

47th Year of Publication

DECEMBER 1965





NAVY UNIT COMMENDATION

'Carrying out over 10,000 combat sorties during a single cruise, the USS Coral Sea and her embarked air wing executed a series of devastating air strikes against military and logistic facilities in North Vietnam.

. . . The outstanding professional and technical competence, esprit de corps, effective teamwork and valor displayed by the officers and men of Coral Sea and embarked Carrier Air Wing Fifteen, were in keeping with the highest traditions of the United States Naval Service.'—Quoted from the Citation.





NANews is indebted to Ling-Temco-Vought for the shot of the A-7A, loaded with practice bombs, going through its paces. . . Above, Skyhawks from USS Coral Sea fly over Vietnam coast. . . Back cover was photographed by M. R. Loyd, PH2, of the U. S. Naval Photographic Center.



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NAVAL AVIATION NEWS

VMFA-122 Pilot is Cited Marine Aviator of the Year

Capt. Raymond R. Powell, Marine Fighter Attack Squadron 122, Third Marine Air Wing, received the World Trophy recognizing him as the Marine Corps Aviator of the Year for 1965.

The award, presented during the annual reunion of the First Marine Aviation Force Veterans Associa-



CAPT. POWELL STRAPS INTO AN F-4

tion in Louisville, Kentucky, is awarded in memory of Lieutenant Colonel Alfred A. Cunningham, the

first Marine pilot.

Capt. Powell was chosen for "outstanding contributions to Marine Corps Aviation," both as a test pilot at the China Lake Naval Ordnance Test Station and as an operational F-4 pilot. While assigned to NOTS CHINA LAKE, he was instrumental in developing the *Snakeye* missile.

Other recipients of the award include: Marine Colonels John H. Glenn, Michael A. Yunck and Thomas J. Ross. The selection of the Marine Aviator of the Year for the award began in 1962 after Glenn's flight in Friendship Seven.



VADM. THOMAS F. CONNOLLY, USN

AirPac Command Changes VAdm. T. F. Connolly Takes Post

Vice Admiral Thomas F. Connolly has relieved Vice Admiral Paul D. Stroop as Commander, Naval Air Force, U. S. Pacific Fleet. The change of command ceremony was held aboard USS Ranger while the attack carrier was moored at NAS NORTH ISLAND, San Diego.

Admiral Connolly assumed command of NavAirPac in what was also a retirement ceremony for Admiral Stroop. ComNavAirPac for three years, Admiral Stroop closed a 43-year naval career when he relinquished the command. He was a 1926 graduate of the Naval Academy.

Admiral Roy L. Johnson, CinC-PacFlt, attended the ceremony, as did Vice Admiral Paul H. Ramsey, DCNO (Air).

Formerly assigned to the Office of the Chief of Naval Operations in Washington, Admiral Connolly is now skipper of a command that extends over 85 million square miles and includes 60,000 officers and enlisted men, more than 3,000 aircraft, 14 aircraft carriers, and three seaplane tenders.

Another Trophy for Andrews Navy League is Donor of Award

The trophy case at Naval Air Reserve Training Unit, NAF ANDREWS, is bursting its seams.

The latest addition is the newest of trophies and awards given for excellence within the Naval Air Reserve Training Command, the Sheldon Clark Naval Air Reserve

Trophy.

The Sheldon Clark Trophy, a new perpetual trophy, was given the Naval Air Reserve Training Command by the Navy League of the United States. It will be awarded annually to the NAS/NARTU in CNAResTra achieving the highest combat readiness during each fiscal year.

The trophy, constructed from authenticated flight deck planking from USS *Enterprise* (CV-6) and USS *Franklin* (CV-13), has a ship's bell clock mounted to the base. It was named in honor of Sheldon Clark, past National President of the Navy League, 1940-1945.

Captain John B. Johnson, C.O. of NARTU Andrews, was present-



ANDREWS WINS FIRST CLARK AWARD

ed this award at the annual Navy League "Naval Reserve Awards Luncheon," October 14 in Wash-

ington, D.C.

Sharing a place of honor with the Sheldon Clark Trophy at NARTU Andrews are the Conway Trophy, CNAResTra's top award for the "most efficient" activity in the command, and five Noel Davis Trophies for the best squadron by type, all won during fiscal '65.

DOD Approves New Agency Reservation Service for MATS

An Air Force plan for establishing a single passenger reservation agency to handle air transportation for all military services has been approved by the Department of Defense. Responsibility for operating the new world-wide agency has been assigned to the Military Air Transport Service.

MATS assumed flight responsibility on November 1 for DOD passengers traveling from the U. S. to overseas points. According to MATS Operations officials, overseas inbound passenger reservations will be brought into the system later.

Under the single agency concept, passenger reservation centers are being set up at McGuire AFB, N. J., and Travis AFB, Calif., to take overseas-bound reservations. Centers spotted at key bases in Europe and the Pacific area will handle inbound and intra-theater reservations.

Although overseas centers have not been established, officials list Rhein-Main AB, Germany; Hickam AFB, Hawaii; Clark AB, Philippines, and Tachikawa AB, Japan, as probable locations.

Big man-hour and dollar savings are expected in the consolidation. The new system eliminates separate passenger reservation systems in each service and insures

maximum use of seats.

For the individual serviceman, perhaps the only unfavorable factor of the new agency is that it will reduce space available travel, as MATS will be stressing full aircraft utilization.

Home stations will continue to request reservations, issue orders, arrange domestic travel to the terminal and provide other services such as base clearance, passports and hold baggage shipment. The terminal, as either a MATS base or a commercial field will accept and process the passenger as usual.

NATTC's 'Best Teacher' Ream Field Instructor Cited

Richard E. Dreiling, AT1, has been named Schoolmaster of the Year during final competition held on Navy Day at Memphis, Tenn. Dreiling, an instructor at the Naval Air Maintenance Training Group at Ream Field, Calif., won the award with his 15-minute classroom lesson on the Theory of the Doppler Shift.

The contest is sponsored annually by the Naval Air Technical Training Command and the Memphis Council of the Navy League to officially recognize an outstanding instructor among the 3,000 attached to the command. The competition was originated in 1960.

The other finalists in the competition were J. K. Phillips, AMC, NATTC, NAS MEMPHIS, and G. C. Rule, ATC, NATTC BRUNSWICK.

Cash Awards to Military Useful Suggestions are Solicited

The President has signed a law authorizing cash awards of up to \$25,000 to military personnel for suggestions, inventions, or scientific achievements which contribute to the efficiency of government.

The suggestion form NavEXOS 12450/8 (Rev. 3-64), used by civilian personnel, may be used for submitting contributions by military personnel. Where these forms are not readily available, contributions will be submitted in writing to the commanding officer, identifying the originator by name, rank and serial number.

Carrier and Wing Honored Coral Sea, CVW-15 Arrive Home

USS Coral Sea and CVW-15 were honored on arrival at their home port, NAS ALAMEDA, November 1, with the first Navy Unit Commendation of the Vietnam conflict. The period for which the fighting units were cited was from February 7 to October 18, 1965 (pages 6-11).



SECRETARY OF THE NAVY Paul H. Nitze (L), on October 19 presented Commander Charles (Pete) Conrad (C), with his Astronaut Wings, the sixth Naval Aviator to receive them. Congressman G. P. Miller (Calif.), Chairman of the House Science and Astronautics Committee (R), attended the ceremony. Conrad and Gordon Cooper ended their eight-day Gemini 5 flight August 29 and were picked up by the USS Lake Champlain. (CVS-39).



MOVING SLOWLY past the USS Arizona Memorial, USS Coral Sea (CVA-43) leaves Pearl Harbor January 16, 1965, en route to join the

U. S. Seventh Fleet. Within three weeks, she is to be plunged into the conflict in Vietnam and held in the area for 81/2 eventful months.

CORAL SEA'S TIME OF BATTLE

A New Year can mean many things. For the officers and men of the USS Coral Sea (CVA-43) who went to the West Pacific last January, the year 1965 marked a time of battle. Operating in the South China sea, Coral Sea played an important role as a member of the Seventh Fleet's mobile carrier striking force.

From February to October, Coral Sea remained on duty in the area of conflict. It is a credit to the skill, experience and dedication of her maintenance forces that the nearly 20-year-old ship was able to operate through these months without a major equipment breakdown.

Goral Sea was a ship born of the battle experience of WW II. At her commissioning in November 1947, Secretary of the Navy, the Honorable John L. Sullivan, declared: "Goral Sea is the product of the hard school of war. Behind it are the accumulative skills of American designers, engineers and workmen."

Not until the middle '50's was there a larger carrier. With the building of the USS Forrestal (CVA-59), Coral Sea was outclassed in size. But her existence paved the way for the new carriers.

Then in 1957, Coral Sea went

through conversion. Her flight deck was lengthened, the angled deck was installed, two side elevators and three steam catapults were added. *Coral Sea* was recommissioned in 1960 and ready to go.

In 1965 Coral Sea, her crew trained and efficient, was to prove as she had in other years her right to stand high on the list of modern attack carriers.

Sailing from Pearl Harbor for the Western Pacific January 16, Coral Sea was sure of one thing; she was ready to go—and that right away.

Saturday, February 6, had been spent in a relaxing manner. She had been operating at sea from the time she left Pearl. Now she was steaming toward Manila.

That evening, movies were shown in all six ready rooms. Over the ship's closed circuit TV station, KCVA-TV, Lt. Ray Vasques was emceeing a TV bingo game. A few crew members stayed up late to watch the last movie on television. Others had turned in early in anticipation of liberty.

But at about 0200, the ship changed speed, reversed her course and steamed full speed away from the Philippines. Only a few people aboard the big carrier knew that something out of the ordinary had happened. There would be no liberty in Manila.

At 0612 (Saigon time) February 7, word flashed to Rear Admiral Henry L. Miller, aboard his flagship USS Ranger, to assemble all the units of Task Force 77 for a rendezvous at an appointed area. Coral Sea steamed full speed for the appointment. Preparations for a strike on North Vietnam commenced.

The pilots of Carrier Air Wing 15 were awakened and told to prepare for action. Below decks, ordnancemen assembled the bombs and rockets which had been quickly sent up to the mess decks from the ship's magazines. As quickly as the bombs and rockets were ready, Aviation Ordnancemen hung them on the strike aircraft which lined the edge of the flight deck.

At 1000, Captain George L. Cassell, Commanding Officer of USS Coral Sea, announced the situation to the crew over the 1MC: During the previous evening, guerrilla actacks against American bases in South Vietnam had cost the lives of several Americans and injured many more. In response, strikes had been ordered against military facilities in North Vietnam used



A CATAPULT officer shields his face against jet blast of a Douglas A-4C Skyhawk.



THIS SCENE was often repeated: inflight refueling. Gracefully skimming above the clouds, an F-8D Crusader gets ready to take on load of fuel from an A-3B Skywarrior.

by Hanoi for the training and infiltration of Viet Cong personnel into South Vietnam.

At 1240, the word was go! Pilots had been briefed and their aircraft were positioned for proper launch sequence on the flight deck. For the first time in her 18 years of commissioned naval service, the Coral Sea was about to fire her first shots in anger.

Precisely at 1500, little more than eight hours after the first word of trouble and just over two hours after the order to strike, Coral Sea's attack aircraft, led by Commander Hank Glindeman, Air Wing Commander, were in a bombing run over the Dong Hoi military complex. Coral Sea had entered her time of battle.

FOLLOWING her first strike over North Vietnamese territories, Coral Sea conducted strike after strike. Each meant additional planning and preparation.

As new targets were assigned by higher authority, the Air Wing Commander met with the planning board to study intelligence reports and photographs of the target area. It was this board which determined the ordnance and fuel loads required for each day's mission.

Ordnance-handling crews worked around the clock, assembling, fuzing and arming the array of weapons. Once assembled and delivered to the flight deck, bombs were hung on the aircraft.

On the morning of a strike, the flight deck swarmed with activity.

At the break of dawn, plane captains manned their aircraft for a daily pre-flight check. Soon after, the flight deck activity stepped up as the carrier's roof displayed the colored jerseys of crewmen.

Green shirts tested and checked the catapults and arresting gear. Fueling personnel, attired in purple jerseys, pumped fuel into the strike and support aircraft. Blue shirts pushed planes on order from the yellow shirts for last-minute changes in the launch sequence, and ordnance personnel, in red jerseys, hung the last bombs and rockets on the aircraft.

Before each day's launch in the squadron ready rooms, pilots were being briefed on formation lineups, navigation to the target, tar-



HUMAN REFUELING is not neglected as a commissaryman prepares steaks in galley.



NOR ARE spiritual needs ignored. Coral Sea chaplains hold religious services daily.



A BOXING MATCH is covered by the carrier's own closed circuit television station.



THE COMBAT Information Center, located between the flight deck and the hangar deck in the forward part of the ship, is the hub of

activity. Amid array of radar scopes, status boards and patched-in radio nets, the CIC Officer has full picture of the current situation.



FLIGHT DECK operations are timed almost to the second, so crewmen waste no time in getting RF-8A recon plane ready for launch.



ONE OF Coral Sea's A-1 Skyraiders is poised for the steam-powered launch that will thrust it swiftly down the carrier's 210-foot catapult.



COMMANDER A. C. O'Neal, air boss, has in Pri-Fly a ringside seat of the flight deck.



READY TO FIRE is the signal now being given by the deck edge catapult operator.



LANDING SIGNAL Officer talks to pilots returning from mission over North Vietnam.



LOADED WITH bombs, an A-4E Skyhawk of Attack Squadron 155 aboard Coral Sea banks and prepares diving run on Viet Cong outpost.



XOM CA TRANG bridge, 60 miles north of the Demilitarized Zone, lost its center span as a result of a direct hit with a Bullpup missile.

get details, rendezvous information, weather over the target, search and rescue assistance and recovery aboard ship after the mission.

About 30 minutes before every launch, pilots, laden with gear, left their ready rooms and manned their aircraft.

Ten minutes before launching, the tempo of activity increased. The sound of screaming jets echoed over the island structure while the spinning props of *Skyraiders* chopped into the wind, creating a nerve-racking whine.

When all the engines had been started, the tempo of the flight deck's orderly activities increased as aircraft were taxied to their designated catapults. One after another, the bomb-laden fighters and bombers straddled the catapults



CAPTAIN CASSELL, carrier C.O., talks with C.O. of replenishment ship during unrep.

and were thrust into the air.

Overhead, after the planes were shot from *Coral Sea's* flight deck, CVW-15 joined up and flew in formation to their assigned target. It was hot, dirty, sweaty work and it went like this day after day, night after night, for eight months.

Theoretically Coral Sea could remain at sea indefinitely (excluding major repairs) with the logistics forces of the Fleet providing her, through underway replenishment, with the necessary supplies required to keep her crew clothed and fed, her engines and aircraft fueled and her armories full of ammunition.

