launched at Newport News, Va. Christened Nimitz, this most powerful sea-going airfield yet produced will be able to take up to 100 tactical aircraft to any point on the earth covered by navigable waters. Its modern aircraft will be capable of ranges that could project American air power over most of the earth's land area. Nuclear-fueled engines will allow it to cruise for years without refueling. It can change its

location at speeds which could place it anywhere within 400,000 square miles in a 12-hour period. The reach of its tactical aircraft would allow its striking potential to increase that area to at least six million square miles.

Though the Navy's attack carriers may not form in line as their sail-powered predecessors once did, placing their wooden hulls, bristling with cannon, between an enemy and the homeland, today's capital ship still performs the same strategic function with a great increase in its overall capabilities.

The carrier continues to carry out the traditional role of controlling the seas over which most of our foreign trade and vital imported raw materials must flow. In addition, the modern attack carrier, with its sophisticated aircraft, is also capable of making its power felt far inland across the globe, an ability which was unimaginable in the days of the gun-armed capital ship. NANews takes a look at the first of the new attack carrier class on page 12 in a report on the launching of Nimitz.





1911

1972

Navy Duo are First Vietnam War Aces

YANKEE STATION — On May 10, two Navy fliers, Lt. Randy Cunningham, pilot, and Ltjg. William Driscoll, RIO, became the first American fliers to qualify as Aces as a result of Vietnam air action.

The two, members of VF-96 operating from USS *Constellation* (CVA-64), downed their third, fourth and fifth enemy MiG's before their F-4J *Phantom II* was hit by an enemy surface-to-air missile just south of Hai-phong. They were quickly rescued and returned to *Connie* by SAR helicopters from USS *Okinawa* (LPH-3).

After the crowd in the ready room had quieted down, the two Aces recalled the day's events. Lt. Cunningham said that they were watching for MiG's while flying a strike over North Vietnam. "The first I knew of the MiG's was when my wingman told me to break port. There were two MiG's shooting at me. I broke toward one, then turned inside him and, as he whizzed by, I reversed and shot him down with a missile."

When Cunningham looked around, he saw another MiG firing at the plane which carried his executive officer. "I called for the X.O. to break, and squeezed off another missile."

That could have been enough excitement for the day, but as Cunningham started to leave the area, he met still another MiG coming straight at him.

"He could have gotten away, but he was 'a plumber — and I fired another missile and the third MiG went down."

Describing the three MiG's, Ltjg. Driscoll recalls, "one was a ball of fire, the others just had their tails knocked off and dove out of sight."

They were now running out of missiles. Worse yet, there was still numerous MiG's in the air. Lt. Cunningham turned his F-4 toward the water and the carrier deck 100 miles at sea. Then seeing another MiG, he started to move toward it.

Here teamwork paid off. Lt. Matt Connelly called by radio to warn of two more MiG's approaching. Cun-

ingham took Connelly's advice and went to full power to escape the enemy. He was still over the beach when he was hit by the SAM.

Struck in the tail, the aircraft began to spin. Cunningham fought to hold it, to nurse it out over the water. Then, as Cunningham described it, "The F-4 started jerking and the nose began to pitch. I said, 'Willie, let's get out of here.'" Driscoll answered, "We're both going when I pull it."

Other aircraft from CVW-9 remained overhead to protect the descending fliers and to direct the rescue effort.

In addition to becoming the first Vietnam Aces, the two are the first Team of Aces, the first to score a triple kill over Vietnam and the first U.S. all-missile Aces. The Aces had downed their first and second MiG's on January 19 and May 8.

On the same day, other Navy pilots downed an additional four MiG's and Air Force fliers downed three MiG's to bring the day's total kill to ten.



Lt. Cunningham (L) and Ltjg. Driscoll relax in VF-96 ready room aboard *Constellation*. Still relaxed, right, they pose with SecNav John W. Warner and CNO Adm. E. R. Zumwalt in Washington, D.C.



Marine Pilot Rescued in Laos

SAIGON, RVN — "All the man needed was a shave. He had gone four days with no food, but looked great," was the observation of an Air Force 40th Air Rescue Squadron HH-53 crew when they rescued Major Clyde D. Smith, USMC, from the lower panhandle in Laos.

"When we lowered the penetrator some distance away because of heavy foliage, the major came busting through the woods like a fullback, grabbed the penetrator and hooked it to his parachute harness."

Maj. Smith, an A-6 *Intruder* pilot with VMA(AW)-224 aboard USS *Coral Sea*, was downed April 9 near the South Vietnam border while on an interdiction mission over the Ho Chi Minh Trail in Laos. His bombardier-navigator is listed as missing in action.

"I felt it was an outstanding rescue effort with all branches of the service taking part. I was especially proud of the A-1 *Skyraider* pilot and how he coordinated the effort," Maj. Smith said. Commanding the rescue and flying the A-1 was Maj. James C. Harding, USAF.

Two Navy A-4 *Skyhawks* of USS *Hancock's* VA-55 were also instrumental in the SAR effort.

While flying the SAR, Lieutenants

Ken Bray and Tom Latendresse each fired a missile at a SAM site in the lower Laotian panhandle with unknown results. "Whether we got them is not important," Lt. Latendresse stated. "We suppressed the enemy radar and a successful pickup was made."

According to Maj. Smith, he spent his first night well hidden in the forest and "lying awake listening to strange noises. One of the weirdest was made by a bird that sounded just like a clicking gun hammer."

During the second day, he saw the enemy walking by "quite casually — they didn't seem too interested in finding me," he related. He had no food and the only water he had was that which he was able to catch when it rained.

The major admitted he began to worry after the first day when he wasn't picked up, "but when I saw the tremendous rescue effort each day, I felt quite humble watching it all."

Coast Guard Changes

WASHINGTON, D.C. — In response to the Presidential Cost Reduction Program, the Coast Guard has announced the closing of its air stations on Guam and at Naples, Italy, by

June 30, 1972. Billets will be reduced at CGAS Miami, phasing out the Florida Straits Patrol.

Billets have been added for a new program using the HU-16 *Albatross* as a law enforcement aircraft. Two HU-16's went to Cape Cod and one each to Miami, Corpus Christi, Traverse City and San Francisco.

Very Well Done

WASHINGTON, D.C.—In a recent message to the men who served in HAL-3 and VAL-4, the Chief of Naval Operations, Admiral Elmo R. Zumwalt, Jr., praised the two squadrons for the "magnificent contribution they made to the war in the Republic of Vietnam.

"The impressive accumulation of individual and unit awards along with the enemy's desire to avoid contact where your precise and discriminate air power could be brought to bear is further testimony of your combat effectiveness.

"Having served as your commander, I have close personal knowledge of your professionalism and devotion to duty. To all *Seawolves* and *Black Ponies*, past and present, my most sincere well done and personal congratulations."

Vice Admiral Maurice F. Weisner, DCNO (Air Warfare) added his own "well done," stating that "As the only two commissioned Navy air units living and fighting in-country, you have added a new and major chapter to the history of Naval Aviation."

HAL-3 and VAL-4, flying *Hueys* and *Broncos*, respectively, were recently disestablished.

New Night Trainer

LEMOORE, Calif. — The latest addition to the sophisticated pilot training devices at the naval air station is the Night Carrier Landing Trainer (NCLT) which will provide fleet pilots with night carrier landing experience without ever getting off the ground. The NCLT was placed in operation in May when Rear Admiral H. S. Matthews, Director of Aviation Training Devices, presided over a ribbon-cutting ceremony. Built by Vought Aeronautics, the new trainer is the first of its kind in the world.

The NCLT uses the systems in the



A floating device of plastic-coated nylon, eight inches in diameter, is maneuvered into place around USS *Oriskany* (CVA-34) during tests at NAS North Island. Manufactured in sections that can be joined to surround any size ship, an 18-inch curtain, counterweighted by 1/4-inch chain, extends below the surface to keep spilled oil from sliding underneath. In choppy water, additional rings can be placed outside of the original ring to catch any oil overflow.

A-7 and will be used to train *Corsair II* pilots based at Lemoore. A second trainer has been purchased for installation at NAS Cecil Field, Fla., where Atlantic Fleet A-7 pilots are based.

Over 400 Naval Aviators from Lemoore-based VA's 122 and 125 and East Coast squadrons participated in the evaluation studies at Vought's Dallas plant.

Night carrier landing practice previously required actual night flying and the use of an airfield with special lighting to simulate a carrier deck followed by actual shipboard night landings.

Record for VT-1

PENSACOLA, Fla.—Flight 13 of VT-1 recently counted its 150,000th accident-free hour. The safety milestone was recorded by Lt. Steve Dreiling and his student, Ens. John Foster. The aircraft was met on the flight line by VT-1's C.O., Commander Claude

C. Vernam, and Flight 13's flight leader, LCdr. Henry Ford.

Lt. Ron Wilsback, safety officer, commended the maintenance department for keeping the aircraft in condition.

Medical Meeting

PENSACOLA, Fla.—Navy and civilian psychologists from the Naval Aerospace Medical Institute and the Naval Aerospace Medical Research Laboratory recently participated in the 18th annual meeting of the Southeastern Psychological Association in Atlanta, Ga.

Presiding over a symposium entitled "Research in Naval Aviation Psychology" were Commander Thomas J. Gallagher and Miss Rosalie Ambler from the Naval Aerospace Medical Research Laboratory. During the symposium, an overview of the activities and opportunities available in

Naval Aviation psychology was presented by Cdr. Gallagher. Miss Ambler described the development and current status of a brief disorientation test which was specifically designed to identify flight students who will be too prone to motion sickness to complete flight training.

Lt. William F. Moroney presented two papers concerned with techniques for using anthropometric (measuring the body to determine differences in individuals, groups, etc.) data for improving cockpit design and for developing assignability codes to aviators to aid in placing the right pilot in the right aircraft. Lt. Moroney described some of the more adventurous activities undertaken by other Navy aerospace experimental psychologists. This included an onboard assessment of human performance during hurricane penetration in three types of aircraft and the assessment of human factors engineering deficiencies during carrier flight operations.

Coming in on Some Wing With Some Care

PATUXENT RIVER, Md.—Flying a P-3B *Orion* from an island in the middle of the Pacific to the West Coast under normal flying conditions could be considered a routine task. But when more than eight feet of the port wing is missing, it's another story. This was the circumstance under which a team from the Naval Air Test Center ferried a crippled *Orion* from Midway Island to NAS Alameda.

The aircraft, damaged earlier in a midair collision with a Coast Guard C-130, was flown 3,300 miles by a team led by LCdr. Norm Roy. The

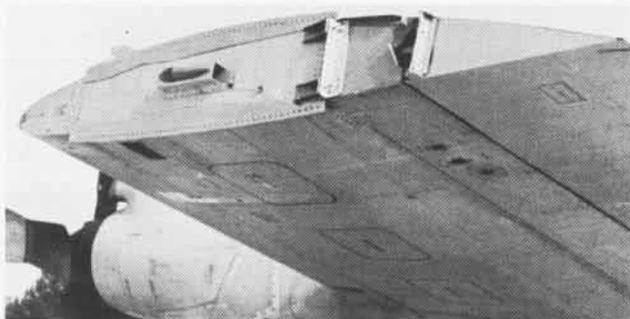
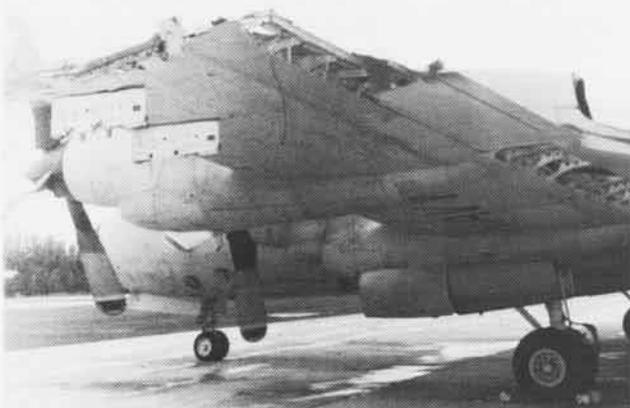
crew included LCdr. M. H. Manahan, copilot; Lt. R. C. Asbell, navigator; and ADJC K. D. Frontz and AE1 W. D. Powell, flight engineers.

Before the crew arrived at Midway, a field team from the Naval Air Rework Facility, Alameda spent six weeks repairing the damaged aircraft. Work included extensive structural inspection, capping the end of the wing with a reinforced plate and reconstructing an aileron. Several flights were flown to test the P-3's airworthiness. Since the P-3's main fuel load is carried in the wing, an effective effort

was made to save the port fuel cell.

As the crew took off from Midway, a smoke removal door popped open at 100 knots, aborting the first run. Inspection revealed no mechanical failure with the door and a second takeoff attempt was successful.

To maintain level flight, considerable rudder had to be applied and aileron controls were held in a position normally causing a 30-degree right bank. The first stop was at NAS Barbers Point, Hawaii, where another structural inspection was conducted. Then it was on to Alameda.



These photographs are before and after shots of the same P-3B. The *Orion* lost eight feet of wing and damaged a vertical stabilizer in a midair collision. Wing was capped for the flight home.



GRAMPAW PETTIBONE

Splashdown

Under clear skies with visibility over 15 miles, winds 070 degrees at five knots, the patrol plane commander and his copilot—lieutenants with 800 and 500 hours, respectively, in type—and a crew of 14 manned their P-3A *Orion* for a 12-hour mission.

It was planned to use water-alcohol injection on the engines for thrust augmentation during takeoff, and the system was turned on during completion of the takeoff checklist. The engines operated normally during start, taxi and takeoff roll.

Airborne, the pilot began a left turn, and in seconds a loud surging sound was heard from the engines, accompanied by indications of over-temperatures on all four engines.

The flight engineer retarded the power levers but turbine inlet temperatures remained the same. Almost immediately there was a series of explosions—from the right side of the aircraft.

The flight-engineer-under-training, who was standing behind the flight engineer, called out a power loss on number three engine. (The flight engineer also noted the loss.) The pilot ordered number three feathered and the flight engineer complied, at the same time reporting RPM on number two engine at 66 percent.

The *Orion* wasn't responding to the controls and this combined with the off flags indicated a total electrical failure. While the aircraft continued to turn left, the pilot ordered number three engine restarted—no luck, no electrical power. Estimated maximum speed by this time, was 140 KIAS.

The P-3 began settling toward a ridge and the pilot applied maximum available power and raised the nose in an attempt to clear the ridge; he did—by a mere 100 feet.

As the aircraft continued its left turn, descending, the plane commander, realizing the flight would have to be aborted, leveled the wings and gave orders to ditch.



The descent continued at an estimated 200 to 300 feet per minute and seconds before impact the pilot rang the command ditching bell (battery operated) to warn the crew.

The aircraft hit the water, wings level, slightly nose high, approximately 1,000 yards from the approach end of the runway. It stayed partially

afloat about five minutes. Then it sank.

Fifteen crew members left the aircraft; one was fatally injured upon impact.



Grampaw Pettibone says:

Sufferin' catfish! I don't believe it! This one really has my dander up! Know why the engines failed? The water injection system had been serviced with a mixture of water injection and dry cleaning fluids. Ain't that grand!

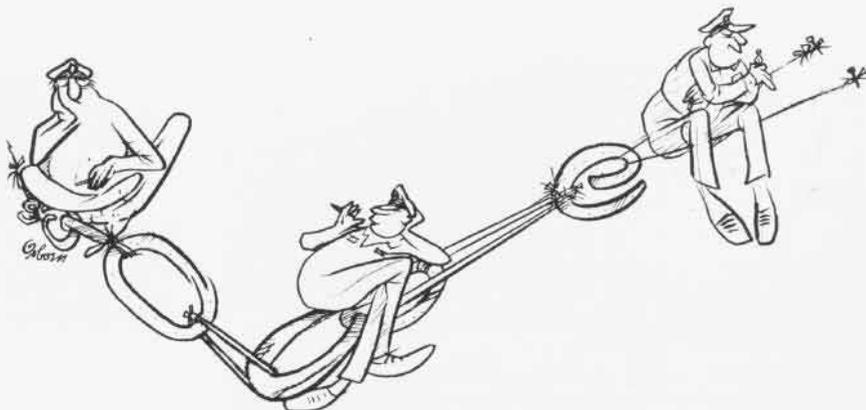
Over the years, I've been criticized for being "too tough on the supervision angle of an accident." You're danged right, I am!

Look at the circumstances of this fiasco: Drums of dry cleaning fluid delivered instead of the alcohol ordered. Signed for by a supply petty officer who didn't check. Placed in a dark area where alcohol is normally stored, again without checking. Later used to service the aircraft — you're right — without checking.

Who ya goin' to blame? The lad who serviced the aircraft? Horsefeathers.

This costly accident involved so many supervisors — it's pathetic. The supply activity which sent the wrong merchandise, the squadron supply officer who accepted the wrong merchandise without checking, and the line supervisor who didn't check — and more. There were just too many places that this "chain" could'a been broken.

Look what all that "not checkin" cost — a life and an aircraft.



On Losing Your Tail

Two lieutenant commanders, both with considerable experience in the SH-3A, were returning from a cross-country flight in their *Sea King* with two crew members and one passenger.

A night flight was planned from NAS South Coast to NAS North Coast with a scheduled en route refueling stop. The first leg of the flight was uneventful with clear skies and generally unlimited visibility. The SH-3A landed at the en route stop and, following refueling and a weather check, made an uneventful departure. As they flew on an approved VFR flight plan, everything proceeded as planned until the helicopter was approximately 13 miles southwest of NAS North Coast.

While the *Sea King* was cruising at 1,500 feet in straight and level flight on a heading of 050 degrees at 110 KIAS, a loud bang was heard. Immediately, the helo began a violent yaw to the right and a 60 to 70 degree roll to the left. Both pilots were on the controls in an attempt to stabilize the helicopter. Right cyclic and full left rudder were applied and autorotation was achieved by reducing the collective pitch lever. Lateral control was regained but the cyclic control became sluggish and the *Sea King* began pitching between extreme nose-high and nose-low attitudes.

The aircraft continued to swerve to the right, although not as violently as before and, with continued nose oscillations, it descended into the trees.

The two crew members and the passenger sustained minor injuries but the pilots were uninjured. With a flashlight, they inspected the helo and found that the entire tail pylon section, from the hinge fold point aft, was missing. It was later found one-third of a mile from the point of impact.



Grampaw Pettibone says:

Egads! Pretty hairy!?! But these aviators behaved like real pros, staying cool and fightin' their flyin' machine all the way to the ground. Reminds me of a duck, "calm and cool on the surface but paddling like fury underneath."

Investigation showed structural failure of the tail pylon section and loss of all directional control. The section had separated from the aircraft in flight "due to progressive fatigue type

fractures in both hinge fitting assemblies on the left side of the fuselage."

In other words, the dang tail fell off 'cause somebody dropped the ball!

It really frosts me that we almost lost this crew because of one individual at the overhaul activity who didn't do his job.

You better believe the situation has been corrected.

Mangling Recipe

During morning launch operations, an F-4B was spotted aft on the port side of the flight deck for turn up and back up aircraft, but was not launched.

After the launch was completed, a flight deck petty officer spotted the *Phantom* on the aft edge of the #4 elevator, clear of the landing area, but with the empennage and extreme tip of the right side of the stabilator extending over the flight deck approximately four feet and six and one-half feet, respectively. Its nose was pointed approximately 30 degrees right of the straight deck axis of the ship.

Another F-4B was parked forward on the elevator, but the elevator operator was able to call in the "split" spot to flight deck control. A few minutes later he was relieved—but he didn't brief his relief on the unusual spot.

During recovery operations the aircraft handling officer decided to lower the elevator to facilitate flight deck respot for the next launch. After scanning the spot board, he directed that elevator four be lowered.

The spot board operator passed this information to the topside elevator operator—without any comment about the unusual spot.

The flight deck director, who had limited flight deck experience, was standing on elevator number three directly across from elevator four when he received the order to lower #4—again without any comment about that F-4B.

After the last aircraft trapped, the flight deck director gave the #3 oper-



ator the signal to raise the stanchions. Then, as he started across the deck, he gave the signal to lower #4. As #4 went down, he realized that the *Phantom* wouldn't clear the deck edge and signaled an emergency stop. The elevator had traveled 12 to 15 feet.

The empennage and both sides of the horizontal stabilator struck the flight deck edge, a guard rail stanchion piercing the empennage. The aircraft was suspended on its nose gear, left main mount and empennage, with the right main gear well clear of the elevator deck. (Five tie-down chains held, but one parted.)

Elevator four was hand-cranked back to flight deck level but the aircraft had already been substantially damaged.



Grampaw Pettibone says:

Holy Hannah! Looks like a well thought out, well planned conspiracy to mutilate a flyin' machine—and it worked!

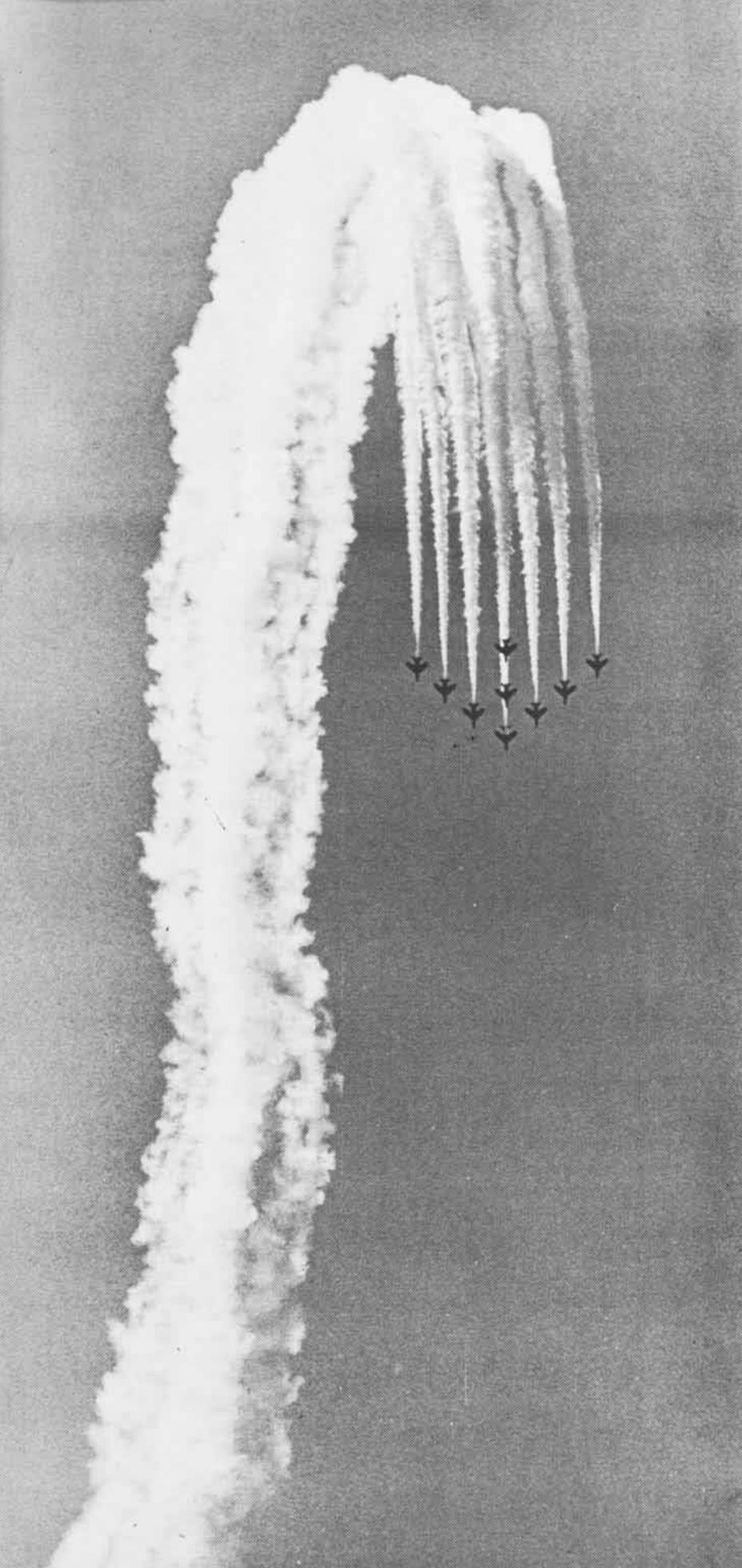
The recipe for this accident needs the followin' fixin's:

- 3 — Did not comply with existing instructions
- 1 — Failed to inform
- 1 — Failed to check

Mix with any combination of flight deck control spot board operator, topside elevator operator, topside director, aircraft handling officer, and, of course, any available flyin' machine.

If any one of the people involved had "complied, informed or checked," the whole mess wouldna' happn'd.

Sound like an old story? Won't we ever learn?



TRANSPO AIRSHOW

NAVAL AVIATION NEWS

Story by Michael McDonell
Photos by JOC Dick Benjamin

If it crawled, floated, rolled, glided or flew, it had to be there, somewhere. Sprawled over 300 acres of Northern Virginia, the first U.S. International Transportation Exposition had it all. The only thing that the viewer needed was the price of admission, lots of time and the legs and stamina of a long distance runner.

Housed in four mammoth pavilions or under sunny skies, foreign and domestic exhibitors showed and demonstrated their transportation products.

The public watched the demonstrations, rode the "people movers" along tracks or slung underneath elevated rails; ate the food, listened to the marching bands, basked in the sunshine and waited for the feature event—the air show. Boeing's brown and yellow prototype 707, the *Dash 80*, was brought before the crowd for presentation to the Smithsonian Institution.

Time yet? Not yet.

Some *Blue Angels* and *Thunderbirds* were seen lunching on submarine sandwiches behind a red and white striped pavilion.

Above the pavilion a Royal Canadian Air Force *Caribou* circled lazily and dropped two yellow streamers to test the wind. Minutes later, 27 figures hurtled from the aircraft and plummeted towards the open-mouthed crowd. Chutes opened overhead, bodies floated underneath and they landed throughout the area.

The trained ear caught a familiar sound before the tinny voice could announce the arrival of the Confederate Air Force's *Ghost Squadron*. Sweeping in from the south at treetop level, the drone of their reciprocating engines preceded *Flying Fortress*, *Liberator*, *Hudson*, B-25, and A-26.

The Navy's SBD, TBM, SB2C, F4F and FG (F4U) flashed in front of the crowd, followed like a pack of terriers by P-63, P-40, P-51, P-47 and two P-38's.

Following the fly-by, flares and fireworks heralded the beginning of the air show. To the south, a thunderous



RAF Red Arrows, opposite page, descend toward the crowd in their first North American performance. Above, two Blue Angels in a close pass and, below, an F-14 is inspected.





Clockwise, starting above, are some airshow shots: on the line, Phantom Blue tails; Blue Angels ascend in diamond formation; Confederate Air Force SB2C, SBD and TBM fly by; the Red Arrows do the same; Phantom Blue noses; and the gateway to the first U.S. Transportation Exposition, 1972.

roar and smoke from 12 J-79 engines issued from the turn-up areas as the Navy's Flight Demonstration Team, the *Blue Angels*, began their roll-out in front of the crowd. Held to a 15-minute time limit, the *Blues* still managed to perform an outstanding show, causing the audience to remain on its feet the entire time with a series of rolls, loops, knife-edge passes and *fleur-de-lis* breakups in their F-4J *Phantoms*. It was like feeding an hors d'oeuvre to a hungry man.

As the team taxied away, whistling wind over long wings caused the crowd to again squint against the glare of the sun. Former WW II Marine Aviator Scotty McCray in his 2-22 Schweizer sailplane commanded its attention as he cut loose from the *Citabria* towplane at 3,000 feet. The

performance was brief but impressive. As he descended, he threw the frail appearing glider into a four-point hesitation roll, followed by an eight-point hesitation roll, an outside loop, a reverse Cuban eight and then, wings wagging, landed in front of the audience.

The Army followed with its newly formed helicopter demonstration team. Complete with smoke flares and banners, the ten OH-6 and OH-58 helicopters, dubbed the *Silver Eagles*, added a rotary winged dimension to aerobatics.

Fixed wing jet aircraft then took the stage again as the Royal Air Force's *Red Arrows* streaked in front of the crowd in their maiden debut on this continent. Flying bright red Hawker Siddeley *Gnats*, the nine-man formation had the audience "ooohing and ahhing" with an exhibition of superb close formation flying that included a breath-taking five-abreast roll.

Bob Hoover followed the Britons' excellent show with one of his own. In a bright yellow P-51 *Mustang*, this outstanding pilot, a graduate of the



Navy and Air Force test pilot schools, took his aircraft through a rapid succession of maneuvers.