From January 16 through March 6, *Coral Sea's* engines logged over 1,200 hours of operation. Forty-five



UNDERWAY REPLENISHMENT, liteline of a carrier at sea for extended periods, plays important role in keeping Navy's ships at sea.



CORAL SEA breaks away from one of the Seventh Fleet's logistic support ships. Many ships kept the Coral Sea provisioned and ready.

of these hours were spent alongside Seventh Fleet support ships as CVA-43 was refueled, reprovisioned and re-armed. Serving her were six Fleet oilers, six stores ships and a fast combat support ship. Coral Sea received everything from fuel oil, aviation gasoline and ammunition, and machinery parts to food, clothing, candy bars and movies.



FIVE-HUNDRED- pound bombs are rolled quickly into hangar bay for temporary storage.

In her deployment to WestPac for the entire period, Coral Sea's thirsty engines gulped over 26,000,000 gallons of fuel with nearly all of it being transferred from Fleet oilers while the carrier steamed on station in the South China Sea. Aircraft from CVW-15 consumed more than 3,000,000 gallons of aviation gasoline and 15,000,000 gallons of JP-5. Nearly 3,000 tons of stores were transferred during the deployment as well as over 12,000 tons of ammunition.

A typical strike mission by CVW-15 was carried out in this sequence. The aircraft sped across the sea separating the carrier and North Vietnam. Strike leaders reported in via radio with an outlying radar picket ship and continued on their mission.

The first wave of the strike peeled from formation and dived toward the target, accompanied by flak-suppressing jet fighters. Diving in from another direction on the tail of the last jet pulling off the target, *Skyraiders* delivered their punch.

A third wave of jet bombers then



AFTER REPLENISHMENT bombs from ammunition ship will be sent to ship's magazines.

swooped in from yet another direction to empty their bombracks while jet fighters flew CAP overhead to protect them.

On the heels of the last bomber, an RF-BA Crusader photo reconnaissance plane, escorted by protective fighters, swept across the target to record the bombs' aftermath.

In the 20-minute interval over a large target, the airspace is saturated with some 50 strike aircraft, all diving on the target seconds apart from various directions. The ultimate in coordination and skill is required on the part of the pilots. At one time, they must fly their plane in a bombing run, dodge flak from the ground and avoid collision.

After their bombing run, the pilots rejoin and head for the safety of the sea. En route, they check each other's aircraft for hits and hung ordnance. Tankers, flying a pattern in their rendezvous area, await the return of the strike group for any planes needing fuel to proceed safely to their carriers.

Squawking IFF code as they streak overhead, strike leaders report their return to the outlying picket ship and continue to their carrier. Strike Control in Coral Sca's CIC furnishes the returning flight with any information requested and Pri-Fly controls the approach to bring them safety in.

Toward the last of the deployment, October 4, a milestone in Navy combat aviation was recorded when an A-4E Skyhawk from

CVW-15 logged the carrier's 10,-000th combat sortie.

The Navy light jet bomber, piloted by Ltjg. William J. Kish, was with a flight of *Coral Sea* aircraft that struck a supply area west of Vinh in North Vietnam. While on the mission, Ltjg. Kish dropped two 1,000-pound bombs and fired 15 *Zuni* rockets.

In addition to the combat sortic milestone, Coral Sea claims the Navy record for arrested landings. On October 2, the 63,000-ton carrier logged her 150,000th arrested landing, with USS Franklin D. Roosevelt, her East Coast rival, 6,000 behind that figure.

Even while Coral Sea was engaged in combat operations, aviation safety was not neglected. The ship was awarded the Admiral Flatley Memorial Award for safety during the fiscal year of 1965, so many months of which were spent on combat duty.

As the *Coral Sea* came home to Alameda in November, she could point with pride to the bravery, skill and perseverance of her officers and enlisted men. They may forget for a time how lonely, how long the months can be on a hot ocean far from home, but they know from this experience that it is not the size or age of a carrier that matters, but the quality of the officers and sailors who man her.



A FLIGHT of A-4E Skyhawks from VA-155 celebrates Coral Sea's 10,000 combat sorties.

New Rescue System Tested Skyhook Successful in Tests





NOT A BIRD OR A PLANE . .

A harness, balloon, rope and an aircraft have been successfully used in a simulated sea rescue. In tests off North Island, Lt. R. A. Carlson, FAETuPac, proved the feasibility of *Skyhook* by allowing himself to be neatly plucked out of the water at 140 mph. The system is capable of picking up survivors from a 10x10-foot jungle clearing.



RADM. WEYMOUTH, CAPT. BUNCE CONDUCT FINAL INSPECTION OF VW-11

NORTH ATLANTIC BARRIER ENDS

THE NORTH Atlantic Barrier had to make way for progress and on October 7, 1965, Airborne Early Warning Squadron 11 was decommissioned.

The Department of Defense announced the decision after technological advances rendered the barrier less crucial.

It was on August 26, 1965, that VW-11 completed the final patrol of the North Atlantic Barrier, the airborne seaward extension of the Distant Early Warning (DEW) Line. Crew Four, headed by Captain L. W. Bunce, Commanding Officer, logged the final mission and a record 81,233 accident-free hours.

As barrier aircraft 141312 taxied into the hangar, an informal ceremony began. Rear Admiral Ralph Weymouth, ComBarForLant, was on hand to greet the crew and congratulate the squadron on its excellent safety record achieved over a ten year span of continuous flight operations from NS Argentia. Captain Bunce cut the "last barrier" cake.

The last EC-121P assigned to the squadron was flown from NS ARGENTIA on September 8, 1965. On

that gray, misty morning, the Naval Station band was on hand to serenade the departing crews. Crowds of dependents gathered to watch the aircraft taxi for the final departure to the strains of "Sentimental Journey." Because the Willie Victor had been such an integral part of Argentia's mode of operations in varied weather conditions, many old hands experienced nostalgia as the aircraft departed.

While on her last flight, 141312 transmitted the following message composed by R. C. Moore, ATW3,

to Opcon Center:

"With fuel in her tanks and a tear in her eye; / She was ready for a takeoff, or at least for a try. / 'Twas her very last barrier; she knew this for sure, / And after this flight it was curtains for her. / With wheels in the well and throttles to the wall, / Off the runway she went, with a farewell to all. / She soon disappeared off in the west, / And then headed north over the sea she knew best. / Some say she's still there; we know that it's true, / Just flying the barrier, without any crew."

FOR UNERRING PERFORMANCE OF THEIR DUTIES

By William C. Fuchs
Flight Operations Division, DCNO (Air)

T THE AIR Traffic Control Asso-A ciation's 10th Annual Meeting in Los Angeles in October, the Air Traffic Controllers of the United States Navy Seventh Fleet were cited for their "unerring, imaginative, and indispensable performance of their duties and for dedication to their professions" (see back cover). To the some 110 officers and enlisted personnel now engaged on combat duty and to the 200 others who have had such duty in the Seventh Fleet during the past year, the citation highlights their unique service in time of conflict.

Each and every aircraft landing aboard aircraft carriers of the U.S. Navy wherever located in the world is a precise and delicate operation. Yet this is done so often that a high degree of pilot-controller proficiency is attained for daily safety and, even more important, to develop an air of routineness that will prevail for combat missions as well as for training missions. Such conditions of operation are now being conducted regularly by the Navy Air Traffic Controllers on duty in the combat environment of the Seventh Fleet operating in the South China Sea.

Air traffic control for aircraft carriers under normal peace time conditions is an exacting routine. Add a few factors such as battle damaged aircraft, hung bombs that the pilot cannot drop and no alternate landing platform available when weather closes in, then the controller in the Carrier Air Traffic Control Center (CATCC) has his hands full. These things can and do happen almost daily aboard Seventh Fleet carriers.

Wis very similar to that exercised ashore, it also has as its basic ingredients: departure control, en route control and approach control. However, the system ashore has a vast network of stationary airports, fixed navigational aids, landline communications and remote radars. At sea, the air traffic is not congested, but the control is just



SURFACE AND AIR contacts are plotted in Combat Information Center aboard one of the carriers of the Seventh Fleet. These men are part of the team that brings planes safely aboard.

as essential to the success of the mission, and must be accomplished entirely from within the aircraft carrier task force or from integral aircraft. The procedures used by the air traffic controller for achieving this control are similar among the three major aircraft carrier types—CVA, CVS, and LPH—but the equipment differs because of the difference in the operating characteristics of aircraft.

In order to effect the type of control needed, there are two centers within an aircraft carrier from which control of aircraft is provided, except when the aircraft is out of communication range or control has been transferred by the controller to another agency. These are the Combat Information Center (CIC) and the Carrier Air Traffic Control Center (CATCC). The CIC, as far as air traffic control is concerned, performs the equivalent of en route control while the full time mission of the controllers in the CATCC is to provide departure and approach control. While VFR operations are conducted from a visual cab on the carrier superstructure and by the Landing Signal Officer (LSO), all approaches, VFR and IFR, are radarcontrolled from CATCC until such time as visual contact is attained.

Procedurally, departure control of aircraft from a carrier normally follows a prescribed pattern, based on TACAN. This permits individual climb-outs on divergent radials, monitored by radar, permitting those jet aircraft which are required to rendezvous, to do so on top of the weather at a prearranged position and altitude. Once joined up and ready to proceed, a hand-off is made by the controllers in CATCC to the CIC mission director.

Approach control procedures for returning aircraft provide the most difficulty and place the greatest demand on the pilot-controller team skill. The environment consists of an airport with an elevation of about 80 feet and a runway about 600 feet long, but with an equivalency of 10,000 feet, considering the effectiveness of the arresting gear. Complete meterological services and search and rescue aircraft are available. Also the runway can be ori-

ented into the wind and the windover-deck can be controlled within limits, by adjusting carrier speed.

A returning jet is vectored by the mission director in CIC to Marshal, the equivalent of a holding fix, where control is transferred to the air traffic controller in the CATCC. At Marshal, the pilot commences a six-minute, left turn, holding pattern at a prescribed altitude and a given TACAN radial and distance. Marshal Points are oriented about the ship to conform to the predicted wind direction for landing. For jets this is normally on a relative bearing of 170 degrees to the ship's landing course at altitudes determined by adding 15 miles to the holding altitude assigned. For example, the first formation of jet aircraft might be assigned holding at 18,000 feet altitude with the Marshal Point at 33 miles, the next formation at 20,000 feet at 35 miles and so on until all jet aircraft are accommodated. Propeller aircraft are held at much lower altitude and on different radials and distance than jets. A normal Marshal Point for props is a 135 degree relative bearing from the ship's landing course.

Upon establishing communications with CATCC, the controller advises the pilot of the altimeter setting, weather and Expected Approach Time (EAT). At precisely his EAT, the pilot departs Marshal and starts a TACAN approach. His rate of descent is 4,000 feet per minute at 250 knots. Speed control is very important to allow succeeding aircraft to maintain a proper one-minute interval. At 5,000 feet the pilot reports "Platform" and decreases his rate of descent to 2,000 feet per minute, continuing toward the ship to a point ten miles astern designated the "ten mile TACAN gate."

On reaching this point, the pilot slows his aircraft to approximately 150 knots so as to pass through the six-mile gate in the landing configuration and ready in all respects to land aboard. During this portion of his penetration, the approach controller in CATCC has been providing constant radar surveillance information to keep the pilot close to the desired flight path and to correct deviations in interval be-



CITATION

Since the commencement of U. S. Navy attack carrier operations on 19 May 1964 in the area of Vietnam, the contributions of personnel of the Carrier Air Traffic Control Centers (CATTC) have singularly enhanced the overall effectiveness of the sea based manned weapons system, the aircraft carrier, a vital tool of our mighty Seventh Fleet.

In a control environment unique for change in climate and a spectrum of conditions unparalleled in modern warfare, the constant exercise of manifestly outstanding judgement. intuitive reaction, and skilled air traffic management has resulted in a safe, efficient, dependable all weather, round the clock, fully responsive combat weapon system.

The Pilot - Controller relationship in the Seventh Fleet is founded on the confidence that comes of proven ability to meet the myriad demands of wartime operations; the exactness of a night or foul weather approach; the urgency of damage or routinely low fuel state; the consequences of fatigue and the clutter of high cyclic sortic rates.

Air Traffic Controllers of the United States Navy Seventh Fleet have served with distinction in the finest tradition of their profession. In recognition of their outstanding service to our Nation, for unerring, imaginative, and indispensable performance of their duties and for dedication to their profession. The Special Medallion Award of the Air Traffic Control Association is presented with admiration and appreciation to:

THE AIR TRAFFIC CONTROLLERS

of the

UNITED STATES NAVY SEVENTH FLEET



President

October 13, 1965

IN A CITATION, signed by President Joel C. Bostian of the Air Traffic Control Association, the organization lauds the performance of the Air Traffic Controllers of the Seventh Fleet.

tween the preceding and following aircraft.

From the six-mile gate, the pilot gradually descends to 600 feet and is acquired on precision radar by the final controller. From this point on, corrections are given to keep each aircraft on the glide slope and lined up with the landing area centerline. At about 11/4 miles, the final controller instructs the pilot to commence his landing rate of descent, and very shortly thereafter he should sight the visual glide slope system. Once this visual landing aid is in sight the final controller relinquishes control to the Landing Signal Officer for the remainder of the approach.

It is inevitable that some aircraft will be unsuccessful in landing on their first pass at the deck, perhaps due to a wave-off, or because of a fouled deck by another aircraft slow in clearing the landing area, or because he has had the misfortune of just failing to snag an arresting cable, a condition known as a "bolter." In any case, the aircraft immediately reverts back to CATCC control, but now it has the potential of rapidly developing into an emergency due to low fuel. Certainly there is neither time nor fuel available to send him back to Marshal for another approach. The CATCC must now direct the aircraft back astern of the ship, in the waveoff/bolter pattern, and insert him into the flow of traffic on the six-mile precision final, without disruption of the other traffic in the approach pattern. These procedures are continued until all aircraft have landed or have been diverted, "bingo-ed," to an alternate ashore, if available.

The Air Traffic Control System of the Aircraft Carrier consists basically of the TACAN, Long Range Air Search Radar, Short Range Air Traffic Control Radar (ASR), Precision Approach Radar (PAR) and Communications. Other landing aids are the Visual Glide Slope, Speed Detection Radar and Television Monitor. Visual control positions are in a glass-enclosed cab where the "air-boss" observes and directs the overall air operations. and the Landing Signal Officer's (LSO) platform, where the LSO gives the pilot visual guidance and final direction to land or wave-off.

Two electronic landing systems are found aboard aircraft carriers today. Both of these are showing great promise of achieving their goal of all-weather capability. The first is the AN/SPN-35, used primarily on the ASW type carriers, and the other is the AN/SPN-10, now being installed aboard modern attack carriers. The SPN-10 is a sophisticated, precision system designed to operate in three modes, i.e., a talk-down mode, a cross pointer (ILS) glide path indicator mode, and a fully automatic "handsoff" mode. In the cross pointer and fully automatic mode, the radar is coupled to an analog computer and deck motion predictor. Outputs therefrom, in the form of error signals are transmitted to the aircraft by a data link and presented to the pilot on the cross pointer indicator, or coupled directly to the auto-pilot for fully automatic landings. The SPN-35 is basically a stabilized PAR used for providing a normal talk-down approach to prescribed minimums.