The *Mustang* snapped into a four-point roll. A series of slow rolls in a 45-degree descent followed, then a Cuban eight into the treetops. Side-slipping down the runway, Hoover went from wheel to wheel, pulled the aircraft up, went into a dirty roll and then landed his aircraft on one wheel.

There was no letup, even after this performance. A *Stearman* was next on deck and standing erect on the top wing was the pilot's wife. *The Flying Pierces* took off, wife waving to the crowd, and looped and rolled for seven minutes.

The Aerobatic Club of America's world champion *Red Devils* followed in three *Pitt Specials* and in winning form. All of their maneuvers were perfect and they finished head-on with a two-plane, split-second, chicken-roll pass that staggered the onlookers with what appeared to be the end of two fine aviators.

The Air Force performed the finale as the red, white and blue *Thunder-*



birds took five F-4E *Phantoms* through their intricate paces.

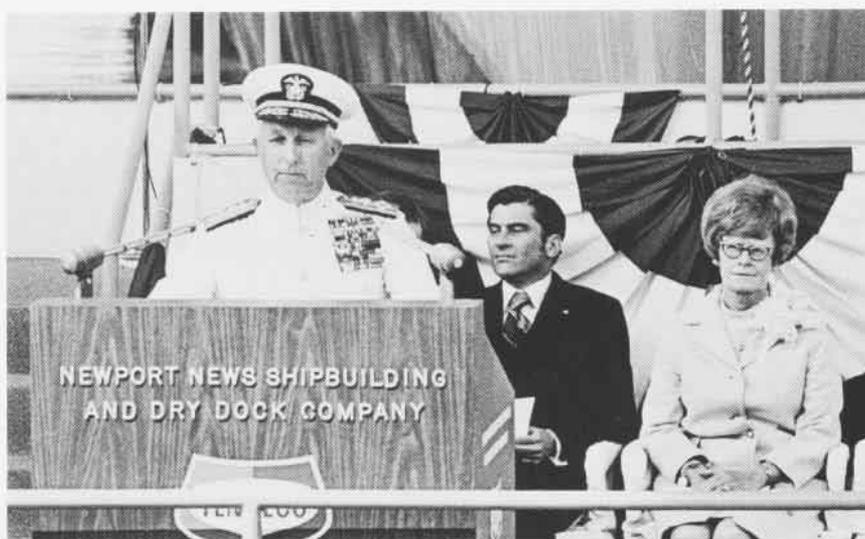
This is the way it went on preview day. There were variations on the other nine days of Transpo 72, but the thrills and excitement remained the same.

As the crowd dispersed to view more earthbound exhibitions, we asked a gangly, grey-bearded staffer what he thought of the show and how the service teams stacked up against each other. Staring down at us through wire-rimmed spectacles, the Sage tugged the brim of his ball cap and intoned, "The show was outstanding. Them civilians can fly real fine. As for the second question, if you seen 'em all, you seen somethin'! Purty colors 'n real fine flyin'. I got some preferences 'n you got eyes. Nuf said!"





Shipyards workmen ready Nimitz for launch, above. Adm. Moorer addresses crowd, below. To his left is SecNav Warner and Mrs. Lay. Nimitz is floated from its building dock, opposite.



Story by JOC Dick Benjamin

Photos by PH1 T. Milton Putnam

Another milestone in Naval Aviation was passed May 13 when the nuclear-powered aircraft carrier *Nimitz* (CVAN-68) was launched at the Newport News Shipbuilding and Dry Dock Company, Va.

The ship was christened by Catherine Nimitz Lay, the eldest daughter of the late Fleet Admiral Chester W. Nimitz, in a ceremony attended by the Honorable John W. Warner, Secretary of the Navy; Admiral Thomas H. Moorer, Chairman, Joint Chiefs of Staff; Vice Admiral H. G. Rickover, Director, Naval Nuclear Propulsion Program; Congressman George H. Mahon, Chairman of the House Appropriations Committee; and other dignitaries.

Because of the ship's immense proportions, launching was accomplished by floating the carrier from the building dock where its keel assembly was laid in June 1968.

When she is commissioned next year, *Nimitz* will be the largest warship in the world, with a combat load displacement of 95,000 tons. Two other carriers of the *Nimitz* class being built or planned are *Dwight D. Eisenhower* (CVAN-69) and the yet unnamed CVN-70.

Admirals Moorer, Rickover and Elmo R. Zumwalt, Jr., Chief of Naval Operations, various officials in the Department of Defense and members of Congress have all stressed the importance of nuclear carriers.

Adm. Moorer has stated:

"For all levels of military action other than all-out nuclear war . . . the attack carrier is the primary striking force of our Navy. It provides the offensive power necessary to assure free use of the seas and the air over the seas in support of our national objectives.

"The Navy's carrier force must have a regular input of new ships, both to upgrade the capability of the force through the infusion of modern technology, and to replace older ships. . . . The improved capabilities of the *Nimitz*-class carriers would become even more vital if the Navy were required to operate a smaller carrier force, since the smaller the force, the

more important it would become for each carrier to have the most capability achievable.

"The United States — a maritime nation — cannot maintain its position as a first rank world power if it does not possess the capability to maintain free use of the seas."

Senator John C. Stennis, Chairman of the Senate Armed Services Committee, said:

"Personally, I believe the greatest single deterrent force we have day after day around the world is the proper presence of these carriers [nuclear-powered] at key points in key areas of the world."

A staunch advocate of an all-nuclear task force, VAdm. Rickover has stated that when a nuclear carrier is substituted for a conventional carrier the range of a carrier task group with four conventional escorts is doubled. When two of the escorts with the nuclear carrier are also nuclear, the range of the carrier task group is doubled again. When all four escorts with the nuclear carrier are nuclear, the range of the carrier task group is essentially unlimited.

Congressman Mahon and his House Appropriations Committee have clearly expressed their philosophy in support of nuclear-powered warships: "In building for the Navy of the future the national security planners of

this country must bear in mind the increasing threat of so-called limited wars to the security of this country and of the free world. Unless the Navy . . . is provided with the proper forces to successfully meet these responsibilities, the national security of this country will be jeopardized."

The high speed endurance made possible by nuclear power results in several major improvements in offensive capabilities of surface warships. These improvements include:

Greater attack effectiveness due to: increased mobility and freedom of independent action, ability to transit at high speed and arrive in attack position earlier — ready to conduct immediate operation without refueling, ability to be on an attack station a higher percentage of the time, and freedom to extend attack to larger areas;

Reduced vulnerability due to freedom from dependence upon replenishment in combat areas, and ability to avoid submarine attack by transiting at high speed and using evasive transit routes;

Significantly reduced need for sea and land-based logistic support forces;

Increased propulsion plant reliability due to the high standards required in design and construction of a nuclear propulsion plant.

Each *Nimitz*-class carrier will have

substantially better military characteristics than the latest conventionally-powered carrier. Two nuclear reactors, which produce as much power as the eight aboard *Enterprise*, will propel the ships for 13 years of normal carrier operations. The flight deck on the 1,092-foot *Nimitz* covers an area of about four and one-half acres. It will carry 50 percent more aircraft ammunition and over 70 percent more aviation and escort fuel; this, combined with the unlimited high speed endurance provided by nuclear power, will greatly increase its capability for sustained combat operations.

The massive *Nimitz*-class carrier has accommodations for almost 6,300 ship and air wing personnel. It has four aircraft elevators and four longer catapults with greater energy capability and exerting less strain on aircraft than those fitted on *Kitty Hawk*-class carriers. Improved design features are incorporated in the areas of command and control, intelligence processing, ammunition handling, aircraft catapulting, fire fighting and damage control.

With its air wing of 100 tactical aircraft, with nuclear propulsion, and with the latest in armor plating and anti-torpedo hull design, *Nimitz* will be the most powerful, best protected and least vulnerable aircraft carrier ever to sail the oceans of the world.





Captain Jim Busey, C.O. of the Rough Raiders of VA-125 prepares to mount his steed during the commanding officers' elimination contest, above. One arm in the air, a pilot seems to be reaching for the ejection handle, below.



RIDE'M

Not the World's Largest nor the World's Greatest, not a super colossal event, but certainly a spectacle and possibly the funniest rodeo in recent times was held in California this spring by the pilots, chief petty officers and other personnel assigned to NAS Lemoore's light attack community.

While sitting around the "bunk house" aboard USS *Oriskany* during a lull in carrier operations in the Gulf of Tonkin, two members of VA-155's *Silver Foxes* were talking about what they were going to do when they got home. LCdr. Gary Starbird and Lt. Jerry Arbiter, both crazy about horses, felt that the squadron deserved a rodeo.

The skipper of the squadron, Commander M. R. "Silver Bullet" Seibert agreed but would have no part of it unless he could challenge the skippers of other Lemoore squadrons to enter. From there the idea snowballed—with pilots challenging pilots, chiefs challenging chiefs, and sailors challenging sailors—to a full-blown rodeo.

On their return to Lemoore, the *Silver Foxes* frantically rounded up worthy broncs, mangy jackasses and "wild" boars. So many "sidewinders" were picking up the challenge that no mere pasture would be suitable for the contest. The nearby Riverdale Rodeo Association has a regulation-sized arena replete with chutes and

RODEO!



spectators' stands which they made available.

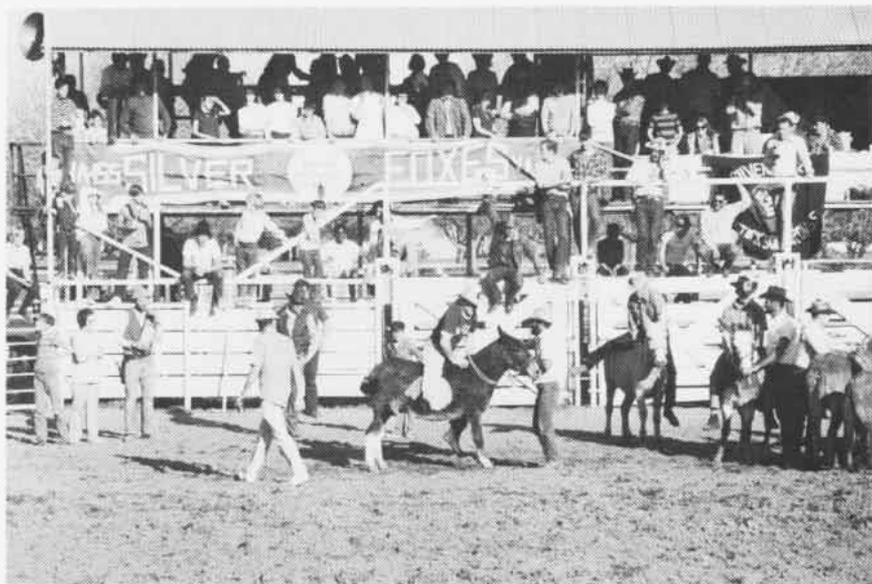
Local interest in the event grew. A crowd of approximately 500 was expected; when the rodeo opened, 2,000 spectators crowded into the bleachers.

Seventy entrants vied for supremacy in five events. The Open Bareback Bronc Riding was won by Lt. Gary Miller of VA-122. The Naval Aviator Bareback Bronc Champion was Lt. D. V. McGinn of VA-113. Chief Sid "Ceasar" Gardner of VA-93 and Chief C. L. Peterson of VA-27 walked off with the honors in the CPO Burro Catch.

Much to the chagrin of the attack pilot community, Commander Pete "Polecat" Peters, Miramar-based VF-191, picked up a first in the Commanding Officer Elimination Contest (burro riding). Commander W. H. Byng, skipper of VA-113, took second. In the final event, the Plane Captains' Wild Board Catch, PO3 "Rob Roy" Robertson, VA-97, picked up a hog and the winner's check for \$50 which he added to the \$800 profit for the event. The \$850 was given to Navy Relief.

In addition, the Red River Valley Fighter Pilots Association, which set up a booth for the sale of POW bracelets, license plate holder and bumper stickers, made over \$200 for their scholarship fund.

Above a pilot gets cockpit orientation for a hop and wonders if there is any way to be grounded. Attack pilots mount up and prepare to launch, below. Civilian critters, the donkeys launched when, where and if they pleased.



A Capital Naval Air

Naval Air Reserve Unit Washington, D.C., is a typical Reserve training activity, one of 31 located in or near major population centers across the nation. Together, they make up the Naval Air Reserve Command, directed by the Commander Naval Air Reserve Force/Chief of Naval Air Reserve from headquarters at NAS Glenview, Ill.

NARU Washington has been located on Andrews Air Force Base since 1961, when the then NARTU moved from its long-time home at

NAS Anacostia. Its Air Reservists drill one weekend a month and two weeks a year to maintain and update the military skills they learned on active duty, against the time when a national emergency might require them again.

The flying side of the Naval Air Reserve in the nation's capital and its large, non-tactical support organizations are similar to those found in Reserve activities throughout the country.

NARU Washington supports several tactical units. Light Photographic Squadrons 206 and 306, based at

NARU and attached to CVWR-20 and 30, respectively, perform their mission of providing photographic intelligence for their air wings in the RF-8G reconnaissance version of the *Crusader*. VP-68, based at NAS Patuxent River, flies the P-3A *Orion* and is primarily concerned with antisubmarine warfare and overwater surveillance. VR's 61A1, 61A2 and 61A3 fly passengers and cargo in support of Navy commitments. Their C-54 *Sky-masters* are currently being replaced by C118's, the first of which arrived



Reserve Unit

in May. The *Liftmasters* will provide more speed, range, comfort and passenger/cargo capacity. Replacement of the older C-54's by C-118's is part of the modernization program which is taking place throughout the Naval Air Reserve.

Behind the men and aircraft of the squadrons is the non-tactical support organization.

The Naval Air Reserve Staff, the command section which sets and coordinates local policies and maintains

records, is manned and operated by Reservists.

Two Naval Air Intelligence Reserve Units, one to support each photo squadron, evaluate the photos taken by photographic and patrol squadrons, locate and identify targets, and prepare target briefs and intelligence studies of various countries and enemy naval and merchant shipping.

The Naval Air Systems Command Reserve Unit, as the local Reserve arm of the Navy's aircraft and aviation weapons department, is involved in

policy generation and review and in the preparation of planning documents and management guides for the Naval Air Reserve.

NARU Washington supports three Reserve Systems Analysis Divisions which perform much like a team of efficiency experts. They make studies of various Navy operations with the aim of increasing effectiveness, which result in considerable savings to the Navy in manpower and time.

This is the Naval Air Reserve in Washington — 200 active duty Navy men and 1,700 Selected Naval Air Reservists who train for an eventuality they hope will never come, so that they will be ready if it does. A part of the Naval Air Reserve organization throughout the nation.



C-118 Liftmaster, left, replacement for C-54 Skymaster, is another step in modernization for NARU Washington. Technicians make sure their F-8 Crusader is ready for photo reconnaissance flight, above, and maintenance men reach radio antenna, located in rudder of F-8, with fork lift, right. Below, a P-3 Orion of VP-68, home-based at NAS Patuxent River, is ready for an ASW mission.





THE SELECTED AIR RESERVE

New for Old

Eight CH-46D *Sea Knights* have replaced the UH-34D's of the MARD at NAF Detroit. The primary mission of the CH-46D is to transport troops, equipment and supplies, and to evacuate casualties in inaccessible areas. Technical representatives from Boeing and General Electric have been assigned to the detachment to assist active duty personnel in re-training HMM-766 in the *Sea Knight*. Approximately 60 pilots and mechanics will be sent to MCAS New River, N.C., for training in flying and maintaining the helo.

Systems Analysis Unit

The first Naval Reserve systems analysis unit to operate at Point Mugu has begun studies to increase the efficiency of local Navy activities.

Reserve Systems Analysis Naval Division U-1, under the administrative control of NARU Point Mugu, is currently refining computer programming

of target systems for the Naval Missile Center. The division is headed by Captain Malcolm S. Jones and is manned by Naval Air Reservists. Capt. Jones says that the division has been so successful that two additional divisions are planned. The mission is two-fold—to prepare Reservists for immediate mobilization in billets requiring systems analysis capabilities and to provide those capabilities to their sponsoring commands.

Helping Hand

Although the overall program of readiness in today's Navy puts a heavy tax on the time of a Reservist, the men of NARU Alameda and its tactical squadrons found time to lend a helping hand to a little girl with acute lymphoblastic leukemia. Thirty-five men each gave a pint of blood for 20-month-old Kellie Anderson.

At NARU Jacksonville, 65 officers and enlisted men each contributed blood for Eddie Wayne, a ten-year-old who is the victim of hemophilia and needs the equivalent of 18 pints of blood each week to maintain a normal level of clotting factor.

Sea Cadets

An aviation-oriented Naval Sea Cadet Corps Squadron, the Eisenhower Squadron, has been commissioned at NAS New Orleans, La. The unit is sponsored by the Navy League and will be supported and trained by air station personnel.

The sea cadets from NARU North Island were runners-up in five competitive training events in which more than 300 sea cadets from 12 Southern California units participated. They lost



Texas license plates on cars of LCdr. R. J. Gilles and CPO D. A. Dickman at NAS Glenview carry a Navy message wherever they go.

top honors to North Hollywood's Bryce Canyon Division.

Sea cadets train aboard Navy ships and aircraft and at naval installations throughout the United States. Those who successfully complete the prescribed training program become eligible to receive advanced enlistment benefits in the Navy or Naval Reserve.

Annual Active Duty Training

During its active duty training at NS Roosevelt Roads, P.R., this year, TACRON 40R1, NAS Norfolk, Va., participated in close air support, artillery and naval gunfire exercises with the Tenth Marine Regiment and Fourth Marine Reserve Air-Naval Gunfire Liaison Company. Later, TACRON personnel took part in a NATO strike exercise, *Firex X*. TACRON 40R1 is led by Captain F. B. Greene.

For 140 members of Naval Air Reserve Fleet Air Tactical Support Squadron 51, the return trip from Spain to NAS Whidbey Island in their C-118's marked the end of two weeks of airlifting 30,000 pounds of cargo and over 500 passengers throughout the Med in support of the Sixth Fleet. The squadron flew to London, Madrid, Athens, Copenhagen, Naples, and Rhodes.

Joint Exercise

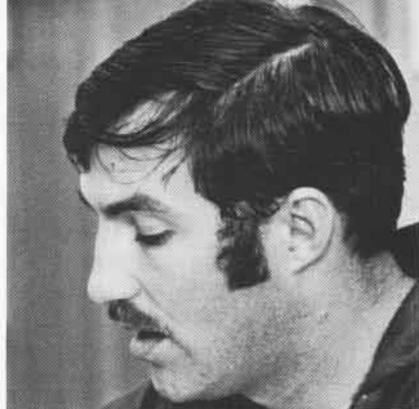
Atlantic and Pacific Reserve VP squadrons joined in an ASW exercise off Norfolk, Va., this past spring. The operation was staged from NAS Willow Grove, Pa., and involved East Coast VP's 62, 64, 66, 68, 90, 92 and 94, and VP-67 from the West Coast.

Last Bugsmasher

Commander John A. Barden and LCdr. "Lucky" Rainders of NAF Detroit recently delivered the last active-duty UC-45J in the Navy to its final home at Davis-Monthan AFB, Tucson, Ariz. Fourteen others are on loan to the Department of Agriculture and five RC-45J's (photo version) are flying at Pensacola.

Bugsmasher, BuNo 39266, entered the Navy inventory in 1943. It was stationed at NAF Detroit for the last two years as a utility aircraft.

'Try It - You'll Like It'



Lt. Larry W. Rinne

If you want to be something," states the Navy recruiting poster, "why not be something special?"

"If you want to be something extra special," says Rear Admiral John M. Thomas, Chief of Naval Air Training, "a tour of shore duty in the Naval Air Training Command as a flight instructor will put you in that elite group.

"We recognize that orders to flight instructor duty in the Air Training Command have historically been considered less than desirable," he continues, "but if we are to continue to maintain the high degree of quality in our product — Naval Aviators — we must have the best Navy pilots available to teach students."

Lt. Larry W. Rinne, attached to VT-4 at NAS Pensacola, Fla., is a classic example. He is an F-4 *Phantom II* driver who was ordered to Pensacola for instructor duty from the fleet.

"I had just completed my second combat tour in Southeast Asia aboard *Ranger* with VF-21 when I got orders to the training command," Rinne states. "I wasn't too happy about the idea. While you're flying with the fleet, the challenges are very personal. You know you're pitting your skill and daring against another individual or group of individuals who want to shoot you down. Working to put your ordnance accurately on a target is what it's all about. It's what I trained to do, right from the beginning.

"My squadron X.O. called me in one day — he apparently heard I was having heartburn about my orders. He

By JOC Paul Rothgeb
Photos by PH1 Jim Curry

told me to remember the TV commercial."

When Lt. Rinne asked which one he meant, the reply was, "Try it — you'll like it."

"I've been here since October 1971 and the X.O. was right," says Rinne. "The challenges are here, too. They are completely different, I'll admit, but when I crawl in that back seat after the fifth or sixth hop and see how much the student pilot in front of me has learned, it gives me a feeling of satisfaction and pride that is very hard to explain.

"The personal contact with your student is all important, too. He becomes a reflection of yourself and you want him to be as good as you are, or think you are. The fleet represents a completely different world and these

students want to know what's in store.

"They want to know what it's like to get aboard ship at night with a pitching deck. I can tell them it's the epitome of skill and knowledge. I got more than 100 night traps during my two cruises. I could never describe it to a student unless I personally experienced it."

Lt. Rinne is the squadron personnel officer when he is not in the back seat of a T-2 *Buckeye* teaching basic jet flight students the rudiments of getting their machines home safely. The average student takes 14 flights to complete the transition/acrobatics phase which Rinne teaches. This allows him to fly about 55 hours each month.

"When I think back to the day I was told what my orders were and the thoughts that went through my mind," he says, "I have to chuckle. The training command isn't bad now.

"Try it — you'll like it!"



Rinne watches as a student preflights an aircraft.

The *Sea King* was specifically designed to combine the hunter and killer functions of antisubmarine warfare into a single helicopter replacing teamed SH-34's performing the separate tasks. In December 1957, the Navy placed an order for development of a new helicopter capable of both employing search devices and carrying 840 pounds of ASW ordnance. In addition, the aircraft was to be instrumented for all-weather operations from ship or shore.

The design produced featured a watertight amphibian-type hull with lateral stabilizing sponsons containing the main landing area. Designated the YHSS-2, the helo was equipped with AQS-13 dipping sonar, Doppler navigation and automatic hovering provisions. The *Sea King* is powered by two turbine engines turning a five-bladed main rotor. Folding rotor blades and a folding tail pylon allow the helo to be stowed in a relatively small area.

The *Sea King* first flew in March 1959 and, by September 1961, fleet deliveries began to VHS-10 and VHS-3 at NAAS Ream Field. One year later, *Sea Kings* were redesignated SH-3A's under the new joint service system. In 1965, a few SH-3A's were converted to RH-3A's for mine countermeasures development work. During 1966, the SH-3D, with more powerful engines, improved performance characteristics and greater fuel capacity, was introduced into fleet use. This model also featured a variable-position torpedo launcher which allows a torpedo to enter the water at the proper angle even though the *Sea King* continues to hover and track an enemy with its sonar rather than being forced to launch while in forward flight.

The *Sea King*, in addition to its ASW duties, has been used for cargo transfer, rescue, *Apollo* astronaut recovery and as a White House VIP transport.



HSS-2



SH-3D



SH-3A

King



RH-3A



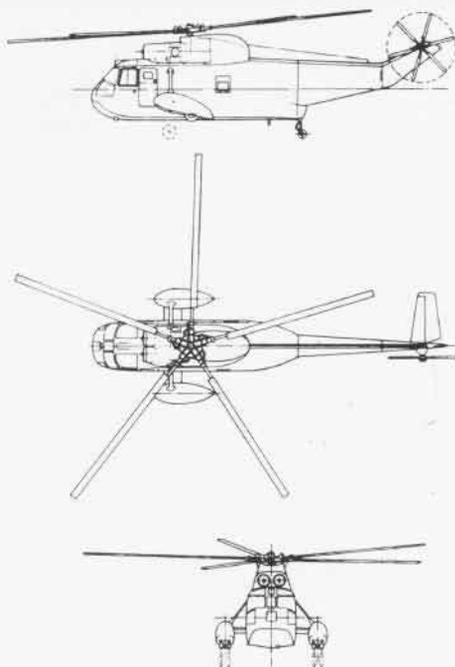
SH-3A

SH-3D

Length (fuselage)	54'10"
Height (tail rotor arc)	16'10"
Rotor diameter	62'0"
T.O. weight	
SH-3A	19,100 lbs.
SH-3D	20,500 lbs.
Engine/horsepower	
SH-3A	Two T58-GE-8B/1,250 shp ea.
SH-3D	Two T58-GE-10/1,400 shp ea.
Service ceiling	
SH-3A	15,000'
SH-3D	13,000'
Hover ceiling	
SH-3A	6,000'
SH-3D	4,300'
Maximum speed	144 kts.
Combat range	
SH-3A	500 nm
SH-3D	600 nm
Endurance	
SH-3A	5.1 hrs.
SH-3D	6.0 hrs.
Armament	Up to 4 torpedoes or 4 depth bombs
Crew	Pilot, copilot and two sonar operators



SH-3A





WO Richard Roberts' responses are tested on the lab's electronic bicycle ergometer.

HEARTBEATS

and

By Don Isenberg
Naval Aerospace Recovery Facility
NAF El Centro

With the ever increasing tempo of man's space-age society — with jets, rockets and space capsules — there is a continuous need for more modern advances in aerospace personal safety and survival equipment.

In order to design, develop and put into the cockpit a more satisfactory pilot recovery system, however, much remains to be learned about the physiological effects the systems may have on the pilot or aircrewman using the equipment.

Development and testing of new concepts in the personal recovery systems field have been in progress at the Naval Aerospace Recovery Facility, El Centro, Calif., since the facility was established in 1947.

In the past, the majority of survival equipment testing was dependent upon the use of instrumented, articulated

dummies. Although these dummies were equipped with highly sophisticated electronic instrumentation, their use for testing did not provide design engineers with the critical human data or reactive information required to achieve optimum test results. To achieve more realistic test conditions and obtain actual human physiological test data, it became necessary to substitute live parachutists for articulated dummies.

The first series of live parachute jumps using telemetering equipment for recording human data was performed by Navy and Air Force test parachutists. The use of telemetry by live parachutists was somewhat restricted due to the heavy (60 pounds) and cumbersome equipment required. With the many new transistorized electronic devices that space-age scientists

RIP CORDS

have developed, the telemetry package has been reduced to about eight pounds and is now small enough to fit comfortably between a jumper's reserve parachute and his abdomen.

Under the guidance and direction of LCdr. Donald H. Reid, Ph.D., MSC, and his team of assistants, this precedent-setting, physiological research project has been carried out at the El Centro facility with a high degree of proficiency.

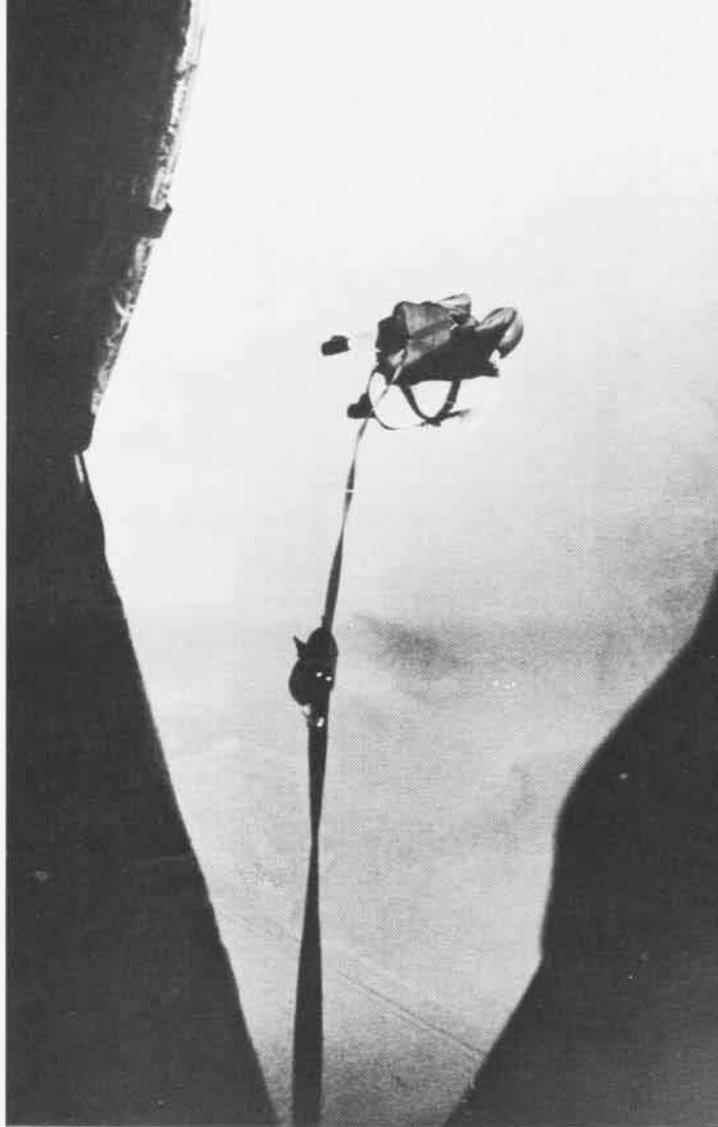
According to Dr. Reid, the test parachutists are currently being instrumented for electrocardiograms, acceleration data, voice transmission, rate of respiration, force strain applied to parachute risers, core and skin temperatures and electroencephalograms (brain waves).