A few of the problems associated with shipboard precision approach systems should be noted. The foremost is motion. A ship, even one as large as a carrier, pitches and rolls about lateral and longitudinal axes. This necessitates stabilized equipment to prevent a glide path



RADM. W. I. Martin accepts plaque on behalf of Seventh Fleet Air Traffic Controllers.

that might resemble a corkscrew. Another problem is one of space. The margin for error in altitude and lateral displacement is comparatively small. An aircraft must pass over the approach end of the carrier flight deck with a hook to ramp clearance of about 10 feet, depending upon the glide slope angle. The aircraft must then land within 300 feet on most carriers or it will fail to be arrested. Laterally the tolerances are also small because the foul line demarking the landing runway from the aircraft parking area is only 50 feet from the runway centerline. Also, a 200foot structure, the carrier's superstructure or "island" as it is commonly called, rises only 100 feet to the right of the runway. These tolerances make carrier aviation a precise operation requiring the utmost in pilot and controller skills and man-machine relationships.

THERE ARE many constraints, problems and conditions facing the Navy's air traffic controllers and the designers of systems which make up their "tools-of-the-trade." These can be reviewed quickly by remembering the small size of the landing field, its constant motion, the mass launches and recoveries, the lack of alternates, the limited duration of aircraft in the wave-off and bolter pattern, the communication and control interfaces with other air traffic control of air defense systems world-wide, and the complete control environment that must be a part of the aircraft carrier, or

other ships or aircraft in the task force. All of these emphasize the skill, competence and professionalism required of the naval air traffic controllers as well as others in the team that makes Naval Aviation possible.

To accomplish this end, the Naval Air Traffic Controllers, both officer and enlisted, are required to meet the rigid standards specified by the Federal Aviation Agency (FAA) for certification. A great deal of emphasis is placed on this requirement by the Navy since the air traffic controllers alternate between afloat (CATCC) and ashore (RATCC, GCA, Visual Control Tower) assignments. When assigned ashore, the duties of the Naval air traffic controller are generally comparable to the FAA controller. However, when assigned afloat, there are additional and in many cases more demanding requirements placed upon personnel to qualify as air traffic controllers on aircraft carriers. Therefore, the Navy conducts its training and skill development programs along lines that will qualify the controllers in accordance with FAA criteria and also assure their capability to cope with the many situations and demands that are unique to air traffic control at sea.

When the carrier's brood is safely aboard and the control systems allowed to rest, we can look with justifiable pride to the outstanding contribution made by our seagoing air traffic controllers. There is a full measure of satisfaction in knowing that the Naval air traffic controller at sea or ashore, is a professional in every sense of the word.

Recreation Area Named North Island Honors Admiral

NAS NORTH ISLAND'S newest recreation area has been named "Admiral Stroop Field" in honor of Vice Admiral Paul D. Stroop who retired October 30 from the post of Commander, Naval Air Force, Pacific Fleet.

The facility includes two regulation softball diamonds and a picnic area. Admiral Stroop was a gymnast at the U. S. Naval Academy in 1925 and a member of the 1928 U. S. Olympic gymnastics team.

Vietnam Medal Requisites Eligibility Dates from July 1965

The eligibility requirements for the Vietnam Service Medal have been announced by the Chief of Naval Operations. Generally, all members of the Armed Forces serving in Vietnam and/or contiguous waters or air space since July 3, 1965, will receive the award.

Personnel are eligible after serving one or more days aboard a Naval ship or at a shore installation directly supporting military operations. Air crew members are eligible after one or more flights into air space above Vietnam and contiguous waters in support of military operations. Personnel on temporary duty must serve 30 consecutive days or 60 nonconsecutive days. The time limit may be waived for personnel participating in actual combat operations.





PARTLY concealed dragon on front of Vietnam service medal refers to subversive nature of the conflict. Reverse side shows the crossbow, ancient weapon of Vietnam, and the torch of the Statue of Liberty.



VADM. HEYWARD ACCEPTS SWORD FROM CHEVALIER'S SON FOR MUSEUM

CHEVALIER SWORD GIVEN TO MUSEUM

A SET OF NAVY wings of gold, a Naval Officer's sword, and a book of news clippings and photographs were all that Mr. Godfrey Chevalier of Detroit, Mich., had the past 43 years to remind him of his famous father, a man he never knew.

In simple ceremonies at NAS PENSACOLA October 5, Mr. Chevalier presented the mementos of his father, LCdr. Godfrey de Courcelles Chevalier, to the Naval Aviation Museum where they will be on permanent exhibition. Vice Admiral A. S. Heyward, Chief of Naval Air Training, accepted the gifts.

LCdr. Chevalier was born in Providence, R. I., on March 7, 1889, and was a 1910 graduate of the Naval Academy. He died Nov. 14, 1922, from injuries sustained in an aircraft accident near Norfolk.

As Naval Aviator #7, his illustrious career had numerous highlights. When the U. S. entered WW I, Chevalier landed in France with the first U. S. Armed Forces detachment in the country, Naval Aeronautic Detachment One.

Returning to the U. S., he served briefly with Naval Operations, Navy Department; aboard the Atlantic Fleet Flagship, and as C. O. of the Atlantic Fleet Ship-Plane Division at Mitchell Field, N. Y.

His next assignment took him to Norfolk for duty aboard the carrier Langley. When she was commissioned in 1922, he served as her senior flight officer. Less than a month after making the historic first flight from her deck, he was dead; but his pioneering efforts will live forever in the early annals of U. S. Naval Aviation History.



CHEVALIER, NAVAL AVIATOR #7

WITH THE MARINES IN VIETNAM

Ready on Arrival

Colonel William G. Johnson, USMC, stood on the bridge of the USS *Princeton* and watched some 1,400 Leathernecks of his command land on the beaches at Chu Lai.

Transport helicopters of the unit, MAG-36, took off from *Princeton's* flight deck in an endless stream throughout the day. No sooner had a chopper, loaded with equipment, supplies and Marines, launched into the wind than another UH-34D was raised from the hangar deck and moved into position. The helicopters, their rotor blades and tail sections folded, were moved into the takeoff circles, readied for flight, then airborne within minutes.

Nearby, other Marines moved from compartments below decks aboard two other troop-carrying ships, the USS *Comstock* and SS *Iberville*.

A strong wind whipped the South China Sea and the threat of rain loomed as they loaded small landing craft with additional cargo. The boats circled beside the ships and, on signal, formed into a skirmish line to streak to shore.

Taking in the beehive of activity, Col. Johnson said, "As far as I can tell, this is the first time an entire helicopter group has been shipped in this manner. We brought all



MEN OF MAG-36 set up housekeeping near the beach some 50 miles south of Da Nang. While tents go up, other Marines (background) come ashore from the USS Princeton.

that we need to stay and fight. We've got it all with us. This is the best trans-Pac I've ever experienced."

On the high ground overlooking the beach, the copters landed to disembark the aviation Marines. In the distance, small landing craft bobbed about as they crossed the surf line to put cargo ashore.

Tents were already going up in the makeshift city, new home for the MAG, while other Marines were still landing.

The work continued throughout the day. The mess hall had been set up earlier and by noon was ready to feed the hungry arrivals.

Foxholes were dug first and by nightfall the security guards were ready to spend their first night in Vietnam, alert against a VC threat while their buddies got some rest.

Units that came ashore with the group were Medium Marine Helicopter Squadrons 362, 363, 364, and Marine Observation Squadron Six with a detachment of HMM-462 heavy helicopters.

Welcome Aboard

Da Nang airfield's hospitality can be impressive. Two U. S. Navy pilots, diverted to Da Nang because of flight deck trouble aboard their carrier, know this to be true.

The *Phantoms* landed in the middle of the night and taxied to

the flight line of VMFA-513. Almost before the tired crewmen stretched out for naps, the following happened:

A team of Marines removed all ordnance from the jets. Another team climbed over the planes, checking out hydraulic, electrical and any other system which could malfunction. The two *Phantoms* were refueled and re-armed.

Five hours later, the jets were whistling off the runway on their way to the carrier, and the Marines who had provided the nocturnal hospitality were back working on their own planes.

Better than a Tent

The sandy, hot, expeditionary airfield at Chu Lai has a *Skyhawk* hospital. The new infirmary is a 40-foot-wide by 100-foot-long steel and aluminum shed. It is used only to treat sick *Skyhawks* of MAG-12. It's the first permanent-type building to be constructed at the field.

Though small in comparison with Stateside hangars, the *Skyhawk* hospital is a vast improvement over the tents formerly used as maintenance sheds. Finely grained sand wafted through them with impunity and, whenever high winds developed off the South China Sea, the tents themselves occasionally flew off, leaving their multi-million dollar patients stripped and bare.

The sand also presented problems to the Seabees who constructed the new hangar. Three-foot concrete blocks had to be stuck into the ground before a foundation could be laid or the entire building would slowly sink into the earth.

The size of the new shed also presented a construction head-scratcher. It was not deep enough to gobble up a *Skyhawk*, so the Seabees left a gap in the front door. Now, the patients sit in the clinic with their tails sticking out of the entrance.

Fire Fighting Victories

At Da Nang airfield with more than half-a-thousand landings and takeoffs every day or night, there are remarkably few crash fatalities. This is why:

The attack pilot radioed a Mayday. His plane had been hit by enemy fire, knocking out the hydraulic system. He would have to make a wheels-up landing. He had been wounded.

Within seconds, crash trucks sirened onto the runway. Some of them shot a blanket of thick foam over the concrete in order to reduce friction from the skidding plane. Others wheeled to pre-designated spots along the strip.

When it touched down, the plane slewed through the foam, coming

to a stop about 50 feet from a prepositioned truck. The crash crew was beside the aircraft before the anguished screech of torn metal subsided. A small fire broke out beneath the plane.

While Marine Cpl. Vern C. Hooper put his truck in position, another spray of foam suffocated the fire, the thick liquid coming from a turret operated by Pfc. Eddie L. Parham. This took care of the immediate danger.

While this was going on, another Marine, Sgt. John K. Walsh, climbed to the cockpit, released the wounded pilot and helped him into an ambulance. The entire operation took less than three minutes.

That kind of record is expected from a crew with a long title, Da Nang Aviation Crash, Fire and Rescue Squad. Usually this is shortened to Da Nang Fire Department.

Composed of almost an equal number of U. S. Marine and Air Force men, the department responds to more than 350 emergency calls a month. The fire-crash specialists are on duty 24 hours a day, in shifts, every combat day.

Crews are positioned at each end of Da Nang's runway at all times. Additional teams and equipment are able, on a second's notice, to move to designated spots. Where, depends on the type of aircraft.

A ramp patrol constantly roves

among parked aircraft, looking for fire hazards. Fuel spills, hydraulic leaks and other dangers are spotted and corrected before a possible explosion.

Because of this type of vigilance, plus instantaneous response to a Mayday, that attack pilot lived to fly—and fight—again.

Open Score

Military men often fear their combat statistics will get into enemy hands. But VMFA-513 has a set it wants the Viet Cong to have.

In the first three months VMFA-513 operated in Vietnam, it flew 388 missions or 1,091 sorties, 46 of which were alert scrambles. These flights accounted for nearly 1,500 flight hours against the Viet Cong.

More than a million pounds of bombs and rockets were sent into enemy positions. Scores of storage areas, tunnels and cave complexes, gun emplacements and trenches were also demolished.

Vagabonds on the Go

The Vagabonds are off again. After four months of fighting they are again on their nomadic way.

Vagabonds is the nickname of VMA-225 pilots. The Skyhawk jet set picked up the tag when they were deployed ten times to five different countries in less than a year.

When the Chu Lai airfield was opened, a VMA-225 jet was the first to land. At that time, the runway was less than half completed. The Skyhawks, which were also the first to fly combat missions against the VC, used a Morest system.

In four months, the squadron flew 2,076 combat sorties in such varied runs as helicopter escort, night radar bombing, close air support for ground operations and immediate scrambles to cover downed aircraft. The *Vagabonds*' 28 pilots won 155 Air Medals.

The ground crews weren't on vacation either. Most of the time, they worked under a hot sun and in wind-whipped clouds of sand. Yet VMA-225 averaged 91% availability.

Not a pilot was injured or an aircraft lost by enemy action while the *Vagabonds* were at Chu Lai. Now they are headed elsewhere. Only the VC is glad to see them go.



TO INCREASE their efficiency, the air crash crewmen at Da Nang, practice a foam drill on their few hours off. They respond to more than 350 emergencies a month.

'SORRY, YOU'RE NOT CARRIER QUALIFIED'

Editor's Note: It isn't often that Army helicopter pilots serve a tour aboard a Navy ship to receive Marine Corps training. That's why we elected to re-publish the following first person account of carrier qualification training by U.S. Army pilots. The account appeared in the October 1965 issue of the Army Aviation Digest.

By Captain Robert B. James, USA

T was a typical muggy morning on 15 May 1965 in Santo Domingo, Dominican Republic. Captain Gick was flying a UH-1B on a courier mission to the USS Boxer an aircraft carrier (Navy designation: LPH, Amphibious Troop Helicopter Transport) cruising somewhere off the shore of Santo Domingo.

As was usual procedure he called, "Buzzsaw Control, Feet Wet from Army." This time, however, the reply was different. Instead of a vector and distance to the ship, Buzzsaw stated they could not take him aboard. Quickly the question went through the crew's mind—why? After at least six trips to Navy ships, why was the pilot now told he couldn't land?

Could it be because an Army Aviator tried to pull pitch while he was chained down to a ship one day? Could it be because an aviator from another Army unit had landed against traffic when four CH-34 Marine helicopters were carrying slingloads to San Isidro Airfield, thus causing all four to go around? possible reasons went Several through the captain's mind as he made his landing at the main division pad. Immediately after he reported to the battalion S-3 and the assistant division aviation officer (ADAO), a check was initiated to find out why our aviator was refused permission to land. The reason given was that we were not carrier-qualified according to Navy standards and that we had violated their ground rules on different occasions.

The battalion commander then initiated a request to the Navy to have all his aviators given the necessary training to become carrier



qualified. Since an airmobile company from the 11th Air Assault Division was in Dominican Republic at this time, arrangements were made to have both the 82d Avn Bn and the 11th AAD company take the necessary training.

On 21 May, the first group was flown to the USS *Boxer* by the U.S. Marines stationed on the ship. We received a very friendly welcome from the operations officer and were taken to the wardroom for coffee and sweet rolls. This was the first food that did not come out of a can that we had received since we had arrived in Dominican Republic, and it was certainly a welcome sight to the aviators.