Before making their initial data recording jumps, the test parachutists

are first acquainted with the various telemetry systems in the laboratory. They are given vigorous endurance tests designed to develop a data baseline for comparison with data obtained during an actual test jump. Laboratory tests begin with telemetering the jumpers' physiological reactions while casually sitting and standing. They next undergo a long period of strenuous exercise on a specially designed bicycle. After the laboratory data have been analyzed, the telemetered test jumpers sit quietly in a low pressure chamber at a simulated altitude of 8,000 feet.

The research team now has a good profile of each individual's physiological baseline, and the parachutists are ready to proceed with the actual tests under field conditions.

Wearing the telemetry package, the



Static line test jump carrying the telemetry package is made by Richard Roberts.



jumpers begin a series of premeditated jumps from various altitudes, speeds and aircraft, utilizing different types of parachutes. The telemetered data obtained from these jumps are then compared to the laboratory baseline data previously recorded.

One factor which weighs heavily on the test results is the number of parachute jumps each individual has completed prior to his assignment to the test team. For example, a jumper who

has experienced 100 jumps would have a considerably lower heartbeat rate during rip-cord pull and canopy deployment than a novice jumper with a background of only one or two parachute jumps. It would obviously be unfair to compare the physiological results obtained from one parachutist to those of another.

Preliminary test results obtained during the program indicate that the heartbeat rate accelerates when the

jumpmaster gives the signal "three minutes out" from the aircraft exit point for the jumper and reaches its peak the instant before manual rip-cord pull. The jumper's heartbeat rate then decreases after the parachute canopy has opened by about 35 beats per minute (bpm). However, the bpm accelerates again at approximately 1,000 feet, just prior to his landing.

The highest bpm rate observed thus far was registered by a novice jumper who was making his third free-fall jump. His baseline rating from the laboratory test was 90 bpm. Three seconds before exiting the aircraft, his heart was beating at a rate of 196 bpm. This accelerated to 220 bpm at the moment of rip-cord pull. His bpm rate at ground impact was 205. In contrast, a 20-year-old parachutist, making his 60th free-fall parachute jump, recorded an increase in his baseline of 58 to 150 bpm on parachute deployment, and only 136 on landing.

Parachutists in general, whether civilian skydivers or military test jumpers, are under considerable stress when performing their parachute jumps. The fact that this period of stress comes and goes within a very short time (approximately 15 minutes) makes parachute jumpers ideal subjects for this type of research.

Comparing parachute jumpers to aircraft pilots, even under the most hazardous flying conditions, would be incorrect since the jumper faces certain death each time he jumps from the aircraft if either he or his parachute does not perform or function properly. Conversely, the pilot may be face-to-face with death for only an instant during many hours of otherwise relaxed flying. As one pilot remarked, "Most aircraft flights are relatively long and cover hundreds of miles, yet the flight may be no more stressful than watching football."

Aside from assisting the design engineers in doing a better job of developing new and more sophisticated personal safety and survival equipment, a secondary objective of these tests is to further man's fundamental knowledge of human psychophysiological responses to environmental stress.

The words written by the poet Lui Chi a long time ago, "I am alone with the beating of my heart," would not be true of the test parachutists at the Naval Aerospace Recovery Facility.

and a Live Subject

Many claim that anyone who parachutes from a perfectly good airplane is a mental case, far removed from the pilot who punches out of a burning jet to save his life.

No one knows this better than Parachute Rigger First Class Anthony E. Van Valkenburg of VP-46, NAF Iwakuni, Japan. The 33-year-old sailor is one of the few fully qualified Navy test jumpers who do their bit so that pilots and aircrewmembers will have safe descents during emergencies.

Why would anyone want to be a test jumper?

"That's pretty easy," replies Van Valkenburg. (His friends call him Van.) "I've worked with emergency equipment for years and I want to make sure it works right when the time comes."

Van's job sounds simple enough: strap on a parachute, climb into a plane, jump. Before going to VP-46

SSgt. Dub Allen



PR1 A. E. Van Valkenburg, a former parachute tester at El Centro, suits up for a jump . . .

By SSgt. Dub Allen, USMC

in January 1971, Van was stationed at the Naval Aerospace Recovery Facility, El Centro, Calif. There he made 284 jumps from 14 different types of aircraft and with every type parachute used by aircrewmembers and pilots. Some were for public exhibition with jumpers doing free falls, joining up in the air, passing batons and tracking back and forth across the sky with smoke flares attached to their boots.

Others were for tactical purposes and medical tests. A team of doctors wanted to know how much work was involved in a parachute jump. Van and other jumpers were wired with electrocardiographs, respiratory counters and other instruments.

Van went up, made his jump and the doctors came up with their totals.

Van's highest jump was from 25,000 feet—almost five miles up. He jumped from a A-3B *Skywarrior* for a high altitude, low opening, public exhibition. From the time he left the plane, it was two minutes before he pulled his ripcord. During that two minutes, he fell over 10,000 feet per minute, opening his chute at 4,000 feet.

Jumpers usually try to stay away from water when landing, but on one assignment Van's job was to jump and land in California's Salton Sea. The purpose of the jump was to see if he would sink while wearing body armor being tested for the Army. He was the first man to live-jump the armor—he didn't sink.

Van has had eight static line jumps. The rest were free fall. The reason for the free fall is "to get to the terminal opening speed of the parachute," he says. This means opening his chute at the maximum speed reached when falling in an unstable position, at about 120-150 miles per hour. This approximates the opening shock received by an aircrewman

jumping from a P-3 *Orion* or a pilot ejecting higher than 14,000 feet; a pilot's chute is set to open at 14,000 feet or lower, where oxygen is plentiful.

Van claims he has had no close calls, but admits to being knocked out once. "It happened when I was testing a new parachute harness," he says. "It was an adjustable harness that would allow a man to wear any type chute, be it back, chest or seat pack."

Van cleared the airplane and pulled the ripcord.

"I pulled and the opening shock knocked me unconscious, but I came to before I hit the ground," he says. His comments in his jump log were, "Hurt all over; K O'd." The harness was not put into military use.

With 16 years of experience, Van will personally guarantee that every parachute used by the military today will open properly—if used correctly.

What does he do for fun? Skydives.

GySgt. Dan Wisniewski



and salutes his jumpmaster after taking off on another free fall sport jump at Iwakuni.

In Retrospect

By Izetta Winter Robb, LCdr., USNR (Ret.)



On August 3, 4 and 5, the women in blue — known to their shipmates as WAVES — convene in Kansas City, Mo., to celebrate the 30th anniversary of their establishment as an integral unit of the U.S. Navy. In a day when “30” has become the magic number designating the end of the age of innocence, the women who were the forerunners of their counterparts in the regular Navy today look back on their experience as one that enriched their lives, though it was not for that reason they enlisted or were commissioned.

They owe the name WAVES to the imagination of the late Commander Elizabeth Reynard who sought an acronym related to the element in which the Navy operates and expressive of their character as Reservists, not Regulars. The title also suggested that they were in 1942 a temporary addition to naval manpower, a modicum of comfort to the old salts who were not convinced as to the soundness of the idea of having women in the Navy. Thus Women Accepted for Voluntary Emergency Service (WAVES) entered the Navy and, from July 1942 to the end of WW II and after, played their part in the worldwide conflict.

In all, approximately 105,000, far in excess of the number originally planned, went on duty determined to establish a record of excellence. At the start, Navy planners had estimated that 25,000 members would constitute the Women’s Reserve, but this number was rapidly revised upward when the Bureau of Aeronautics gave that same figure as a requirement for women to serve aboard its air stations and facilities in the United States. As the newest of the bureaus, less trammled by the traditions of the past, BuAer seized the opportunity to add to its strength by availing itself of womanpower. The very example of BuAer strengthened the stand of those commanders in other parts of the naval establishment, who likewise saw the advantages to be gained by using women to release men for sea duty.

The first director of the Women’s

During WW II and since, WAVES in Naval Aviation have proved to be very versatile.



This December 1943 photograph of LCdr. Tova Peterson Wiley, then assistant national director of the WAVES, and SpY3c Helen Otto was taken in the operations tower at NAS Ottumwa, Iowa.

Reserve, LCdr. (much later, Captain) Mildred H. McAfee, on leave from the presidency of Wellesley College, gave to the women not only superb leadership but the gift of flexibility which made the WAVES' contribution creative and original. On duty for three years, beginning in August 1942, she sums up from the vantage point of three intervening decades the WAVES' early experience:

It was good to be in at the beginning. We had all the impetus of patriotic conviction of the rightness of our cause. We hated war, but we tried to expedite it to avoid a greater evil. It was good to sing that we would "free our Navy's men who would free the world." We liked to be "marching as one."

To be sure, we fumbled our way into the structure of the Navy. We did our share of grumbling like all good sailors. We blundered as we tried to be nautical in our shorebound status. "By your leave, sir" easily became "Leave me by, sir," and marching under inexperienced women officers would have led to catastrophic confusion if those officers had not been wise enough to mutter, "Use your judgment, ladies," until the hazards were passed.

Indeed we knew so little that we

were forgiven much. And we had great teachers—admirals, captains, chiefs, and all the rest who accepted assignment to WAVE training and supervision with cheerfulness.

We made good friends with whom we suffered the trials of a military bureaucracy and shared the satisfaction of being part of a victorious Navy.

Our respect for American women grew as we watched their transformation into competent Navy personnel, undertaking successfully tasks they had never encountered as civilians or adapting civilian skills to Navy demands. Their adaptability and service "above and beyond the call of duty" are a source of pride to anyone fortunate enough to have worn the blue-braided Mainbocher uniform.

They were memorable days beginning in 1942.

Indeed they were. Willing to accept tradition, but not blindly, the WAVES brought to their tasks a certain scepticism. LCdr. Marguerite Vedeler recalls one long-time Navy man's witness to this virtue: "When I give an order to a man, he says, 'Aye, aye, sir.' When I give an order to a woman, she says, 'Aye, aye, sir, but. . .!'"

The women were eager to prove themselves and took up their varied

roles with an enthusiasm and thoroughness that justified their advocates. Captain Joy Bright Hancock, USN (Ret.), Women's Reserve Representative for the Bureau of Aeronautics from 1942 to 1946 and thereafter the director of the WAVES to 1953, points out in her book published this year, *Lady in the Navy*, certain important factors: "There was no draft or conscription involved; the women came forward eagerly and proudly to contribute their talents and skills. Their capacity to learn and to perform tasks in a field of work heretofore unknown to them brought high praise even from those men who had not been able to recognize their potential worth." To this she adds this comment, "The hazards the men predicted were overcome; their reluctance to admit the possibility of success of a program for women in the Navy proved unfounded, and so all is forgiven."

According to *NANews'* "brief gallop" poll, it is the overwhelming conviction of the WAVES of WW II that they found their service and experience valuable and, if asked for a similar service, would do it again. In response to our query as to her reason for entering the Navy, one veteran replied, "Strange and quaint to say in these days—to help my country." Again and again this declaration of patriotism was made. Ltjg. Margaret H. Jenkins rated her commission "a proud accomplishment that overshadows two American Olympic credentials." For some it was a particular event that prodded them to enlist. A WAVE from California says, "The Battle of Britain spurred me to join the Navy."

One officer wrote in a reflective mood: "This question (as to whether one would enter the Navy again) is unanswerable. If one were the same age and the circumstances were the same, of course, the answer would be 'Yes.' But we are not the same."

In 1942, from all over the country, the women stepped into Navy blue. While the teaching profession contributed the greatest number of WAVES, other vocations were widely represented: social work, banking, law, medicine, business, merchandising, research, public relations, journalism, and these certainly do not exhaust the list. While service established some women in new careers, it

did not always do so, for the women were used insofar as possible in areas where by learning and background they could serve the Navy. An editor could still be an editor; she simply changed from food and fashion to aeronautics or ordnance. If she was a physicist, she might find herself in the Office of Naval Research or the electronics division of BuAer. Probably the greatest impact on the future was felt by the young enlisted WAVES who served in regular ratings at naval stations and bases, air stations and training schools.

Nearly four centuries ago, Sir Francis Drake wrote to Lord Walsingham: "There must be a beginning to any great matter, but the continuing unto the end until it be thoroughly finished yields the true glory." Throughout the conflict of WW II, the WAVES served steadfastly. Indocrinated at Smith College at Northampton or Mt. Holyoke College, not far away, in Massachusetts, or at the boot camp at Hunter College in New York City, the WAVES learned the ways of the Navy, and then, after special training, if such were needed, served at naval facilities in this coun-

try and, in the last months of the global war, went to Hawaii. At the present time, they occupy Navy billets all over the world.

While many women's experience in the Navy introduced them to many new types of work and in some cases led to careers they had not dreamed of, probably more of them returned to their own communities and took up the traditional role of wife and mother. In truth, many a Navy man was to "find a shipmate in the WAVES." Long before the militant demands of Women's Lib were heard in the land, the WAVES were proving themselves by their work worthy of equality. Whereas in WW I, women had been for the most part Yeomen (F), in WW II, they filled scores of ratings and held commissions throughout the naval establishment.

In answer to the question as to what was her most exciting incident in naval service, one WAVE replied, "There were far too many to mention." Others pinpointed a particular event. One, who chooses to remain anonymous, remembers her greatest thrill as "sitting on the back seat of Adm. Nimitz' limousine beside Sena-

tor Margaret Chase Smith while Admirals Nimitz and Spruance sat on the jump seat in front of us." Lt. June V. McCann replied, "My most exciting moments were during patrol flights over the Pacific Ocean (four to fourteen hours) when I was an aerial navigator. The training flight on a *Liberator* to Oahu Air Station, Hawaii — which we barely made because of headwinds — was the single most exciting event."

LCdr. Loretta Kincaid put down two events as memorable: "Being present at the Pearl Harbor Submarine Base when Adm. Nimitz came back from the South Pacific to relinquish his command as Commander in Chief, Pacific . . . being on the dock at Pearl Harbor when the aircraft carrier USS *Franklin* limped in after devastating kamikaze attacks."

Chief Radioman Carolyn Schmidt's great moment came early in her training: the day the WAVES paraded in the football stadium at Madison, Wisc. "I was really proud to be a member of the first enlisted WAVES in WW II."

But for many the victory in the Pacific marking the end of the con-

...and Navy Women

Women's lib is nothing new to the Navy and several recent changes point this up: The acronym WAVES has been replaced by the titles Officers and Enlisted Women in the Navy; no longer are "women's representatives" assigned to Navy commands; and women are now being assigned to commands which have traditionally been open to men only. (In early February, CinCPacFlt directed that women be sent to seamen billets to replace male seamen being ordered to sea duty.)

One place where the shift in personnel has already begun is VRF-32, NAS North Island — and the girls think it's great.

SA Linda Casada says her job is interesting and that squadron personnel are some of the best to work with;

SA Janice Simerman says, "The men are really considerate and they are all curious as to why a woman joins the Navy."

The distaff seamen at VRF-32 perform mostly clerical work — jobs previously done by men who are now needed aboard ship. According to Ltjg. Jo A. Sanders, squadron PAO, competition exists among the women but she feels it will promote efficiency. "They are willing to learn and take on as many jobs as they can. They have to show the men they are competent," she says.

LCdr. Margit M. Loser, Pacific Fleet Enlisted Personnel Distribution Office, was quick to point out that there is no reason why women can't do many of the jobs now done by men. "They sign enlistment contracts just like the

men, promising to undertake whatever assignments they are given," she says.

By bringing women into formerly off-limits working areas, the Navy is using its women seamen better and at the same time, getting the job done.

In a memorandum to all women in the Navy, Captain Robin Quigley, former Director of the WAVES, now Assistant Chief of Naval Personnel for Women, wrote:

"If we women fail to shoulder the challenge of change as it affects us, to turn that corner with the rest of the Navy, then we will be relegated, and rightly so, to the perimeters of this profession tomorrow and forever."

The challenge is here now and Navy women, as always, are doing their part to answer it.

flict constituted the great moment. A Navy woman on the West Coast will always remember "the night the war ended and the lights came on again on the ships in San Francisco harbor." Cdr. Eddith Montgomery declares, "My cherished memory was seeing the lights turned on again on the Capitol dome in Washington."

During their service in WW II, the WAVES found their part in a man's world much to their liking. Asked to comment on the men with whom they served, their responses were sometimes effusive, memory perhaps cleared of all that at the time might have seemed abrasive. One said, "The men were all great," and another responded, "Absolutely elegant!" Perhaps more just and accurate is the estimate of an early three-striper who described them as "a fair cross-section of humanity—magnificent human beings and some less than magnificent."

Lt. Eugenie Smith remembers the courtesy of the men: "We seemed to be accorded quite freely and generously the privileges and responsibilities of the uniform and the job." LCdr. Dorothy Kaufman agrees: "On the part of the men, it took some getting

used to to have a woman around because 'it had never been done before,' but after they got used to us, we were accepted. . . . The gals did not become too masculine — as many feared at the time—but settled down as soon as their men came home, married and for the most part had several children."

Still another saw in her service "an opportunity to work with, talk to, and get to know many famous, brilliant, exciting men that I could have met in no other way. . . . My only regret was we could not share with them some of the great perils at sea they had to endure."

Today, there are 6,682 women in Navy uniform: 738 officers and 5,944 enlisted. Of the enlisted women, 12 percent serve in aviation rates. Throughout these 30 years, women in aviation have served in many capacities. Two more aviation ratings recently have been opened to women: aviation fire control technician (AQ) and aviation antisubmarine warfare technician (AX). Women officers are filling billets in air squadrons: legal officer, public affairs officer, mainte-

nance administrative officer, educational services officer, schedules officer, communications officer, and student control officer. They are regularly involved in administration, personnel and data analysis and frequently serve as RPS custodians. And women in other large sections of the naval establishment have likewise found their areas of service enlarged. So what was once strange — women in the Navy — is no longer so.

In a sense, we are always on active duty. Captain McAfee has put into words the feeling of many who served with her: "It is hard to believe that it is all of 30 years. It has been an exciting generation whose outlines we certainly did not anticipate during those years dedicated to winning the war. I guess we must learn that winning the peace is harder and takes longer."

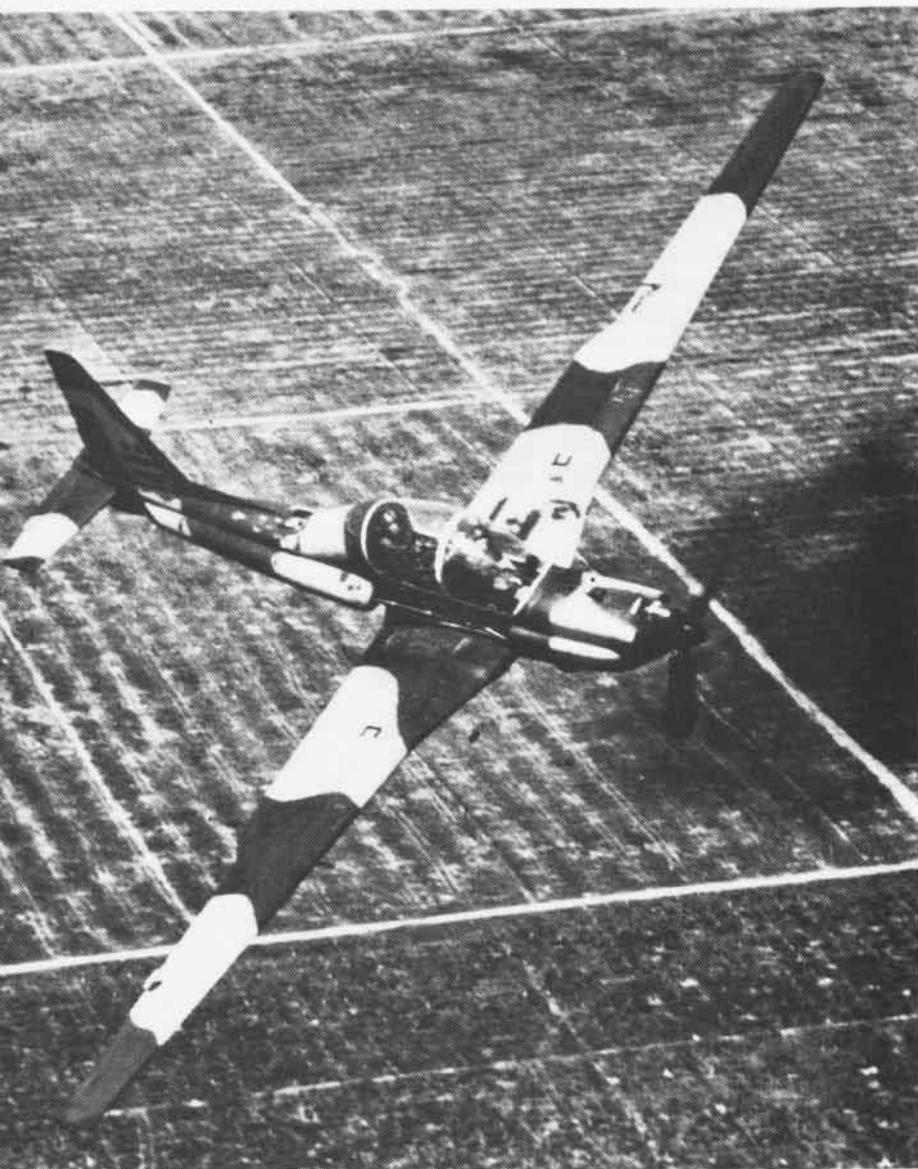
Today from coast to coast, active, reservist, regular or retired Navy women can still be proud of the name by which they were popularly known — WAVES. The acronym, rich in connotation, bespeaks a responsibility undertaken, a job well done, and a love of country still unalterable.

Today

By JOSA Vicki A. Farrell

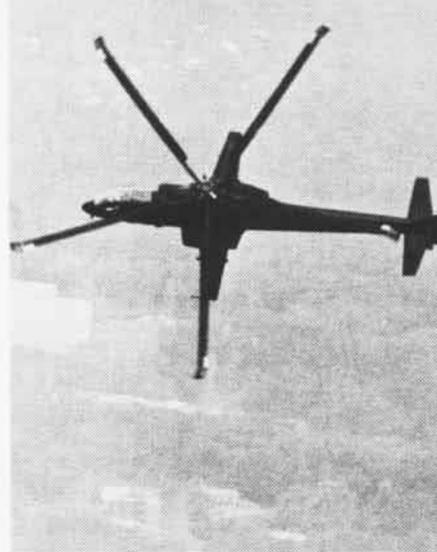


SA Maureen McColl maintains records in the personnel office and SA Janice Simerman drives a flatbed when she isn't busy in training.



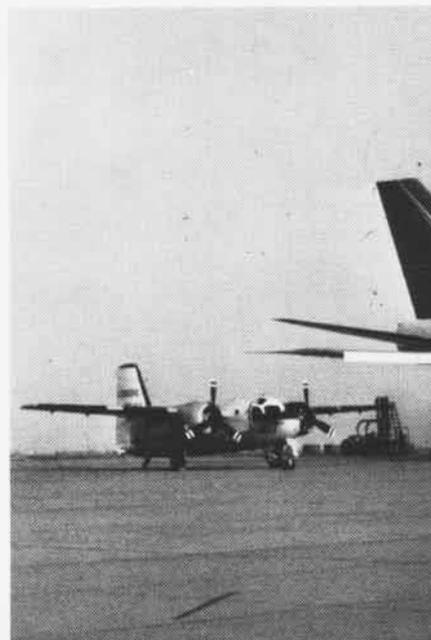
Quiet

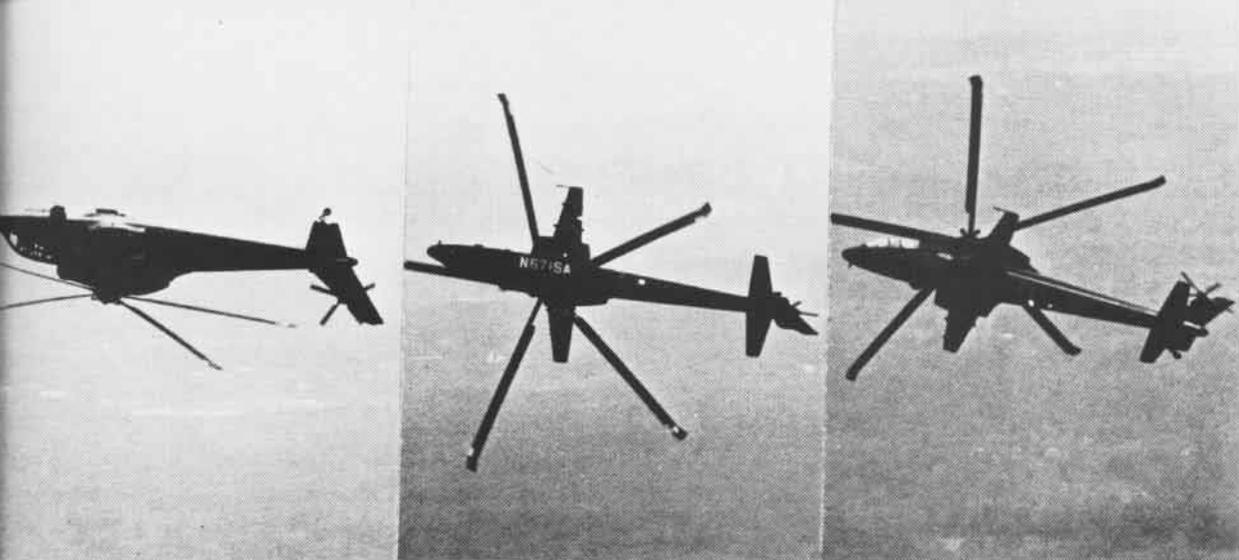
Army's quiet airplane, developed and built by Lockheed, is shown operating in the skies over Vietnam. The YO-3A has been deployed to the Far East for a year. Powered by a slow-turning, three-bladed wooden propeller, it has long, thin, high-lift wings with a span of 57 feet. Its fuselage is only 30 feet long.