We then had a demonstration by the Marines on launching an entire flight. Later we found out that this was not a normal launching but a 50,000 accident-free hour flyby which we had observed. I must admit that many hours of formation flying were evident at this time.

We then toured the ship until lunch time, when we enjoyed some good Navy chow. This was followed by a thorough briefing by the deck officer of all signals, traffic patterns, Navy commo, formations, and assault waves used aboard ship. It is amazing how even a short briefing can bring out so many differences in SOP.

After the classroom briefing, the Marines again demonstrated all the maneuvers taught so that we might see them in actual practice. We then asked questions about anything we did not understand, had a cup of coffee and departed to shore.

The next two days, other groups had a similar experience, except for the 50,000-hour flyby, of course.

On 24 May, we were broken down in groups of four, UH-1B or D model helicopters, with two pilots aboard each. In the morning four aircraft went to the USS Boxer, and four to the USS Okinawa, a smaller helicopter carrier operating with the Fleet.

That afternoon and each morning and afternoon thereafter until 27 May, Army aircraft broke the peace over the ocean to advance into a new experience which may be beneficial to us in the future.

Training that usually takes weeks was completed in days. The carriers were cruising at distances from one mile to 20 miles offshore at all times and Buzzsaw Control would always give us a vector and distance to the ship. Upon arrival we were given a Delta pattern command. This means we were to circle the ship with left hand turns above 500 feet and generally were given assigned altitude due to a delay. We flew this Delta pattern for approximately ten minutes when we were given a *Prep Charlie* (prepare to land and given spot number on ship).

At this time letdown is made to 400 feet turning crosswind, 300 feet turning downwind, and 200 feet and 60 knots prior to reaching 180° mark. Upon reaching the 180° mark (a point just forward of touchdown point and approximately 300 feet off to side of ship), a relatively steep turn and descent is begun and a call at 180° point is made. If we are cleared to land, we then receive a Charlie. Upon reaching the 90° point, the turn should be completed so the aircraft is parallel to the path of the ship. At this time you are actually flying sideways and slipping toward the ship, which is generally moving 17 knots into the wind.

Since the landing spot is 60 feet off the water, particular attention must be made not to get too low. You should clear the side of the ship by 10 feet and slow sufficiently to come to a 3-foot hover over your

spot. A man in a yellow T-shirt called the LSE (Landing Signal Enlisted) gives all your signals. Careful attention must be paid to him because he gives two mandatory signals. One is waveoff (go around) and the other is hold (when on the deck). All other signals such as slow down, speed up, go left, right, or rearward, land, pick up to hover, and take off are given, but pilot discretion is used.

If the copilot is at the controls on any approach, the pilot must hold his arm out the window so the LSE can move into the copilot's sight

The most important difference between landing on land and on shipboard is that you should never watch the water. Vertigo will set in, and this could ruin your day.

From the 90° point, watch the LSE and your touchdown point only. With this in mind, you will find no more problem landing as you would on a large football field.

After landing on designated landing spot, the usual procedure for individual aircraft is for two deck men in purple shirts to attach four chains to the helicopter prior to its going to ground idle. The LSE will then give you a cut signal and a thumbs up or down. You reply on aircraft status and then cut engine.

In case of a wave landing (two or more aircraft in formation break), an LSE will be in front of each parking slot waiting for you.

When preparing to take off, the LSE will give the start signal. After you have reached takeoff rpm, he will give a tiedown remove signal to the tiedown man. These men will come in front of aircraft, holding two chains each in the air. You acknowledge by holding up four fingers. This is strictly a safety factor. You then get a hover signal followed by a signal to take off, usually on side of ship you are parked closest to. You must go to the side rather than front in case of engine failure. The carrier usually outweighs the aircraft and you could get the worse of the ram.

The requirement to become carrier-qualified calls for six day landings initially and two day landings every six months to stay current. Night qualification is also six night landings plus three night landings every six months.

Now we are carrier-qualified and can perform a new type mission for the Army. Although the carriers and Marines have moved out of Dominican Republic, we know that some day, for some reason, if we should have to work with the U. S. Navy again or if we are told we have an assault wave to a combat zone from a carrier, we have a feather in our cap. Current? Oh, yes, it will probably be a problem to stay current with the lack of carriers in the Aviation Battalion.







THE SIXTH FLEET has added another project to its roster of good will projects: the American Field Service Program. AFS has sponsored the exchanges of outstanding American students and foreign students in their junior year in high school. Upon the return of foreign students to their own countries, they have formed chapters abroad. Using these chapters as nuclei for invitations, the Sixth Fleet ships have made it a point to invite AFS returnees, American students studying abroad, prospective students and host families to tour ships in

port. This program has been carried out in ports in Italy, France, Greece, Turkey and Spain, and, according to Vice Admiral W. E. Ellis, Jr., Commander of the Sixth Fleet, is an "effective means of expanding the community relations potential in large population centers." At left, Rear Admiral R. L. Townsend, ComCarDiv Six, visits with an AFS member during a visit in Greece. Center, AFS students enjoy sundaes on USS Shangri La. Right, an officer on the USS Ault shows students about the destroyer, during visit to Cannes.



FIRST PUBLIC VIEWING OF THE CORSAIR II

T HE NAVY'S A-7A Corsair II, developed specifically for the attack role and designed to meet requirements of current national strategy for fighting any type of warfare, was unveiled to the public in Dallas, November 2, by Ling-Temco-Vought, Inc.

Center stage for a public viewing of a flight test, attended by ranking government, military and civilian officials, was the A-7A. The new craft combines the endurance and load-carrying capabilities of the propeller-driven aircraft with the simplicity and power of a fan-jet engine.

Secretary of the Navy Paul H. Nitze was the principal speaker at the Dallas ceremony. He announced that the Navy had exercised an option to buy a fourth increment of A-7A's. Already announced had been three initial buys totalling 42 aircraft.

The November 2 flight, with veteran LTV chief test pilot John Konrad at the controls, was the first public viewing of the powerful carrier-based airplane. It was also the first to come from the production lines of the Vought Aeronautics Division of LTV Aerospace Corporation.

Hanging from pylons under the plane's wings as it roared from the runway of NAS DALLAS were clusters of 12 Mk 82 inert bombs and six Mk 81 inert bombs, one of the several ordnance-carrying configurations the aircraft is capable of carrying. It can also carry two *Sidewinders*, one on each side of the fuselage, but these were not included in the November 2 exhibition flight.

A second aircraft, flying without external stores, demonstrated landing, takeoff, roll and high speed maneuvers for the crowd. A third A-7A was used to demonstrate maintenance and loading innovations. An LTV crew completely removed the engine of the display aircraft in less than 25 minutes in full view of the guests. Accessability of guns, electronic storage spaces and fueling stations was also exhibited on the outdoor ceremony's "stage."

Corsair II is the result of an evaluation, known as the Sea Based Air Strike Study, conducted in 1963 by the Office of the Chief of Naval Operations. In studying its air-strike system structure, the Navy



A PRODUCT OF MORE THAN 1,300,000 HOURS OF F-8 CRUSADER EXPERIENCE

determined that its current carrierbased light attack aircraft inventory did not meet its future needs in terms of payload range and mission flexibility (NANEWS, September 1964, pp. 6-9, "A New Approach to a New Aircraft.")

The Corsair II's design places a high value on invulnerability. It has an exceptional degree of protection for the pilot through cockpit armor, self-sealing fuel tanks in critical areas, a dispersal of airframe components to minimize damage from hostile fire and a provision for additional armor plate to protect all vital components for selected missions.

It can carry much higher conventional ordnance loads over greater distances than current jet light attack airplanes. It also carries a multiplicity of weapon stores, making it extremely valuable in accomplishing varying mission requirements over long ranges. Its long-range capability, however, can be traded off for reconnaissance time over the target area as land bases and/or carriers become available nearer the battle areas.

After his first flight in the Corsair II on September 27, LTV's Konrad, a veteran test pilot with more than 5,000 flight hours, half of them jet, in 180 different types of aircraft, expressed satisfaction.

"At high speed and low altitudes, the plane is quite comfortable and



DESIGN PHILOSOPHY PROVIDED FOR LOW MAINTENANCE REQUIREMENTS

is very much at home in that the pilot does not feel turbulence or excursions in the flight path to the degree that he does in other aircraft. Its turning capability is superior to the F-s *Crusader* which is saying quite a lot. It rolls faster subsonically, exceeding expectations The engine response looks good all the way, with no unusual characteristic at all."

Although the A-7A may bear

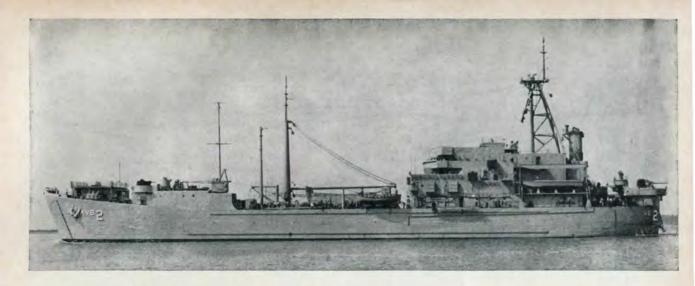
some outward resemblance to its predecessor, the F-s Crusader, it is an entirely new airplane. Konrad predicted it would give the Navy and Marine Corps what they are looking for in sturdiness, load-carrying capacity and long range.

In the A-7A program, maintainability was stressed. The Navy, coping with the problem of maintaining airplanes that keep becoming more complex as technologies improve, required LTV to meet all its performance objectives and, at the same time, develop an airplane that was easy to maintain and possessed a quick "turn around" time ability between missions.

Corsair II is powered by a Pratt & Whitney TF30-P-6 non-afterburning engine. This engine, of the 10,000-pound thrust class, is a twin-spool axial flow turbofan with full length fan ducting, giving it a high thrust augmentation and operational flexibility. It has a high compression ratio which, combined with its fan cycle characteristics, provides excellent fuel economies and gives the aircraft long range and target loiter capabilities. The A-7A carries 1,500 gallons of fuel in its internal tanks and can carry an additional 1,200 gallons externally for land-based and carrier-based operations.



'IMMEDIATELY RESPONSIVE . . . EXCELLENT . . . A WINNER'-JOHN KONRAD



NAVY'S INSTANT AIR STATION

To APPLY the term "instant" to an air station may seem to be an exaggeration, but in the case of the Tallahatchie County, three to four hours is practically "instant." Operating in the Mediterranean with units of the Sixth Fleet, the Tallahatchie County is continually ready at a moment's notice to drop her ramp anywhere along any coast and set up an air station that will be in full operation in less than four hours.

Recently working with VP-24 at Soudha Bay, Crete, the ship provided all the functions normally supplied by a permanently established naval air station, including full support of more than 300 squadron personnel along with her normal complement of over 250 men. Working with earth-moving equipment and 14 mobile vans, the ship set up an advanced air base that was used by the squadron under all weather conditions for three months.

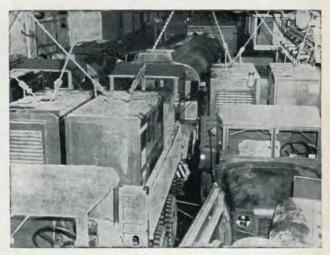
With an enviable degree of departmentalization, the ship deployed 14 independent vans as mobile as an American trailer home. Each was capable of doing a specific job. There were separate vans for meteorology and weather predictions, aircraft machinery repair, electronic repair, supply parts, and communications. The communications van served also as an air control tower.

While at Soudha Bay, working parties from the ship managed to paint most of the school. Commander J. W. Shute, Commanding Officer, presented encyclopedias and other reference books to the childrens' library. During a one-day cruise off the coast of Crete, 45 Hellenic Boy Scouts were hosted.

The USS Tallahatchie County (AVB-2), the only ship of its kind in the Navy, is based at Naples.



THE BULLDOZER is first off the ship. It is used to scrape a road to the ramp for the other vehicles and carves a runway, if needed.



VIEW FROM inside the Vehicle Storage Deck shows the fuel trucks, jeeps, and vans that are used to set up a fully operational strip.



WITH HER BOW section practically on the beach, USS Tallahatchie County can unload her cargo of men and materials on any accessible coast and set up an advanced base.



THE FIRST van set set up is Communications unit which also acts as the control tower.



WITHIN A MATTER of hours after landing, the base is operational. The hangar being constructed in the background is for future use.



ADEQUATELY covering all aspects of the situation, the ship carries necessary supply of aircraft fuel and the trucks to go along with it.



SHIP'S SIGNALMAN receives advice on hoisting pennants from 45 Hellenic Boy Scouts during one-day cruise off northern Crete.



COMMANDER J. W. Shute, Commanding Officer of Tallahatchie County, presents encyclopedias, other books to children of Soudha.

LAND-LOCKED 'ENTERPRISE' IS READY



THIS HIGH AND DRY FLIGHT DECK IS EXACT SIZE OF THE USS ENTERPRISE

WITH NEARLY all the pomp and circumstance of an official shipyard launching, the USS Enterprise (CVAN-65) was launched again at the Naval Air Test Center, Patuxent River, Md., on October 6. Well, not the Enterprise, but a single dimension representation.

Actually the "ship" is an outline of the Big E's flight deck superimposed on one of the Test Center's runways. Complete with a television set-up, varied types of night lighting, a landing safety officer's platform, arresting gear, and a mock-up island structure, it can duplicate most aspects of a carrier landing.

Following standard deck markings, pilots can expect a sharp tug by shipboard arresting gear within 300 feet after touchdown.

Work on the project began last year. A group of civilian project engineers in the Carrier Suitability Branch of the Flight Test Division conceived and developed the idea.

The television equipment, mounted on a stand, approximates the carrier's island structure. It will record each landing in order to point up defects or improvements that occur in each system under test. It will also help pilots to correct deficiencies encountered while landing.

The "Spin 10" (SPN-10) all-weath-

er carrier landing system installed at the site provides a complete hands-off landing for data-link equipped aircraft. This system also electronically simulates, into the aircraft controls, carrier deck motions that would be encountered at sea. The final approach to the unsinkable "ship" is made over an expanse of the Chesapeake Bay to further simulate a carrier approach.

The device itself was conceived and developed for the research, development, test and evaluation of



PRI-FLY FROM A 100-FOOT TOWER

carrier landing aids. Here the pilot /engineer teams experiment with new landing systems under controlled conditions.

Official christening ceremonies took place at the site when Mrs. William Carrier, wife of Captain William Carrier, Director of the Flight Test Division, wielded a champagne bottle. Immediately after the official launching, spectators were given a demonstration of the versatility of the equipment with launches and recoveries of an F-4 Phantom.

In addition, the "ship" will also be used for FMLP.

FAA and USAF Agreement Head for Single NOTAM System

An agreement calling for the immediate collocation and ultimate consolidation of U. S. Air Force and Federal Aviation Agency NO-TAM (Notice to Airmen) facilities and systems has been signed by the two agencies. This is the first step toward a single National NO-TAM System.

The Air Force operated USAF/USN Central NOTAM Facility has moved from Tinker AFB, Oklahoma City, Okla., to FAA Headquarters, Washington, D. C. The facility is now collocated with the existing National Flight Data Center, the central source for NOTAMS and other flight information issued by FAA. The Central NOAM Facility began operations at its new location October 22, 1965. The Tinker facility will remain open a while longer.

Both the FAA and the USAF/USN NOTAM systems will continue to function as separate units pending consolidation of the two into a single National NOTAM System. Final consolidation will depend largely on the availability of adequate telecommunications and computer services to handle the combined workload of the two systems. In the interim, both FAA and the Air Force will work towards increasing the exchange of NOTAM information between the two and developing common standards and procedures.

NAEC Cited by BuWeps Instrumental in Chu Lai SATS

The Naval Air Engineering Center at Philadelphia has received a letter of commendation from the Chief, Bureau of Naval Weapons, for its participation in the program that successfully established the expeditionary airfield at Chu Lai, South Vietnam (NANEWS, Sept. 1965).

Credit for the engineering development and installation techniques goes to the Naval Air Engineering Laboratory (Ship Installations), one of five laboratories under the command.

Short Airfield for Tactical Support (SATS) is a combination of portable components which together form a completely operational airfield that can be rapidly constructed on any flat terrain. These components include lightweight launching, recovery, and servicing gear for jet aircraft and 2x12-foot panels of aluminum matting that are so connected as to form the level runway surface.

The Naval Air Enginering Center is headed by Capt. A. H. Clancy.



CDR. D. J. DE BAETS, VRC-40 C.O., presents G. E. Joyce, Jr., AMS3, with new coveralls and wings upon his being designated a C-1A Aircrewman. The new work garb serves as a visible mark of his distinction.

Second F-111B off the Line Program Now Ahead of Schedule

The second U. S. Navy F-111B made its maiden flight from Grumman Aircraft Engineering Corporation October 24, seven days ahead of schedule. This raised to eight the number of variable-wing F-111 aircraft now on flight status.

The one-hour flight was made by Grumman pilots Ernest Von der Hayden and Ralph Donnell.



JIM SPRINGER WINDS UP NEARLY TWO DECADES ON STAFF OF NANEWS

NANEWS' ART DIRECTOR DEPARTS

FOR THE first time in nearly 20 years, Naval Aviation News is looking for a new Art Director. Stalwart upholder of high standards in the graphic arts, James M. Springer, with this issue, brings to a close his distinguished service to Naval Aviation.

Mr. Springer has had a varied experience as a free-lance photographer and has also devoted a great deal of his time to painting. During trips to Europe, he has visited some of the great galleries of art, particularly those in France and Italy. He and Mrs. Springer plan to take a trip around the world before settling in Florida.

Before he came to work on the News in April 1946, Mr. Springer had worked for the Bureau of Ships. He has therefore been an employee of the Navy Department for nearly 24 years.

Meeting with imagination the various requirements imposed on governmental publications, Mr. Springer has succeeded in making Naval Aviation News an outstanding example of modern graphic arts. In a contest, sponsored by the Federal Editors' Association, Naval Naval News was judged by three specialists outside government as "the best internal publication" in any government agency for 1963-64. No small credit is due

Mr. Springer's eye which could spot the good pictures, place them skillfully in terms of layout and somehow, by cropping or masking, make some pictures, otherwise poor, good enough for publication.

In all these years, Mr. Springer has never made a mistake in sizing, no mean record in a periodical that is in so large a measure pictorial. Again and again, the Navy has recognized the quality of Mr. Springer's work by citing him for Superior Performance and making monetary awards in recognition of his work, one of these a Quality Step Increase in salary in 1965.

By background and temperament, Mr. Springer is a meticulous artist. He has brought to his task not only imagination, but the special skills that accumulate through years of experience. And what he knows, he has shared, not only with the staff, but with young illustrators elsewhere in the Navy.

To Jim Springer, NANEWS owes the continued attention to detail, the elimination of "widows" (hangover lines of only a word or two), the careful design of facing pages so that they complement each other, and the unremitting emphasis on quality.

He now goes where all good art directors go—to work in oils.

PACIFIC AIR WINGS ON PATROL

Patrol Squadron One, commanded by Commander F. D. Armstrong, Jr., won the ComFAirWing Four ASW Totem Pole Award for the first quarter of the fiscal year. The competition is designed to test the over-all capability of each participating squadron to perform the varied missions required of patrol squadrons and their crews.

Areas covered in the competition included: weapons handling, ASW tactics, reconnaissance, aerial mine laying, rocket firing, and bombing. The award was presented by Commander Fleet Air Wing Four, Cap-

tain D. G. Gumz.

During ceremonies at Whidbey Island, Commander D. A. Lane, Commanding Officer of VP-2, received the Air Medal and Navy Commendation Medal. These were earned during the squadron's last deployment to Iwakuni and subsequent detachment to Vietnam.

J. M. Stackhouse, ADC, received the Secretary of the Navy Commendation for Achievement. As CPO in charge of ground support operations at Tan San Nhut near Saigon, he "worked under near primitive and always hazardous

working conditions."

Both awards were presented by Commander Fleet Air Whidbey, Captain Gumz. Other awards presented that day included 19 Navy Commendation Awards, four aircrewman wings and 10 Navy Good Conduct medals.

Seventy-one Air Medals were presented by Rear Admiral John W. Gannon, Commander Fleet Air Wings, Pacific, to officers and men of VP-9 during ceremonies at NAS MOFFETT FIELD. Although 110 men from the squadron were eligible for the medals, many of them were on flights away from Moffett and missed the ceremony. Others had been transferred.

The Air Medals were recommended for VP-9 by Admiral R. L. Johnson, Commander-in-Chief, U. S. Pacific Fleet, after the squadron returned from a seven-month deployment to southeast Asia. Each



CAPTAIN D. G. Gumz presents VP-2 skipper, Cdr. D. A. Lane, with an Air Medal.



MORE AWARDS as C. L. Fiene, AMS2, received Air Medal at a VP-9 special inspection.



C. M. BOSTIC, AO2, of VP-2, receives the Navy Commendation Medal from Capt. Gumz.

man who received the medal flew at least 20 combat missions into the Vietnam combat zone.

Two P-3A crews from Patrol Squadron 28 returned to Barber's Point from New Zealand after participating in Operation Longex with the Royal New Zealand Navy and Air Force. The two Orions, operating from Auckland, flew in round-the-clock flights with the Sunderland flying boats of the RNZAF Number 5 squadron.

Many RNZAF crewmen flew as observers in the P-3 Orion. They are scheduled to receive the Orion next year to replace their Sunder-

lands.

Vice Admiral John T. Hayward, ComASWForPac, flew to Auckland to address the crews assembled at the post-exercise critique. The *Hawaiian Warriors* then subsequently visited Wellington, Christ Church and Ohakea AFB to demonstrate the P-3A. Static displays and briefings were conducted in the capital city of Canberra, and in Sidney, Richmond and Townsville before the crews returned to Hawaii.

During a visit to Barber's Point, Rear Admiral Kazutomi Uchida and Captain Kazuto Yakushiji of the Japanese Maritime Self Defense Force (JMSDF) were briefed on the mission and performance characteristics of the *Orion*. Briefing officers for the occasion were LCdr. E. C. Copeland and Lt. D. S. Woodfore. LCdr. G. J. Sharp conducted a two-hour, in-flight demonstration of *Julie*, *Jezebel*, *Mad* and radar.

The Armed Forces Expeditionary Medal has been authorized for fight crew members who flew missions during the Tonkin Gulf contingency action in August 1964. 'Round-the-clock ASW protection was provided by VP-28 Neptunes while amassing a total 1,607 hours.

The squadron completed an extensive ORI in October after a week of mining, weapons delivery, reconnaissance and ASW sorties.

VP-17, commanded by Commander R. J. Sadler, logged over 2,700



LCDR. G. J. Sharp explains VP-28 Orion to Adm. Uchida and Coptain Yakushiji (JMSDF), and Cdr. L. C. Dobbs, ComASW ForPac staff.



CAPTAIN Gumz presents ComFAirWing 4 ASW Totem Pole award to Commander F. D. Armstrong, skipper of Patrol Squadron One.

flight hours in its first 60 days of deployment. Homeported at NAS WHIDBEY ISLAND under Fleet Air Wing Four, the squadron is under the operational control of Commander Fleet Air Wing Six at MCAS IWAKUNI, Japan.

While visiting Fleet Air Wing Six units, Rear Admiral R. M. Isaman, Commander Task Force 72, commended VP-17's maintenance personnel for their 90% availability record compiled while operating from detachment bases throughout WestPac and southeast Asia.

Patrol Squadron 48 culminated a six-month fund drive in September when the squadron delivered a new 21-cubic-foot freezer to the Casa Amiga de la Corera Mission in Tijuana, Mexico. The squadron, based at NAS NORTH ISLAND, has supported the mission since February 1965 with monthly contributions of food, clothing, toys, and money.

When it was learned that there were no provisions to store food needed to feed up to 300 needy children each day, the squadron initiated a drive to raise the money for the freezer. A contingent from the squadron, led by Commander W. M. Shaver, Commanding Officer, presented the freezer to Sister Maria Escobar, Mother Superior of the mission.

Patrol Squadron 19 set the pace for the Combined Moffett Field Charity Drive in October with 100% participation and an average contribution of \$4.69 per man.

Commander A. P. Lesperance, squadron Executive Officer, presented a \$1,456.00 check to Captain M. C. Friedman, Commanding Officer, NAS MOFFETT FIELD, the instant the drive began. The sum was collected entirely during VP-19's Alaskan deployment.

After returning from a six month deployment, VP-4's first major event was a change of command and full dress inspection. In ceremonies at Barber's Point, Commander R. T. Duncan, Jr., relieved Commander E. E. Bowen. The squadron's new Executive Officer is Commander C. M. Walker, formerly the Operations Officer.

During its deployment, squadron flight crews operated out of bases in Okinawa, Japan, the Philippines

CDR. W. M. Shaver and Carnes, ATCS, with Sister Maria Escobar at Tijuana Mission.

and South Vietnam. During this period, VP-4 brought the squadron total up to 60,000 accident-free flight hours.

While deployed to the Western Pacific, VP-46 brought the newest Deltic P-3's to WestPac in June and in the first four months amassed a total of 4,422.5 hours.

In addition to other tasks, the command performs the duties of Commander Okinawa Air Patrol Group at NAF NAHA. During offduty hours, the squadron managed to capture the NAF NAHA Softball Championship in September by defeating six other Navy and Marine teams. In other competitive events, the squadron won the championship in horseshoes and table tennis.

Two officers and 24 enlisted men of the Royal New Zealand Air Force arrived at Moffett Field in late October to begin training in the P-3 Orion. The training is carried out by VP-31, which has trained all Pacific Fleet P-3 pilots.

The group is led by Squadron Leader Stuart Smart who arrived in August as an advance liaison officer. Their training will be the same as that given to American pilots and crewmen. They will be trained in ground maintenance and operational flying.

This training is conducted in anticipation of a transition next fall from the Sunderland flying boat, flown since WW II, to the P-3

Orion. The contingent will train at Moffett until late spring.

VT-4 is High in Safety 56,360 Hours with no Accidents

Training Squadron Four, based at Forrest Sherman Field, NAS PENSACOLA, has flown 56,360 hours in the last three years with no accidents, a new record for jet training squadrons within the Basic Training Command.

As a result of this record, VT-4 received the CNO Safety Award and the Chief of Naval Air Basic Training Aviation Safety Commendation Plaque at a formal squadron inspection October 23.

Rear Admiral J. J. Lynch, CN-ABaTra, made the presentation to Commander C. E. Cantrell, C.O. of VT-4. Also attending the presentation was Commander A. B. Bliesener who commanded VT-4 from July 1964 to July 1965.

In making the presentation, Rear Admiral Lynch read a message of congratulations from Admiral David L. McDonald, Chief of Naval Operations.

First RF-8G is Delivered Miramar Squadron Makes Change

Light Photographic Squadron 63, NAS MIRAMAR, has received the first RF-8G. The new photo *Crusader* was flown from Dallas October 4 by the squadron's C.O., Commander F. E. Masek.

The RF-sG has a new and stronger wing spar, ventral fins for improved stability at high speeds, a new wiring system, and several electronic refinements.

The squadron will receive the first six a regard off the production line and others as they become available. After an adequate training program, the RF-sG will make its appearance aboard designated carriers in the Pacific Fleet.

Another Navy First Noted Test Jump from the Sabreliner

The first man to make a premeditated parachute jump from the T-39 was Lt. Raymond H. Bisbing, Senior Jumpmaster at the Naval Aerospace Recovery Facility, El Centro, Calif. The jump was made at the Facility's drop zone.

Lt. Bisbing's jump was made with the T-39 flying at 160 knots IAS (223 mph) at an altitude of 12,500 feet. Using a back parachute, he free-fell for 10 seconds before the barometric release, set for 10,000 feet, fired the automatic actuator and the parachute opened. Ten minutes later he was followed by P. J. Carr, PR3.

The aircraft then returned for another load and two more jumps were made by J. A. Capers, PR2, and E. L. McCall, Jr., PR2.

The jumps were made under a test program at the Facility established at the request of BuWeps for the purpose of testing the T-39's escape system. The program had



LT. BISBING MAKES JUMP FROM T-39

been tested only by dummies previously. Lt. Bisbing volunteered to make the first live jump.

New Device Aids Towers Routine Broadcasts Automated

Automatic Terminal Information Service (ATIS), now operating at 13 of the nation's busiest airports, is soon to be extended to another 59 airports. The continuous ATIS broadcasts ease controller workload, reduce radio frequency congestion and permit pilots to obtain routine non-control information when cockpit duties are least pressing.

The broadcasts relieve airport traffic controllers of issuing routine information repetitively to each arriving and departing pilot, thereby providing more time for actual control duties. Broadcasts are recorded on magnetic tape, giving ceiling, visibility, wind direction, barometric pressure, runway in use, and other pertinent data. Information is revised whenever conditions warrant.

FAA air navigation aids transmitting ATIS messages at the 59 new locations will be listed in the Airman's Information Manual and shown on instrument approach charts and sectional maps. The broadcasts will go out over voice channels of existing VOR's (Very High Frequency Omnidirectional Radio Range), ILS localizer voice channels and, in some cases, on separate VHF frequencies.

Arriving pilots, turning to the correct frequency, receive the information several minutes before initial contact with approach con-



FIRST RF-8G PHOTO reconnaissance Crusader, built for the Navy by LTV, makes its maiden flight from Dallas, Texas on August 31. Originally designated the RF-8A, it has undergone structural changes along with the addition of ventral fins, wing pylon stations, and new camera positions. The first flight was made by Joe Engle, LTV test pilot. Fifty-three of the Navy's photo Crusaders are being modified to the new configuration.

trol or the tower. Departing pilots get the information before leaving their gate positions.

de Florez Again Honored Device Center Unveils His Bust



RADM. GAYLER AND DE FLOREZ BUST

A bronze bust of Rear Admiral Luis de Florez was unveiled at the U. S. Naval Training Device Center, Port Washington, N. Y., October 23.