The Blackhawk Roll

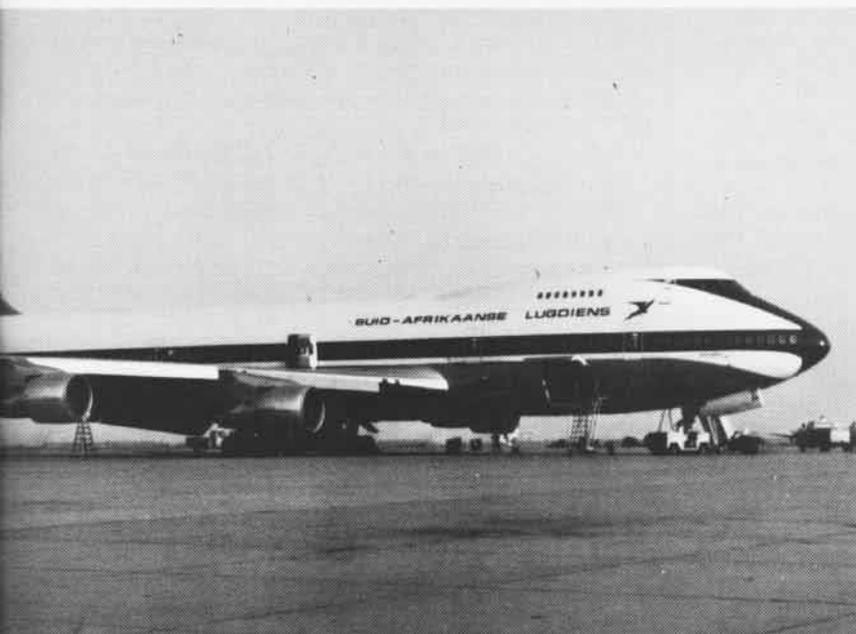
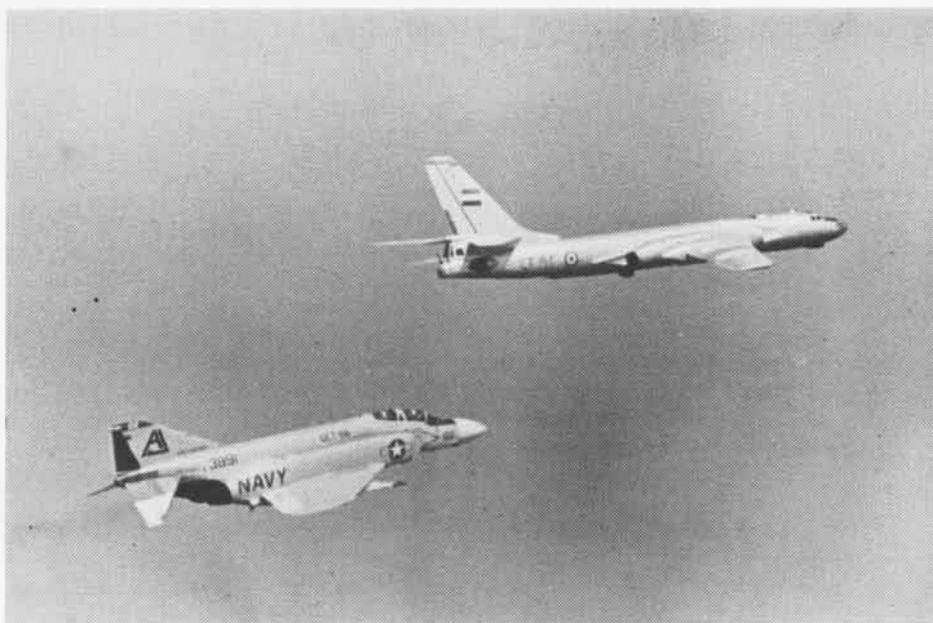
Sikorsky's S-67 Blackhawk performs a series of rolls during tests. Five rolls, flown at 1,400 feet, began at 140 knots and were completed at speeds from 115 to 120 knots. During loop tests, entry was at 2,000 feet and 170 knots; at top of loop, S-67 was at 2,800 feet, 50 knots; recovery at level flight was made at 2,000 feet and 170 knots.





Escort

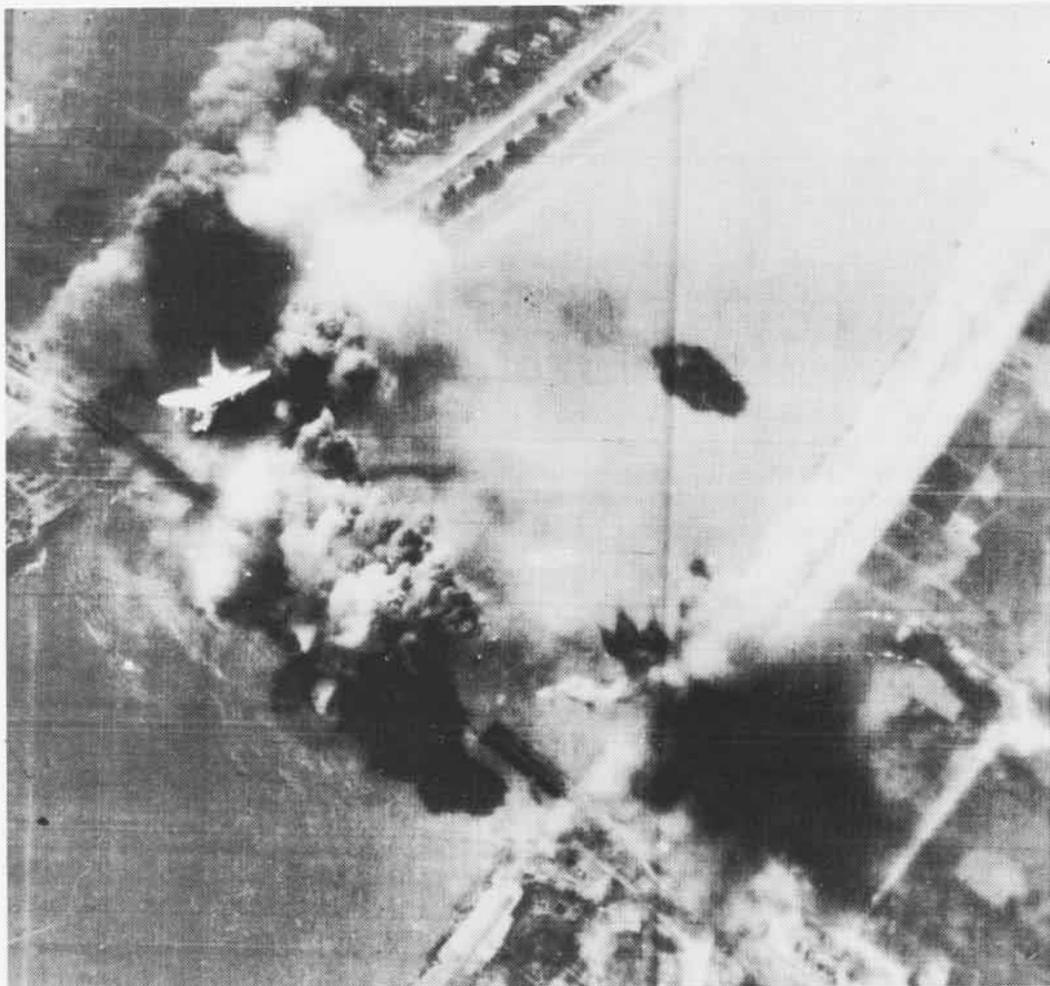
A VF-101 Det 66 F-4J Phantom, flying from USS America in the Med, escorts an Egyptian Badger, a maritime reconnaissance aircraft. VF-101 is home-based at NAS Oceana.



Move Over

A "tiny" C-1 is dwarfed by a huge 747 on the transient line at NAS Lemoore. The South African airliner spent nearly a week at Lemoore, using the long runways while conducting noise level tests.

at Sea with the Carriers



A-7 Corsair II pulls up after striking Hai Duong railway bridge. Center span was dislodged and east end cut.

In recent months, as the war in Vietnam heated up, American response was quick and Naval Aviation was there or soon on its way. As NANews went to press, six carriers were "on station" and a seventh was headed for WestPac.

The advantages of carrier-based aircraft are many and have been proven over and over again since the first carrier aircraft were launched against enemy targets in the Marshall and Gilbert Islands in February 1942.

Mobility is the key word. The best in training, the law. The latest in aircraft, the necessity. Combined, they enable the naval air arm to do its part.

Here are a few of the day-by-day actions.

April 24

CVW-21, flying from *Hancock* (CVA-19), hit enemy positions in Military Regions One and Two as it continued its support of RVN forces.

VA-212 A-4 pilots struck enemy troop and truck positions 20-23 miles south of Quang Tri — observed three sec-

ondary explosions and one sustained fire.

VA-164 *Skyhawk* pilots dropped ordnance on enemy trucks .25 miles southwest of Quang Tri and hit enemy positions in the same area — one secondary explosion and three trucks damaged.

VA-55 pilots damaged a truck 23 miles west of Quang Tri and struck enemy tanks 24 miles northwest of Kontum — damage unobserved because of foliage.

April 25

Hancock stayed in the action as VA-55 struck automatic weapons sites 19 miles northwest of Kontum; VA-164 *Ghost Riders* swept in on a tank 24 miles northwest of Kontum and hit an enemy artillery position in the same area; and VA-211's *Flying Eagles* dropped their ordnance southwest of Quang Tri and on enemy gun positions and bunkers 36 miles southwest of Pleiku. Then the *Eagles* and *Riders* teamed up and rolled in on enemy positions east of

Kontum where they destroyed one gun position and eight emplacements.

April 26

Constellation's CVW-9 hit enemy positions in Military Regions Three and Four as VA-146 *Corsair* pilots destroyed two enemy anti-aircraft artillery sites and one enemy ammunition cache a mile north of An Loc and destroyed two bunkers and nine emplacements — two secondary explosions and two sustained fires.

VA-147 A-7's hit the same area destroying 11 emplacements and three bunkers — two secondary explosions and one fire.

The *Boomers* of VA-165 in A-6's dropped their ordnance on enemy positions 40 miles southwest of Saigon, destroying seven emplacements and a bunker — one secondary explosion.

April 27

CVW-9 pilots continued their attacks. The *Jasons*, VA-147, attacked positions north of An Loc and destroyed five enemy bunkers. VA-146 *Blue Diamonds* destroyed 14 emplacements and a fire base in the same area. VF-92 *Silver Kings* in their *Phantoms* destroyed a 23mm gun.

April 29

Constellation aircraft swept in on enemy positions around An Loc and the southwest portion of region four as CVW-9 continued its support of RVN troops.

Lieutenants Mike Bolier and R. H. Dilworth, VF-92, destroyed two fortified positions and heavily damaged four more north of An Loc — one large secondary explosion and one sustained fire.

Ten miles south of An Loc, VA-165 *Boomers* destroyed four bunkers.

Forward air controllers for VA-165 cited Lt. Butch Doty and his bombardier/navigator, Ltjg. Tom Mario, for dropping "the best bombs we have seen from a fast mover."

Teamed, VA's 146 and 147 dropped ordnance on positions at An Loc, destroying five enemy emplacements, two 80mm mortars and a 37mm gun site and counting four secondary explosions and one sustained fire.

April 30

CVW-9 pilots observed three secondary explosions as they swept in on enemy positions surrounding An Loc and, in strikes 60 miles west of Saigon, the wing counted two 51 cal. gun positions destroyed.

Midway (CVA-41) arrived and her CVW-5 pilots flew strikes against enemy positions 60 miles west of Saigon.

CVW-11 pilots from *Kitty Hawk* (CVA-63) dropped their ordnance in a 10-mile radius of Quang Tri — six secondary explosions, two secondary fires, three sustained fires and six emplacements destroyed.

A *Kitty Hawk* pilot reported "one coastal artillery site erased" as he flew against artillery positions near the mouth of the Cua Viet River.

May 1

HC-7 helo pilot Lt. Jim Spillman and his crew, copilot Lt. Bob Wright, AE3 Douglas Ankney and ADJAN Richard Baird, were launched in *Big Mother 65* from the deck of USS *Denver* to rescue a downed aviator 30 miles north of Dong Hoi. Lt. Mike Surdyk of VA-95 from *Coral*



Sea had ejected from his A-7 two miles off the coast when hit by a SAM.

In company with Lt. Spillman was Lt. Frank Pinegar in *Big Mother 61* with his crew, Lt. John Kennedy, ADJ2 Michael Frazier and ADJ3 Frank Snider. (Lt. Pinegar and his crew had recently picked up two AF *Phantom* pilots who had been shot down near Hon Me Island, five miles from the mainland.)

As Lt. Spillman neared the beach, he spotted the survivor, and dropped rescue swimmer Baird into the water. The *Sea King* then left the area while Baird prepared Lt. Surdyk for pickup.

On the helo's second approach, shore batteries opened

up — some of the rounds coming as close as 20 yards.

Returned to *Denver*, the rescued pilot, somewhat shaken but unhurt, was soon returned to *Coral Sea*.

On the same day, five Seventh Fleet carriers flew missions in all four military regions.

Kitty Hawk's CVW-11 hit region one. The *Aardvarks* of VF-114 in F-4's dropped their ordnance on enemy tanks, troops, gun emplacements and bunkers in a 10-mile radius of Quang Tri, destroying a command post and two gun emplacements. Then they hit a supply area one-half mile northeast of Khe Sanh.

VF-213's *Phantoms* rolled in on a coastal artillery battery in the southern half of the DMZ. The *Black Lions* also struck a supply storage area southwest of Quang Tri — two trucks and three secondary explosions. Then the *Phantoms* hit bunkers and supplies 15 miles southwest of Da Nang, reporting 20 secondary explosions.

The *Knightriders* of VA-52 hit troop and gun emplacements in the southern DMZ, and supply storage areas, gun and tank positions nine miles southeast of Dong Ha.

VA-192 *Golden Dragons* in A-7's struck troop, tank and antiaircraft artillery positions in a ten-mile radius of Hue. They also hit troop positions in a four-mile arc of Quang Tri — four secondary explosions, two sustained fires and six emplacements.

Dambusters of VA-195 struck enemy troop concentrations in a 10-mile radius of Quang Tri. The evaluation of their strikes was precluded by smoke and darkness but a forward air controller reported a secondary explosion and a sustained fire.

The squadron's *Corsairs* also hit an enemy truck park near Khe Sanh — nine secondary explosions and one truck damaged.

Fourteen miles west of Hue, *Dambuster* pilots observed one secondary explosion and, in the southernmost strike of the day, a bunker concentration 20 miles southwest of Da Nang was destroyed.

Corsairs, *Intruders* and *Phantoms* from CVW-9 struck enemy targets 10 to 20 miles southwest of Quang Tri.

VF's 92 and 96 *Phantoms* destroyed two trucks and damaged two others — four secondary explosions.

VA-165 *Intruders* destroyed two "stacks" of enemy supplies and VA-146 destroyed one truck and damaged another.

Constellation's aircraft also destroyed five emplacements, one ammunition storage area and three 130mm guns — three explosions and one fire.

A-4 *Skyhawk* and F-8 *Crusader* pilots of CVW-21 aboard *Hancock* struck targets in regions one and two.

The *Flying Eagles* of VA-212 hit enemy troops and tanks in a five-mile radius of Quang Tri and destroyed a 51 cal. gun position — three secondary explosions and one sustained fire.

The *Ghost Riders* of VA-164 destroyed six enemy emplacements ten miles south of Da Nang.

Pilots of CVW-15 rolled in on enemy positions in regions one and two.

Corsair pilots of VA-94 struck enemy positions 10 miles south of Quang Tri — destroyed two emplacements and bunkers and damaged one bunker.

Flying F-4 *Phantoms*, pilots of VF-111 dropped ord-

nance on enemy positions 45 miles northwest of Kontum, causing one secondary explosion.

CVW-15 pilots from *Midway* struck enemy positions in regions three and four. *Arabs* of VA-115, flying *Intruders*, hit an enemy position 50 miles southwest of Saigon near Se Dec while the *Vigilantes* of VF-151 and the *Chargers* of VF-161 hit enemy positions near An Loc.