Admiral de Florez, who died in 1962, founded the Device Center in Washington, D. C., during WW II. After the war, the Center moved to the New York location. A noted scientist and pioneer in the art of developing training simulators, de Florez contributed greatly to the safe and rapid training of combat pilots, crews and other personnel. For his service, he received the Legion of Merit, the Distinguished Service Medal, the Robert J. Collier Trophy, and the Distinguished Flying Cross.

Sculptor of the bust is Wheeler Williams, N.A. Among those attending the unveiling ceremony were Mrs. Luis de Florez, Rear Admiral J. K. Leydon, Chief of Naval Research, Rear Admiral Noel Gayler, Assistant Chief of Naval Operations (Development) and Captain J. K. Sloatman, Jr., present C.O. of the Naval Training Device Center.

U.S.-U.K. Joint Effort Agree to Develop Lift Engine

The Minister of Aviation of the United Kingdom, Roy Jenkins, and the Secretary of Defense of the United States, Robert S. McNamara, have signed a Memorandum of Understanding approving a joint project for development of an ad-

vanced lift jet engine. The development work will be performed by Rolls Royce, Ltd., and a U. S. contractor yet to be chosen.

Engines of this kind are used for takeoff and landing of V/STOL aircraft. The development could have wide application to transport as well as tactical military aircraft, should it result in a significant advance in lightweight engine technology.

By collaborating, the U. S. and U. K. hope to achieve substantial savings in development costs, in addition to getting an engine incorporating the best of each contractor's technology.

The U. S. contractor will be selected on a competitive basis. The joint project is scheduled to begin early in 1966.

VR-3 Evacuates Civilians Pakistan War Zone Operation

Three VR-3 flight crews, homebased at McGuire AFB, N. J., took part in a MATS airlift in September that evacuated more than 1,000 persons from Lahore and Rawalpindi, Pakistan, and Kabul, Afghanistan.

Participating in an operation called "Nice Way," the 21 officers

and enlisted men flew the evacuees in C-130 Hercules aircraft to Teheran, Iran, and Istanbul, Turkey, over a three-day period.

Evacuation of U. S. civilians out of Pakistan was made on Sept. 15 and 16 during brief cease-fires. The VR-3 aircraft on this mission were commanded by LCdr. Bob Meglio and Ltjg. Barry Miller. The operation was completed Sept. 21 when a five-plane Navy-Air Force MATS team flew into Kabul and carried out 400 more Americans, mostly women and children. Ltjg. William J. McKenna commanded the Hercules involved.

RAdm. Smith Assumes Post Takes over NATC, Pax River

Rear Admiral Daniel F. Smith, Jr., relieved Rear Admiral James R. Lee as Commander, Naval Air Test Center, Patuxent River, Md., on Sept. 30, 1965. Admiral Lee retired after a 37-year Navy career.

Admiral Smith reported to the Test Center from duties as Chief of Naval Air Basic Training at Pensacola. He has served as Navy's Chief of Information, and Commander, Carrier Division Three. Admiral Lee took command of the Test Center in September 1963.



INTERSERVICE COOPERATION is typified by this scene. A Marine Corps UH-34D and an Army Huey copter wait for a visiting Air Force Skyraider to clear Qui Nhon's airstrip before lifting off for an assault strike. Marine Medium Helicopter Squadron 363 shares a living compound, various work areas as well as combat missions with a platoon of U. S. Army helicopiers and an Army transportation company whose headquarters are at Qui Nhon.

SELECTED AIR RESERVE



LOS ALAMITOS and Alameda pilots took turns on the catapult aboard USS Lexington in the Gulf of Mexico near Pensacola. The 16

aviators in two-week period claim new Naval Air Reserve jet record: 156 landings in A-4's while qualifying for day carrier operations.

New CNAResTra Takes Over

Rear Admiral Richard L. Fowler has relieved Rear Admiral George P. Koch as Chief of Naval Air Reserve Training. Admiral Fowler is the 12th Chief of the Naval Air Reserve Weekend Warriors.

Admiral Koch has assumed his new duties as Commander, Carrier Division Six, at Mayport, Florida.

As CNAResTra, Admiral Fowler is responsible for the 18 subordinate commands located throughout the country.

Admiral Fowler's most recent assignment was the command of Patrol Force, Seventh Fleet, and U.S. Taiwan Patrol Force, the naval component of the U.S. Taiwan Defense Command.

Reserve Pilots Carqualed

For only the second time since Korea, Reserve Naval Aviators have been carrier-qualified aboard the USS Lexington. The 16 pilots were able to do this during a regular training duty period. Ten were from NARTU ALAMEDA and six from NAS Los ALAMITOS.

The pilots who made up the training detachment were from five outfits: Los Alamitos squadrons



CAPTAIN William J. Scott, C.O., NAS Twin Cities, presents Robert J. Brancale, AD2, with a Navy and Marine Corps Medal for rescuing 80-year-old Oscar Osmandson of Mankato, Minn., during the spring floods.

VA-771, 772 and 776; Alameda squadrons 873 and 879.

During the training period, the Reserve aviators logged 156 traps, 27 touch-and-go's and six bolters. There were no accidents and the skipper of the USS Lexington commended the Reservists' proficiency. The 16 had engaged in 162 FMLP periods on the West Coast in preparation for the Lex carquals.

Carquals have not generally been part of the Reserve program because of the unavailability of deck space. These carquals were a token program to demonstrate that requalification of the average Reserve squadron can be accomplished within a two-week training period.

Two Trophies in Ten Days

Twice in ten days, NARTU ALA-MEDA captured an important command trophy. The unit first received the Chief of Naval Air Training Trophy for demonstrating the most improvement in training and readiness of Selected Air Reservists during the preceding fiscal year.



ON BOARD USS Enterprise, two of NARTU Norfolk's recruit school students receive special instructions by the Flight Deck Officer.



LT. JAMES BAKER, VS-752, wears new NFO wings and shows 4ND Rifle Trophy for 1965. His other trophies are on the table.

A few days later, the 450 officers and enlisted personnel assembled to witness the acceptance of the Naval Air Association Safety Trophy by their Commanding Officer, Captain Jim B. Bock.

The Naval Air Association is composed of officers and enlisted personnel who now are, or previously were, stationed or affiliated with Naval Air Reserve Units at NAS New YORK. The trophy was established in the interest of aviation safety.

Medal for a Daring Search

A Marine Corps helicopter pilot, who volunteered to fly into a Sierra storm on a night search for a downed helicopter and four men, has been awarded an Air Medal.

The decoration was presented to Capt. Jay Davis during ceremonies at NAS ALAMEDA. Capt. Davis is the Training and Safety Officer for the Marine Air Reserve Training Detachment at that station.

The downed aircraft carried three Marines and one newspaper man. Temperatures in the mountains were below freezing, and the missing men were without provisions or clothing necessary for survival.

Capt. Davis was accompanied on the night flight by his crew chief, Cpl. Robert A. Ashbaker, who also volunteered.

Flying at treetop level, the crew searched isolated canyons as the storm intensified. They searched as long as fuel permitted and returned to Alameda. The next morning Davis took off again and three hours later, spotted the four men huddled around a campfire near their wrecked helicopter.

Unable to land, Capt. Davis dumped out blankets and summoned other aircraft from Stead AFB to complete the rescue.

'Se Habla Espanol'

The fact that he spoke Spanish fluently made it possible for Merle S. Ramsey, AC3, of the NAS NEW YORK Floyd Bennett Tower, to be a key figure in an air/sea rescue.



CAPTAIN J. B. Bock, NARTU Alameda C.O., receives Naval Air Association Safety Trophy from Captain Richard Law (L). Alameda pilots flew 26,960 accident-free hours to win over 17 Naval Air Reserve units.

All involved in the three-way Coast Guard-Navy-FAA flight assist have been honored by the awarding of FAA "We Point with Pride" plaques recently bestowed.

The assist began when a Spanish-speaking student pilot reported he was lost. An attempt to steer him on a course to Atlantic City was unsuccessful because of his inability to communicate in English.

Ramsey established contact with the pilot and, in fluent Spanish, gave him headings and other pertinent data. A Coast Guard aircraft was dispatched to assist him.

Two hours of coordinated effort paid off as the student pilot was steered to a safe landing with his fuel almost gone.

Survival Training

A survival training program has been initiated by two squadrons at Los Alamitos. Under the supervision of the Assistant Flight Training Officer, LCdr. Larry O'Toole, VA-776, with the cooperation of HMM-764, undertook the first sea survival training drill of its kind at the air station.

Off Seal Beach, Calif., VA-776 pilots were "ditched and rescued" by crewmen of HMM-764.

"It takes skillful maneuvering and practice on both the part of the downed pilot and the rescuers to facilitate a quick, efficient rescue," said LCdr. J. W. Merrill, VA-776, one of the "victims."

AT SEA WITH THE CARRIERS



A COMMEMORATIVE plaque was passed along with ammunition from the ammunition ship USS Pyro to USS Coral Sea when CVA-43

became Pyro's 200th "customer" during operations in the South China Sea. The AE has transferred 8,350 tons of ammo to 7th Fleet ships.

PACIFIC FLEET

CORAL SEA (CVA-43)

LCdr. J. M. Snyder, VA-153 X.O., logged his 100th combat mission aboard *Coral Sea*, according to a report from the carrier. Another

VA-153 pilot, Lt. Howard P. Alexander, recorded his 300th arrested landing and his 100th combat mission before *Coral Sea* returned home from her fourth WestPaccruise (see story, pages 6-10).

BENNINGTON (CVS-20)

A VS-33 s-2 Tracker crew made arrested landing No. 86,000 for Bennington while the ship was off Vietnam. Setting the mark were Commander R. A. Schnorf, squadron X.O.; Ltjg. P. Schuyler; S. S. Ross, AX1; and T. F. Benbrook, AF2.

Captain Marvin E. Barnett, Bennington's C.O., reported his crew was suffering from a bad case of "channel fever" and a storage problem as the CVS headed for home with gifts stowed in almost every available compartment. In his last "family-gram" before Bennington arrived in Long Beach, Captain Barnett said Benn covered enough miles in six months to make two trips around the world, and used approximately 7,500,000 gallons of black oil and nearly 15,000,000 gallons of water. The embarked air



CATAPULT OFFICER gives the signal that starts the launch of an F-4B Phantom from the flight deck of Coral Sea. The carrier has returned home from the South China Sea.

group, CVSG-59, logged 4,062 arrested landings and nearly 3,000 helicopter landings.

BON HOMME RICHARD (CVA-31)

An F-s Crusader piloted by Ltjg. Geoffrey H. Osborn, VF-194, made Bonnie Dick's 118,000th arrested landing. Squadron flight navigation officer and LSO, Ltjg. Osborn is a double Centurion who has been awarded an Air Medal.

Another *Crusader*, this one piloted by Lt. David E. Cowles of VF-191, made No. 119,000.

HORNET (CVS-12)

As part of ASWGru One's ORI, three "unfriendly" submarines were assigned to locate and simulate sinking *Hornet*, the nucleus of the ASW task group operating off Hawaii. They were also to attempt to put landing parties ashore.

The task group commander, Rear Admiral Evan P. Aurand, dispatched his standard forces in response to the sub threat. Something more was nedeed, however, to prevent the landing of raiding parties. But what? The answer: Hornet's 50-foot liberty launch, painted white with a fictitious local fishing registration number on its bow, was lowered into the water at midnight to begin what was to be a nine-day adventure. Its 10-man crew, outfitted in civilian sports clothes, was to patrol likely landing sites on Maui and make reports to the ship by radio as needed.



MIDWAY Skywarrior releases a 500-pound bomb on a suspected Viet Cong position.



USS HORNET'S senior chaplain, LCdr. J. E. Thompson, is lowered to the deck of the Coast Guard weather ship Chautaugua for services.



NO ACCIDENT, but good acting, explains look of pain on Robert Reed's face. Robert Young looks on; filming was made in Kearsarge.



CNO, Adm. David L. McDonald, is piped aboard Midway during visit off Vietnam.

Patrol they did. Standing fouron, four-off watches, the *Hornet* men looked for tell-tale signs of submarines — periscopes, surfaced "goblins," and snorkels. Find them they did not. Even so, they were given the VIP treatment upon their return to the ship—and after a quick trip to the nearest freshwater shower.

The sportsmen-spies included Ltjg. Leonard F. Picotte, OinC; Larry L. Power, SN; Maurice E. Brown, SM3; Floyd I. Koch, ENFA; LCpl. Robert J. Fruge, Pfc. William M. Guy; William A. Bahanna, SN; Lloyd Lowden, HMC; Wiley W. Todd, BM2; and Kenneth G. Summers, QM3.

Hornet's 89,000th arrested landing was made by Ltjg. Robert N. Tanis, VS-37, in an s-20 Tracker.

KEARSARGE (CVS-33)

Filming of a coming TV show, "The Admiral," was made aboard Kearsarge while the CVS was at sea for a week of flight operations. Directed by Leon Benson, the hourlong drama about the Korean War stars Robert Young, Robert Reed, Warren Stevens, Russ Conway, and Don Marshall. Several CVS-33 crew members were also cast in roles.

CONSTELLATION (CVA-64)

Admiral David L. McDonald, Chief of Naval Operations, received a briefing on major alterations to Constellation when he visited CVA-64 at the Puget Sound Naval Shipyard. Constellation's skipper, Captain George H. Mahler, accompanied him on a tour of the ship.

HANCOCK (CVA-19)

Two sailors who visited Hong Kong during a tour aboard *Hancock* have joined a growing group of civilian and military good samaritans. They're providing a new life for two refugee children—on the installment plan.

For \$5 a month, Dale Jayne, MU1, and Bill Crawford, PH1, assure that the children are furnished food, clothing, and an education. They were able to "adopt" the youngsters, both from large, poverty-stricken families living in a village in the Chi-Wan sector, after they contacted the Catholic chaplain for the Serviceman's Mission in Hong Kong to see if they could help somebody in need.

Jayne, now a member of the ComNavAirPac Band, is helping Tak-on Yick, 7; Crawford, assigned to VFP-63, "adopted" eight-year-old Kim Wong. The Navy men are enthusiastic about this personal foreign aid program.

They urged other interested persons to contact Sister Marilyn Mar-



DURING Hong Kong visit in Hancock, Bill Crawford "adopted" refugee Kim Wong, 8.

tin, Maryknoll Missionaries Primary School, Hing-Wah Village, Chi-Wan, Hong Kong, B.C.C.

KITTY HAWK (CVA-63)

Rear Admiral Maurice F. Weisner relieved Rear Admiral Edward C. Outlaw as ComCarDiv One during a ceremony aboard Kitty Hawk while the carrier was berthed at NAS NORTH ISLAND. Rear Admiral Outlaw was bound for duty as Commander Carrier Division Sixteen.

TICONDEROGA (CVA-14)

Ticonderoga departed home port, San Diego, for a scheduled eightmonth WestPac deployment. It is the ship's seventh Far East cruise.

Tico is the first attack aircraft carrier to return to the South China Sea; she was in waters off Vietnam when the destroyers Maddox and C. Turner Joy were attacked by North Vietnamese patrol boats in early August 1964. Her aircraft were among the first to respond.

INDEPENDENCE (CVA-62)

In February 1963 the Navy accepted its first Grumman-built A-6A Intruder. In March 1964 VA-75 became the first operational A-6A squadron in the Fleet. And in September 1965, Commander W. B. Warwick and LCdr. W. L. Dunnam logged their 100th A-6A carrier landing to become the Navy's first Intruder Centurions. VA-75 is presently aboard Independence in the South China Sea; squadron pilots have flown over 400 missions.

A helicopter crew from HC-2 rescued a C-1A Trader crew from the South China Sea after their aircraft skidded off Independence's angle deck. The rescuers included Ltjg. D. C. Shelby, pilot; LCdr. J. E. Stophel, copilot; and Cecil W. Watkins, AD2. They saved LCdr. P. Scarlatos; S. S. Williams, ADC; C. P. Laforce, AD3; and A. E. Brown, AM3.



TWO HEADS are better than one for a safe helo landing made aboard USS Guadalcanal.

ATLANTIC FLEET

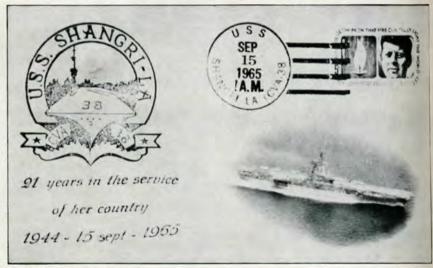
SHANGRI LA (CVA-38)

Commander James R. Foster, VF-13 C.O., was rescued by an HC-2 helicopter crew when his F-s Crusader sank after a "cold" launch off Shangri La during a fly-off held before CVA-38's Med cruise ended.

The rescuers included Lt. William A. Ayward, pilot; LCdr. Joseph E. L. Dugas, copilot; Charles P. Palmer, AE3; and Allan R. Wells, AD2.

INTREPID (CVS-11)

Norfolk-based Intrepid returned home after a six-month, \$10 million overhaul at the New York Naval Shipyard. The 22-year-old



21ST ANNIVERSARY cachet and cover cancellation, issued by USS Shangri La, made for a popular addition to many collections. D. L. Boyd, PH1, superimposed ship's photo.



USS INTREPID'S catapults are tested before the ship leaves the New York Naval Shipyard at end of six-month, \$10 million conversion.



FIRST A-6A Intruder Centurions, Cdr. Wm. Warwick and LCdr. Wm. Dunnam, stop for a photo after landing aboard USS Independence.

ship left New York almost 100 tons heavier than when she entered the yard in April 1965.

New equipment that helped account for the added weight included a 75-ton bow sonar, a centerline anchor, an automated supply data system, a pilot-LSO landing aid television system, and a Fresnel lens landing aid. Some 20,000 linear feet of wooden flight deck planking also was replaced.

ENTERPRISE (CVAN-65)

The Navy's only nuclear-powered aircraft carrier and the nation's newest attack aircraft carrier, USS America, were berthed side-by-side at Norfolk recently in a "meeting" that may not be repeated for years.

In October, Enterprise and the nuclear-powered guided missile frigate USS Bainbridge were permanently transferred to the Pacific Fleet, while the recently-commissioned America stays behind.

F. D. ROOSEVELT (CVA-42)

Rear Admiral F. G. Bennett, Commander of Cruiser-Destroyer Flotilla 8 in the Med, had his first F-4B Phantom ride when he flew "second-seat" with Commander L. E. Ames, VF-14 C.O., from FDR during Med flight operations. Admiral Bennett, non-aviator whose command is based aboard the cruiser USS Albany, took the ride as part of a review of F. D. Roosevelt's anti-air capability.

FORRESTAL (CVA-59)

Forrestal anchored off Genoa, Italy, for an 11-day visit, during which members of her crew celebrated her 10th anniversary.

Commander Fred Bromley, VA-83 C.O., received congratulations from Vice Admiral C. T. Booth, ComNavAirLant, after making Forrestal's 112,000th arrested landing in an A-4E Skyhawk. Vice Admiral Booth, on a tour of Mediteranean naval air facilities, was aboard CVA-59 when the landing was made.

LEXINGTON (CVS-16)

The 131,000th and 132,000th arrested landings aboard Lex were



WITH PLANES aplenty on the flight deck, USS Franklin D. Roosevelt steams in Med.

made within five days of each other. Lt. D. Kentopp and Ltjg. P. G. Eschauzier made the first in an s-2F *Tracker*; Lt. V. A. Kransniewicz, VT-27 instructor, and student pilot Ens. L. S. Baldwin set the second mark, also in an s-2 *Tracker*.

Frank Ventimiglia, MM1, has been named the Lexington's Sailor of the Year.

WASP (CVS-18)

Two ship's company officers stole a bit of glory from embarked CVSG-52 squadron pilots when they teamed up in a C-1A Trader to make Wasp's 61,000th arrested landing. Commander N. K. Donahoe, weapons officer, and Lt. L. T. Jackson, assistant navigator, were returning from a flight to Norfolk when they set the new mark.

Rear Admiral William N. Leonard, ComCarDiv 14 and Com-ASWGru *Bravo*, received the Joint Services Commendation Medal in a ceremony aboard *Wasp*. He earned the award for service as a member of the Joint Staff of CinCLantFlt during the Dominican crisis. Rear Admiral Magruder A. Tuttle, Com-Fair Quonset, presented the medal in behalf of Admiral Thomas H. Moorer, CinCLantFlt.

RANDOLPH (CVS-15)

Randolph and other ships of Task Group Alfa put on a complete ASW demonstration for 530 officer-students aboard for an indoctrination cruise.

THE ARCTIC



THERE ARE MANY DEFINITIONS OF THE TERM "ARCTIC". FOR SIMPLICITY'S SAKE, THE GOTH PARALLEL IS SET AS THE OUTER LIMIT. ALTHOUGH THE

ARCTIC IS THOUGHT OF AS A REGION OF ETERNAL SNOW AND COLD, IT EXHIBITS A DIVERSE CLIMATE. IN WINTER, GREAT VARIATIONS
IN TEMPERATURE OCCUR,
RANGING FROM ZERO
AT COASTAL
STATIONS, TO
AS LOW AS
-90°F. IN
EASTERN SIBERIA. THE
COLDEST EVER RECORDED
IN THE NO. HEMISPHERE
WAS -93,6°F. IN SIBERIA.

IN CONTRAST, THE COLDEST
TEMPERATURE EVER RECORDED
IN NORTH AMERICA WAS-81°F.
IN THE YUKON. TEMPERATURES
IN THE -40'S ARE NOT UNCOMMON IN NO MINNESOTA



IN THE SUMMER, MOST ARCTIC COASTAL AND ISLAND STATIONS EXPERIENCE. TEMPS FROM 50°F. TO 80°F. OVER THE PACK ICE, OF COURSE, TEMPERATURES ARE JUST ABOVE FREEZING. OVER CENTRAL GREENLAND, HOWEVER, THEY NEVER REACH THE MELTING POINT.

AN IMPORTANT FACTOR WHICH
GREATLY INFLUENCES WEATHER
IN THE ARCTIC, IS THE DURATION
OF SUNLIGHT. COMPLETE DARKNESS DOES NOT SET IN UNTIL
12 NOV AT THE POLE, AND ENDS
ON 30 JAN, THUS,



THERE ARE ABOUT BO DAYS OF REAL NIGHT. ABSENCE OF SUNLIGHT IS NOT AS GREAT A HANDICAP AS ONE MIGHT THINK. REFLECTION OF MOONLIGHT ON THE SNOW-COVER ADDS TO THE BRIGHTNESS OF THE TERRAIN. UNDER EXTREMELY FAVORABLE CONDITIONS, TRAVEL AND AIRCRAFT OPS. CAN BE CONDUCTED IN THE POLAR NIGHT.

NRL Scientists Honored Given Superior Service Awards

Two Naval Research Laboratory scientists were honored in October when the Chief of Naval Research, Rear Admiral J. K. Leydon, presented U.S. Navy Superior Civilian Service Awards to Robert E. Ruskin and Henry J. Mastenbrook for their contributions in the field of atmospheric measurements.

Although the problem of measuring water vapor in the stratosphere had been explored previously, Mr. Mastenbrook was able to achieve for the first time meaningful measurements above 50,000 feet. As the data on distribution of water vapor in the stratosphere are accumulated, the general circulation of the stratosphere, the radiation balance and the interchange between stratosphere and troposphere are becoming better understood.

Mr. Ruskin received his award for his work in the area of instrumentation and in the application of new methods of meteorological and atmospheric measurements. Some of the developments growing out of his research are a reliable frostpoint instrument for use on a bal-

loon to obtain water-vapor measurements in the stratosphere; a fastresponse and accurate total-watercontent meter for use in cloud physics research; and advances in methods for cloud droplet distribution measurements. His research in the field of air temperature measurement by aircraft has led to the use of the axial-flow vortex thermometer by the military.

Supply Officers Course Eleven Represent Ten Nations

Eleven Supply Corps Naval Officers from ten nations visited NAS Pensacola in October as part of the 1965 session of the Naval Supply Management Course for Senior Foreign Officers, conducted by Bu-Sanda. Senior officer in the group was Captain Vera of the Thailand Royal Navy.

The course provided training in Washington, D. C., Mechanicsburg, Pa., Bayonne, N. J., New York, Newport, R. I., Norfolk, Canada and Pensacola. The officers studied the latest techniques in logistics.

The schedule at Pensacola included a tour of NAS facilities and presentations by the Naval School, Pre-Flight, Naval Aerospace Medical Institute, the Photo School, VT-4 and the Naval Aviation Officers School.

Final phase of the course was held in Washington in November. Rear Admiral H. J. Goldberg, Chief of BuSanda, presented the certificates to the officers.

Memphis Honors Admiral Named 'Military Leader of Year'

On October 18, the Memphis, Tenn., Area Chamber of Commerce named Rear Admiral Allen Smith, Jr., the "Military Leader of the Year for 1965" for his "outstanding contributions to good relations between the civilian and military communities."

Mr. James M. Campbell, President of the Memphis Council, Navy League of the United States, made the award on behalf of the Chamber. Rear Admiral Smith is the Chief of Naval Air Technical Training. His headquarters are aboard NAS MEMPHIS.

PERSONAL GLIMPSES

Editor's Corner

Vignette on Centurionship. Each U. S. Navy aircraft carrier has its own Centurion club. Membership is given only to those Naval Aviators who achieve 100 landings aboard a carrier flight deck. How did the club get its start?

The following account was contributed by an original member of the club, Captain M. C. Norton, Jr., now C.O., of NAS GLYNCO:

"The USS Leyte (CV-32) was commissioned in Norfolk on April 11, 1946. Air Group 18 was her assigned group and was destined to spend the better part of two years aboard, commencing with the ship's shakedown.

"It was during the second Med cruise that the incident occurred which led to the formation of the Leyte Centurion Club. The ship was anchored in Golfe Juan, French Riviera, and we were being entertained royally. One of the most lavish parties given for us was that of the U. S. Consul General. Attending were such luminaries as Elsa Maxwell and the Duke and Duchess of Windsor.

"Commander Gus Widhelm was the Operations Officer on the staff, and all who knew Gus remembered that he could talk fast and long to anybody about anything. He was engaged in coversation with the Duke of Windsor (to which I was listening attentively). In the course of this conversation, the Duke of Windsor men-

tioned that in the Royal Navy there was an elite club of carrier aviators who had obtained 100 carrier landings of one type or another throughout their careers. We, of course, were unimpressed with the figure, since Gus himself had over 300 by this time and virtually everyone in the air group had well over a hundred. But the statement by the Duke remained on Gus' active mind and he posed the question to me: It might be interesting to know how many of our aviators have 100 landings on the same ship. We pursued the conversation with the Duke of Windsor and learned enough of the Royal Navy practices to know that they made a ceremony of the 'Century' landings and presented the aviators with some sort of memento of the occasion.

'Upon return to sea, we pursued this project promptly. A research of all the logbooks revealed that in the 14 months abroad, about a dozen pilots had accumulated over 100 landings on the Leyte. This did it! We were sufficiently elite, to warrant the formation of a club. The charter members selected the name 'Centurion' after consideration of such names as 'The Century Club,' 'The Hundred Landing Club' and others. We wrote a charter. Ltjg. Larry Lawton was talented enough to draw a certificate, and a shoulder patch was designed for wear by the members on their flight suits. We had a large wooden plaque built and mounted in the wardroom and the names of those first members were inscribed. This plaque was removed from the Leyte when she was decommissioned and given to the Breezy Point Officers Club, Norfolk,"

Captain Norton's recollections of the early Centurion group are verified in NANEWS, February 1948 edition, page 19. The 1948 story, however, said that the air group belonged to CAG-7. Listed as the first official Centurions were M. C. Norton, W. M. Gathje, L. W. Lawton, W. E. Longley, H. R. J. Drew, G. M. Watson, F. Julliard, Ben Park, C. M. Schindler, T. B. Russell, R. M. Beattle, J. K. Koelsch, E. D. Kimble, L. E. McFawn, C. D. Winner and M. W. Mount.

THE OLD AND THE NEW. Within days of each other, the letters came to the Editor's Corner. One announced the first flight of the LTV Aerospace Company's Corsair II, the attack jet known as the A-7A. The other was from LCdr. R. Cisternas Nellar, Second Attack Squadron, Argentine Navy, announcing the "near to end" operations of the prop Corsair of World War II legend. The Argentine Navy has been using the Corsair aboard the aircraft carrier A.R.A. Independencia.

Said LCdr, Nellar: "Within a short time leaves operational service in our Navy the finest fighter out of the second World War, the famous Corsair. As far as we know, the Second Naval Air Attack Squadron of the Argentine Navy is the last in the world to man this plane as an organized squadron. That means 25 years of service of freedom. We are sending, for this reason, the information about this surpassing life which are near to end."