VA-93 *Blue Blazers*, flying *Corsairs*, also attacked positions near An Loc and destroyed one enemy mortar position.

VA-56 *Champions* destroyed one machine gun position, several emplacements and set three secondary fires as they swept positions near An Loc.

May 2

CVW-9 kept up the pace as it struck enemy targets in the vicinity of Quang Tri and Hue. VA-147 struck supply routes 15 miles from Quang Tri, destroying 21 trucks, two highway bridges, one railroad bridge, and a 23mm gun position.

CVW-21 pilots flew against positions in regions one and two. Flying F-4's and A-7's, CVW-15 pilots struck enemy positions 15 miles west southwest of Hue where they damaged one truck and then swept in on positions 13 miles southwest of Quang Tri. They also struck an enemy supply route 40 miles southwest of Da Nang.

CVW-11 *Phantoms*, *Corsairs* and *Intruders* hit positions southwest of Quang Tri and were credited with nine secondary explosions — one truck damaged, one 23mm gun position destroyed, five fires set by their ordnance.

CVW-5 pilots from *Midway* struck enemy targets around An Loc and Phu Hoa approximately 30 miles northwest of Saigon.

Vice Admiral William P. Mack, Com7thFlt, commended the officers and men of *Hancock* as the ship left the line for Subic Bay, R.P.

"*Hancock* and CVW-21 have just completed a highly successful and important line period. You have flown over 2,400 sorties against vital enemy targets from the tip of military region four in South Vietnam to Than Hoa, 75 miles south of Haiphong in North Vietnam. . . . often flying more than 100 attack sorties per day.

"On April 15, in the midst of this demanding schedule, you celebrated your 28th birthday by doing what you were built to do. Though *Hancock* is older than 75 percent of her crew, she continually improves with age.

"Your exceptional professional performance under arduous conditions is indicative of a well trained, highly motivated crew.

"As you leave the line you can be proud of your many accomplishments during this crucial period of support to the Republic of Vietnam. Well done . . . and hurry back."

May 13

Two battalions of RVN's 369th Marine Corps Brigade were lifted behind North Vietnamese lines 24 miles northwest of Hue by helicopters from the Seventh Fleet Amphibious Force in Operation *Song Thanh* 5-72.

CH-53 and CH-46 helicopters from Marine Helicopter Squadron 164 aboard *Okinawa* lifted 1,000 South Vietnamese marines from a landing zone near Hue to another further north behind enemy lines.

May 15

CVW-21 pilots accounted for 20 enemy troops killed, 15 bunkers and six enemy structures destroyed and eight sustained fires and two secondary explosions during missions in regions three and four.

Pilots of VA-55 killed 20 enemy troops during a strike against an enemy location 40 miles north of Saigon. The *War Horses* also destroyed one enemy bunker and started two sustained fires at a supply storage area 65 miles north of Cam Ranh Bay.

VA-164 *Ghost Riders* hit enemy targets 25 miles north of Saigon and started six large sustained fires. They also attacked enemy positions 45 miles north of Saigon where they destroyed six bunkers.

VA-212 *Flying Eagles* destroyed eight enemy bunkers and caused one secondary explosion during an attack on enemy positions ten miles southwest of Saigon.

Checkmates of VF-211 bombed an enemy position 45 miles north of Saigon, noting a secondary explosion.

May 17

A Navy pilot assigned to CVW-9 aboard *Constellation*, was picked up by a rescue helicopter after ejecting from his *Corsair* 60 miles north of Dong Hoi.

Commander Thomas R. Wilkinson parachuted from his *Corsair* into the sea two miles off the coast after being hit by enemy AAA fire some ten miles inland. Wilkinson, C.O. of VA-147, was returned to the carrier where he was reported in "excellent" condition.

Pilot of the rescue helicopter, making his third recovery while under fire, was Lt. Jim Spillman, HC-7. Copilot was Lt. Bob Wright. Other crewmen were AT3's Herbert Curry and William Collins (who jumped into the water to assist the pilot). Spillman's helo, operating from the guided mis-

sile frigate USS *Sterrett* (DLG-31), received heavy enemy fire during the rescue.

Aircraft from *Constellation* tried to gain time for the rescue by bombing gun positions along the shoreline. The rescue operation took only 15 minutes.

May 18

MiG's in May for the Midway is the motto in the ready room of VF-161 and they made that motto a reality as two *Charger* F-4 *Phantoms* downed two MiG-19's 30 miles northeast of Hanoi.

Credited with downing the MiG's were Lt. Bart Bartholomay and his RIO, Lt. Oran Brown; and wingman Lt. Patrick Arwood and RIO Lt. Michael Bell.

May 20

VAdm. Mack commended the officers and men of *Constellation* as the ship left the line for Subic Bay, R.P.

"As *Constellation* and CVW-9 leave the line for a well deserved rest, I extend my sincere congratulations and appreciation on your historic, uniformly outstanding performance during the past 41 days.

"Returning to the line in early April, you conducted over 2,500 precision air strikes for allied forces in South Vietnamese military regions. . . . As one of the first units to be extended in WestPac to counter the current North Vietnamese invasion into the Republic of Vietnam, the men of *Constellation* and her embarked squadrons have done more than their share in the defense of U.S. objectives in Southeast Asia."

May 23

Vice Admiral James L. Holloway III relieved VAdm. Mack as Commander Seventh Fleet in shipboard ceremonies on board the command ship, USS *Oklahoma City*.



Crew of the HC-7 *Sea King* which rescued a downed pilot two miles off the North Vietnam coast: from left, Baird, Spillman, Wright, Ankney.



Two North Vietnamese PT-76 tanks and a truck were knocked out in recent air strikes. Same mission destroyed five tanks and damaged six.

Grease Spot Carriers



By Rear Admiral J. R. Tate, USN (Ret.)

Even before WW II, the Navy was feeling the shortage of flattops and the decision was made to experiment with the quick conversion of existing merchant ships to small carriers. This was a step back to the days of *Langley*, except now we had efficient hydraulic arresting gear and catapults. The planes were heavier and faster, but the modern gear would take care of that item, and the modern freighters had six knots more speed than the old *Covered Wagon*.

The Navy took over one of the Moore-McCormack freighters and converted her to USS *Long Island*. She operated in Chesapeake Bay, developing the plans for the class. At the outbreak of the war, I was in Sitka, Alaska, but in June I was ordered to command USS *Core*. The Navy had taken over a group of C3

hulls from the N5 shipping board and was converting them into escort carriers (CVE's). These ships were so-called Victory Ships — an 8,500-hp-gear turbine drove them at 18 knots. They were armed with a single 5"/51 rifle on the stern, four 40mm quads on the flight deck gallery and 20 to 30 somewhat frightening (we hoped to the Japanese) 20mm's. The air group was a nine-plane TBF torpedo squadron and a 12-plane F4F fighter-bomber squadron.

When I reported to Seattle-Tacoma Shipyard as prospective C.O. of *Core* there were C3 hulls all over the yard and their status was changing from day to day. (One day, ten were taken off the Navy list and assigned to the British.) *Core* was supposed to be 90 percent complete but it would be three months before commissioning. Plans

changed daily. My exec was an old friend, LCdr. Dusty Rhoades. He had already been at the yard a month and had, as he told me, "collected the best damn crew in the Navy."

Our crew were all survivors of *Lexington* and USS *Neosho*, both sunk in the Battle of the Coral Sea. They looked at this new collection of iron with a critical eye. There were many remarks, from "the little stinkpot of an engine" to "only five watertight compartments." They also had questions on the armament, etc. The mail censors reported the universal description of the ship as "grease spot carrier," and "if this box of bolts had been in Coral Sea, she would have been an instant grease spot." (It took a lot of talk of the mission of the CVE versus the employment of the CV to sell the CVE as a carrier.)



YEAR OF THE CARRIER

After several weeks with no visual progress on *Core*, I visited the Navy Yard at Bremerton where Captain Artie Doyle was preparing to commission USS *Nassau* (CVE-16), another C3 hull converted by the Navy Yard. Alongside *Nassau* was USS *Altamaha* (CVE-18), also a yard conversion. I found that she was almost completed and due to be commissioned the next week. Only a few officers and LCdr. Doc Pratt, her exec, had reported aboard. She had no crew and no one knew where or who the C.O. might be. Ten minutes on the phone with a friend in the detail office and I was assured my orders as C.O. of *Altamaha* would be cut within the hour.

I made a hurried trip back to Tacoma where I gave Dusty Rhoades a list of *Core* officers and crew and told him to transfer them to *Altamaha*. He exploded. I explained she was due to be commissioned and needed a crew NOW. At that moment, a yeoman arrived with my dispatch orders to *Altamaha*. Dusty gave me a hurt look. "So you go out and win the war with this *Altamaha* and leave me here to gather another crew. Why not take me, too?" I explained that Pratt had already reported as exec. (I saw Dusty several years ago and he still was bellyaching about the incident.)

The commissioning went off as planned. *Bogue* and *Altamaha* were scheduled for a 12-week period to test fire guns, load ammunition and stores, train the crew, and qualify the air group in carrier landings. This was soon shortened to four weeks.

We loaded ammunition and bombs in one day and, in two more days, loaded a pitiful amount of stores and spares. The material simply was not to be had. We finally got underway to run the degaussing range. This operation had just been completed when we received a message to go to Port Townsend and call the commandant by landline.

We arrived at Port Townsend and were directed to proceed with all dispatch to San Diego, embark the air group, proceed immediately to the New Hebrides and report to Commander, Southwest Pacific, Admiral William F. Halsey, for duty. We were told that a newly commissioned destroyer would soon arrive and escort us to San Diego. My protests that we



USS *Core* (CVE-13), fourth in her class, was typical of the merchant C-3 hulls converted to auxiliary aircraft carriers (ACV's). TBF's, opposite page, conduct carquals aboard USS *Nassau* in September 1943. Below, F6F's prepare to land aboard USS *Altamaha* in 1945.





Altamaha heads for India with badly needed P-51's stacked on her flight and hangar decks. The 450-foot flight deck normally accommodated 12 fighters and 9 torpedo bombers.

still had navy yard workmen aboard, that we had not done the structural firing of the guns, that we had only limited stores were all brushed aside with the terse "Get going."

The destroyer came in during the early a.m. after a struggle with the antisubmarine net, and a conference revealed he was in much the same state of unpreparedness that we were. His main item of grief was that he could transmit on TBS but could not receive!!!

We made up a hurried operation order for the trip to San Diego, put most of the yard workmen ashore and headed for sea. One of the points in the op order was that *Altamaha* would do her full power trials en route—cruising speed 18 knots!

The first night we were off the mouth of the Columbia River. There

were low clouds and intermittent rain squalls, and the destroyer was patrolling 2,000 yards ahead. Suddenly the TBS came on, "Enemy submarine fully surfaced on our port. We are attacking." This was followed by gunfire and depth charges. We changed our course to starboard and headed away—fast. The destroyer asked if he should stay and hunt the sub. We could not talk back to him and could only hope he would remember that our mission was to get to San Diego. However, while still in radar range, we did a 360 as a come-on. The next day, the destroyer joined up at a pre-arranged rendezvous. The rest of the trip to San Diego was uneventful. The air group was hoisted aboard. They had scrounged a few spare parts and these were soon stored away.

At a conference in the comman-

dant's office, we were informed we were to get underway the next day, escorting a 23-ship Dutch convoy at ten knots to Noumea in the Southwest Pacific, and then report for duty there.

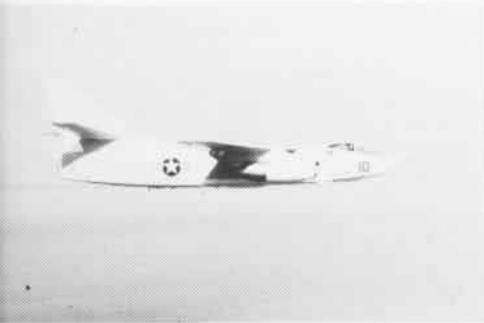
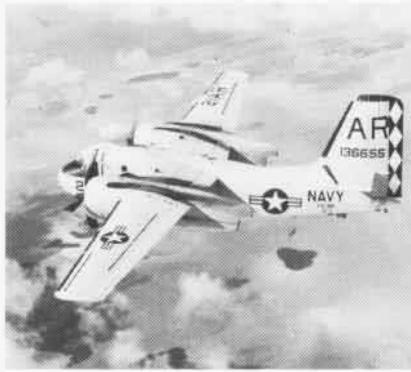
Our protests about our unreadiness only brought the comment, "Do it en route." The air group was not qualified for carrier landings and that would not be done without a plane guard. The request that we be given two days at San Diego for this was met with an adamant, "The convoy sails tomorrow."

After the conference, the commandant took me aside. "I know this is tough, but *Lexington*, *Wasp* and *Hornet* have all been sunk. *Yorktown* is sunk, *Enterprise* was damaged at the Battle of Santa Cruz and her forward elevator is jammed. *Saratoga* is all we have in SoWestPac and planes are badly needed. We are filling you up with not only your air group, but also all the F4F's you can carry—for replacements at Guadalcanal. They are urgently needed. You could not fly your air group even if they were qualified. Good luck." We loaded planes all night and sailed with the convoy.

A survey of the officer situation at this point revealed there were four regular Navy officers qualified to stand deck watches: the C.O., exec, air officer and navigator, a lieutenant survivor of *Nevada*. All the rest were reserves. The chief engineer had been the head of the municipal power plant at Milwaukee, Wisc., the gunnery officer was a Justice of the Peace in Florida, the damage control officer a Pennsylvania lawyer. Their enthusiasm was terrific and before we reached Noumea we had eight qualified watchstanders. Not only had the structural firing been done, but we had fired several target practices.

After delivering the convoy to Noumea, we were diverted to Espirito Santo where, at anchor and with catapults that had never been fired, we catapulted our entire load of F4F's for air delivery to Guadalcanal. Even the C.O. flew one off.

On our return to Noumea, as we passed through the net, we saw the red-lead-chipped *Sara*, the battered *Enterprise*, and *Nassau* (which had arrived a few days earlier). Artie Doyle sent us a message. "We tattered veterans of SoWestPac greet you and you



Aircraft Ferry Squadron Thirty-One was commissioned at NAS New York in 1943 as VRF-1. The East Coast ferry squadron is responsible for delivering worldwide more than 42 types of aircraft from the slowest helos to the fastest jets. Commander T. G. Higgins leads the Norfolk-based squadron.





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