PROP CORSAIRS OF WW II FAME ON 'INDEPENDENCIA'



ARGENTINE FIGHTER OFF ON 'NEAR TO END' FLIGHT

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and the second s	A	90	people')			Flatley (safety)	Sep	2
Air control changes sought	Dec	19	Good will in Philippines	Feb	18	Freedoms Foundation	May	24
Air controllers, 7th Fieet, Ched	Feb.	36	Namesake Underway training	Nov	37	Hopp, LCdr. Frederick	Jan	2
Air cushion vehicle	Nov	20	Lake Champlain (Gemini 5			Marine wins Chanute award	Feb	30
Air Force (Navyman qualifies in			Gemini 5 recovery	Mar	9	Navy League (flight training)_	Iun	25
C-141)			Gemini 5 recovery	Nov	21	Ney awards	Aug	36
Air Intelligence school, joint			Modern carrier organization Carriers in the Fleet			Presidential citations		
Air riding machine, SK-5	Oct	20	Communications Department	Sen	10	NAS North Island	Apr	38
Airborne early warning (E-1B)			Executive Department	Feb	14	NAS Alameda NAS North Island Safety trophy (NAATC) Sather, Ltjg. R. C. (DFC,	Mar	25
Airborne replenishment			Operations Department	Apr	15	Sather, Ltjg. R. C. (DFC,		
Air traffic control by automation	Aug	24	Supply Department	Jul	13	posthumous) Surgeon General's	Apr	19
Aircraft			Weapons Department	Nov	15	Surgeon General's	Jun	39
A-6 Intruder (VA-85)			Ranger (CVA-61) gets RA-5C Recovers downed helo			Hydraulic shop, lint-free (NORIS)	Torn	00
First flight			Return from Vietnam	Tul	10	Hydrofoil, Fresh-1 accepted	Jun	13
Public debut	Dec	20	Vietnam	May	18	Hydroskimmer tests (SKMR-1)		
C-2A (COD) Grumman	Jan	3	Shangri La (communications-			Insignia ruling changed		
C-130E Hercules (VR-8 main-			CATCC)	Sep	27			
tenance)	Mar	20	Chevalier mementos given to			J-K-L		
Canadian Tutor at Pax CH-53A (logistics data)	May	13	Chronology, 1964	Dec	15			
First flight	Uct	36	Chu Lai airfield built	Sen	10	Japanese weather network opens.		
First flight	Anor	6	CNO readiness through safety	och	10	Knapp, Cdr. William, dies		
F-4 Phantom (1000th accepted)	Sep	6	trophy	Nov	2	Landings on a round runway		
With Zuni rockets	Jan	C2	Safety winners, '65	Oct	2	Lewis (Donald) account of flight "Light Water" (helo delivery)		
F-8 (Dallas transition)	Mar	10	Coriolis acceleration platform			Logistics data for CH-53A		
F-111 (photo)			Corrosion, fight against			LOX manufactured at Sigonella		
Pictures	Mar	23	Crawford, Lt. W. R., MC, USN,	Nov	22			
Pictures Makes debut	Inl	11	honored	Iun	39	M		
Japanese WW II A7M2 pictures	Feb	22		3		The second second second second		
OV-10A 'COIN' (first flight)	Sep	20	D-E-F			MacDonald, Chief J. H.,	500	
Multi-service P-3's in Alaska	Apr	12	Davis family saddelay	Man.	10	commended	Jun	40
P-3's in Alaska	Oct	17	Davis family tradition DCNO(Air), change of command			Maintenance Blue Angels	Oct	
RA-5C (debut in Pacific)	Jan	20	E's ('65) announced			Mobility at NARTU Andrews		
SH-3A Sea King			Ellyson in Hall of Fame	Jan	10	Training Group, 5th anniversary		
Distance record Planning	May	8	Engine work sling (VA-75)			VT-5		
Planning	Mar	16	Enterprise, Jr., (Seattle)	Jul	29	Making of a flight surgeon		
TA-4E Skyhawk (hrst hight)	Sen	. 2	Exercise Silver Lance Fire fighting ("Light Water")			Marines (fly H-46 Sea Knight)		
VTOL transitions	Mar	24	Naval Research Laboratory tests			Aviation assault troops		
XC-142A (transition flight)	Jun	29	Flight deck crewmen	Nov	6	(Vietnam)	May	22
Antarctica (see Operation Deep	Mai	44	Flight deck pay approved	Nov	9	Rescue flood victims	Jan	12
Freeze)			Flight surgeon, making of			MCAS Iwakuni (ordnance		
Army pilots carrier-qualify	Dec	18	Flood victims, Navy aid to		29			36
Astronauts			Food (Bon Homme Richard)	Oct	31	Martin-Baker seat saves 1,000 lives	Int	23
Gemini 5 recovery by Cham-	Nov	21	Fresh-1 hydrofoil accepted			Medical buildings, Pensacola,	100	
Paris Air Show highlights	Aug	20				dedicated	Jul	25
Aviation Supply Depot (CH-53A)			G-H-I			Minnesota cities aided	Jun	6
Awards (see Honors and Awards)			Recovery	May	6	Missiles GMU-55 at Point Mugu	A	10
			Recovery	Nov	21	Phoenix unit passes test		
B-C			Gray Eagle Trophy (Mangrum)			Weapon system data revamped		
Battle of Philippine Sea memoir	Inn	15	Grissom, Maj. Virgil I (Gemini) Guantanamo Bay	Feb	19	14.446.14.14.24.14.14.14.14.14.14.14.14.14.14.14.14.14	-	
Barriers End	Jun .		Hands (Seventh Fleet)			N		
Atlantic	Dec .	11	Helicopter pilot, first, dies					
Pacific	Jul .	2	Helicopters			NAO's		
Blue Angels Maintenance			Copter for towing rescue boat	Jan .	25	Family tradition	May	10
Paris Air Show highlights	Aug.	90	Downed helo recovered (Ranger)	Man	10	New designators NASA seagoing expedition	May	3
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Carrier air traffic control	Sep .	27	CH-53A (planning for)	Mar	16	Naval Air Facilities		
Carrier-based AEW (E-1B)	Aug .	6	Logistics data	Oct .	36	Andrews (maintenance)	Jul	22
Carrier, aircraft	2		H-46 Sea Knight for Marines			Naval Air Stations		
AirLant E's awarded	Sep .	2	LH-34D Sea Horse (retrieved)			Brunswick (lights at night)		
America (commissioned) First cruise (deperming)			Versus Antarctica			Corpus Christi (Navy Relief) Dallas (transition to F-8)		
Bon Homme Richard (food)			Helmet for deck personnel	Mar	15	Ford Island (history)		
Plat	Aug .	22	Honors and awards	37500		Glynco (air controlman school)		
Radio-TV	Oct .	25	AirLant E's	Sep .	2	Memphis (programmed instruc-		
Coral Sea (CVA-43)			Biggs, Ltjg. G. E. (posthumous)				Jul	6
Time of Battle			Bomber Stream Charlie			North Island (copter mainte-	Let	
Vietnam Deck formations	May .	90	Britannia award ('64)	Sen.	25	nance) Hydraulic shop	Jul	24
Forrestal (10th anniversary)			Commendations; Marines in	ocp		Patuxent River (air show)	Oct	6
Hancock (Vietnam)				Sep .	12	Land-locked 'carrier'	Dec	24
Intrepid (AdMat inspection)_			Vietnam DAR for NavCads	May .	3	Land-locked 'carrier' Test pilot school	Mar	12

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Sigonella (LOX manufacture)_			Round runway, landings on	Mar	6	VT-5 (maintenance)	Aug	28	8
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Naval Training Device Center						Staten Island rescues copter	Mar	28	8
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Navy man qualifies in C-141			Schoech, VAdm. W. A.			Participation of the second of			
Nuclear blast effects			Seabees build Chu Lai airfield_			T-V			
1100000			SecNav on fighting front						
O-P-R			Seventh Fleet			Tallahatchie County (AVB-2)	Dec	22	2
0-1-K			Air power	Jun	20	Target drones (NOTS, China			
Oceanography squadron com-			Air controllers	Dec	12	Lake)	Jul	20	0
missioned	Sep	3	"Ship, ship, where is my ship?"	Iun	10	Tast pilots abroad	lan	19	4
missionedOil analysis	Jul	28	Sky lab: Navy applications	Jul	12	Calcal day of	Mar	15	9
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trieved	Mar	28	Squadron and unit insignia			ASW school at San Diego	Apr	2!	3
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Steel Pike	Jan	38	VA-106 Gladiators	Ian	C3	Test pilots abroad	Ian	14	4
Orions in Williwaw land	Oct	17	VA-115			TransPac deployment	Aug	16	6
Ordnance handling at Iwakuni			VAH-2	Dec	C3	Vertical replenishment (helos)	Feb	28	8
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Photo pilot: the unarmed fighter	Oct	20	VAW-11	Mar	C3	Vietnam conflict	May	18	8
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Radar, new tactical, Beaufort			VS-23			W-Y			
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Ramsey, VAdm. Paul H.	Mar	3	AEW Barrier Squadron (Pac)_	Mar	36	Weapons evaluation by VX-5	Sep	16	6
Rides SK-5	Nov	20	Decommissioned	Iul	2	Weapon system data revamped	May	14	4
Relief, flood (Navy and Marines)	Mar	18	VW-11 decommissioned	Dec	11	Weathergrams (O'Connor)			
Replenishment, airborne	Nov	11	MABS-12 (Chu Lai)	Sep	10	Arctic	Dec	36	6
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			ment)	Aug	16	Turbulence			
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Land-locked 'Enterprise' (Pax)	Dec	24	ment)	Aug	16	Weather radar	Aug	38	8
Oil analysis			VP-19 (Orions in Alaska)	Oct	17	WX satellite			
Probe after Gemini shot	Feb	13	VP-31, 40, 48, 50 (anti-				Apr	38	8
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Search helicopter with rescue			VR-3 (history)	Aug	18	Wings, Navy	Apr	20	0
boat		25	VR-7 Det. Alfa (Vietnam)			Whetstone, Marc, story	Jun	10	0
Spin room tests, Pensacola			VR-8 (Hercules maintenance)_			Williford, Cdr. J. R. (SH-3A)	May	8	8
Ultrasonic cleaning			VR-22 (move to Moffett)	Oct	2	Young, Lcdr. John	May	(6



THE GRUMMAN C-2A recently underwent CVS carrier suitability and performance trials at NATC Patuxent River. Scheduled for delivery in summer of 1966, it is designed to improve Fleet effectiveness by shortening logistical "pipeline time." The C-2A will carry high priority weapon system parts and supplies, deliver personnel and



retrieve badly-needed repaired items. The E-2A Hawkeye (R) is shown with AN/APS-111 radar and AN/APA-164 rotodome installed. This new system provides improved definition of approaching aircraft and reduction of ground clutter. The Hawkeye will make its first appearance with the Seventh Fleet by the end of this calendar year.

LETTERS

Kudos and Criticism

SIR: I would like to thank you for your excellent article in the October 1965 issue of Naval Aviation News, pp. 20, 21, describing one of our detachment's activities in WestPac. Our photo pilots do a truly outstanding job, but generally receive little credit for their hard work.

I take this opportunity to call your attention to one small mistake on page 20. This detachment belongs to VFP-63 instead of VFP-62.

J. B. STEWART, LTJG. PIO, VFP-63

Plaques Requested

Sirs: As you know, the Commissioned Officers' Mess at NAS ATSUGI, Japan, was totally destroyed by fire on April 30, 1965.

Among the losses sustained was a grand collection of squadron, ship and unit plaques—many of which represented now defunct units.

We are trying to rebuild this collection and have received several plaques from visiting squadrons. They are proudly displayed in our small but colorful temporary club.

Since your fine publication is read by so many of our present and past patronage, may I solicit your assistance in asking those outfits who wish to have their insignia on display at the Atsugi O Club to forward a plaque or a patch to: Mess Treasurer, Commissioned Officers' Mess (Closed), NAS Box 12, c/o FPO San Francisco, 96667.

T. H. CONLEY, JR., LT. Mess Treasurer



LT. GORDON HOFSTRA, F-4B fighter pilot of VF-101, had no trouble starting his Model T Ford after cars at NAS Key West were flooded with salt water. The other pilots, while frustrated, looked on in envy.

HMM-365 is Cited Again Battle Achievements are Noted

Marine Medium Helicopter Squadron 365 added another trophy to its collection when it was named winner of the "Commandant's Aviation Efficiency Trophy." Earlier in the year it won the Chief of Naval Operations' Readiness Through Safety Trophy.

The current award was given for outstanding accomplishment of all assigned tasks. The squadron flew 2,218 combat missions with a total of 11,641 hours of combat flight time during the fiscal year. They were also the first squadron to employ successfully an M-60 machine gun mounted on a UH-34 Seahorse.

NAVAL AVIATION FILMS

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

MD-7281FC (unclassified) Armed Forces Military Report No. 646—15th Century Idea Man. Story of Leonardo Da Vinci and his contributions in the area of military inventions, including the basic design ideas for land-sea-air. 10 minutes.

MH-9731A (unclassified) Marine Corps Air Control—Close Air Support. Operation of close air support within Marine Corps air control system. 28 minutes.

MN-9916B (confidential) UDT Operations—Delivery and Recovery (U). Methods of delivery and recovery of UDT men by surface, sub-surface, and air methods (U). 18 minutes,

MN-10003A (unclassified) Naval Aviation Safety Program—Safety is Your Business, Description of Naval Aviation Safety Program, 28 minutes,

MN-10003B (unclassified) Naval Aviation Safety Program—The Big Payoff. Relation of aviation maintenance personnel to the Naval Aviation Safety Program. 19 minutes.

The following films have been reactivated:

MN-9456A Aircraft Familiarization— HSS-2. Pilot and crew familiarization for the HSS-2 (SH-3A) helicopter.

MN-9456B Aircraft Familiarization— HSS-2. Automatic flight controls, basic instrumentation, and flight procedures for the HSS-2 (SH-3A) helicopter.

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



SIMULATED COMBAT maneuvers in the Caribbean prepare U.S. Marine Corps CH-46A Sea Knight pilots to carry out the Marines' vertical envelopment tactic. The Boeing-built helicopters operated from the USS Okinawa (LPH-3). Participating in the maneuver and operating the Sea Knights is HMM-265 from MCAF New River, N.C.



A typical assault mission begins when 17 fully equipped Marines board each of six Sea Knights on the deck of the Okinawa. As they take off and head for shore, flight deck crews are already wheeling a second wave of helicopters into position. The cargo they carry consists of additional troops, artillery pieces with crews and ammunition or vehicles.





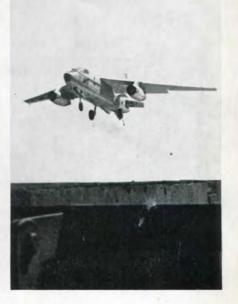




When Heavy Attack Squadron Two arrived home from an extended cruise aboard USS Coral Sea, it had been away from Whidbey Island since December 1964. Led by Commander R. M. de Lorenzi, the Royal Ramparts concurrently celebrated their tenth anniversary on their arrival home. The squadron is flying A-3B's.









AWARDED TO
THE AIR TRAFFIC CONTROLLERS
UNITED STATES NAVY SEVENTH FLEET
IN RECOGNITION OF THEIR HEROIC SERVICE
TO OUR COUNTRY DURING CONTINUING
HOSTILITIES IN THE REPUBLIC OF VIETNAM
1965