NAVAL AVIATION NEWS

46th Year of Publication

MARCH 1965

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ASW'S MOST IMPORTANT ELEMENT

"There is a placard which hangs in the submarine school at Groton: 'The basic element of military capability is man—individual man—with his personal dignity and his pride. No matter what machines, what weapons evolve, they will be the product of man. Man will maintain them, and, above all, man must control them.' This has a very real application as we consider the impact of ASW programs. The individual is the most important element in the entire anti-submarine warfare effort." — Vice Admiral Charles B. Martell, Director of ASW Programs.

NAVAL AVIATION NEWS

FORTY-SIXTH YEAR OF PUBLICATION MARCH 1965

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Front cover displays a C-130 of Fleet Tactical Support Squadron 21, photographed in flight over Honolulu by Donald R. Parks, PH2. Above, an A-4 Skyhawk, belonging to CVSG-53, is silhouetted in the sun on the flight deck of the USS Kearsarge (CVS-33).

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NAVAL AVIATION NEWS

RF-8A's are to be Modified

53 Crusaders will be Modernized

The Navy has contracted with Ling-Temco-Vought, Inc., to overhaul and modernize 53 RF-8A photo *Crusaders*, a move which will expand the aircrafts' reconnaissance capabilities and extend their service life. The 24-month conversion program calls for a large percentage of RF-8's to be sent to the company's Dallas plant for changes.

Five of the planes were partially converted last year when ventral fins and a beefed-up wing were installed on them. In this fiscal year, 15 aircraft will be modified. The remainder are scheduled for conversion in the following year.

Under the program, ventral fins and the strengthened wing will be incorporated along with fuselage structural reinforcements and a new, molded harness electrical system. After modification, the planes will be redesignated RF-8G's.

A new navigation system and provisions for improved cameras will increase the aircraft's mission capability.

Units Win Safety Trophy

VT-21 and VT-24 Honored Jointly

Training Squadrons 21 and 24 have been named dual winners of the Chief of Naval Air Advanced Training Annual Aviation Safety Trophy for 1964. It is believed to be the first time two *Cougar* jet squadrons have flown a full year with no accidents.

VT-21, based at NAAS KINGSVILLE, Texas, chalked up 20,573 flight hours and graduated 121 basic jet students. VT-24's totals were 19,873 flight hours and 114 students graduated. VT-24 is based at NAAS CHASE FIELD, Beeville, Texas.

Rear Admiral F. A. Brandley, Chief of Naval Air Advanced Training, awarded the following citation, with the trophy, to each squadron: "For outstanding achievement of Naval Aviation Safety and accident prevention while engaged in training of student aviators in F-9J jet aircraft during 1964."

Commander Edmund B. Titcomb commands VT-21 and Commander Loran C. Parry is C.O. of VT-24.

A-NEW Ends Its First Year

New ASW System Proves Reliable

Weapons System Test (WST) at NATC PATUXENT RIVER has celebrated the first year of testing the advanced ASW system, A-NEW.

The integrated avionics system, installed in an NP-3A flying test bed, was designed to improve ASW operational capability and maintainability of the system itself. In its first year, the A-NEW crew flew 625 hours of ASW flight tests, despite a six-week installation improvement period in June and July.

Of the 625 hours, 150 was accomplished on actual submarine exercises in the Norfolk, Bermuda, Key West and Charleston operating areas against both conventional and nuclear subs.

Commander E. C. Waller and his WST team are confident that as A-NEW progresses, the Navy's capability to combat any submarine threat to the U. S. will be greatly improved.

(*Naval Aviation News* described A-NEW in Aug. 1963 issue, pp. 6-8.)

ARRESTING GEAR ARROWS *at NAS Lemoore are believed by station officials to be a unique method of pointing out to pilots location of arresting gear. The arrows, internally lighted at night, are located on either side of the doorway with the word "Arrest" on each side.*

VICE ADMIRAL WILLIAM A. SCHOECH

VICE ADMIRAL PAUL H. RAMSEY

VICE ADMIRAL JOHN S. THACH

FLAG OFFICER CHANGES *announced by the Secretary of the Navy are as follows: Vice Admiral John S. Thach, Deputy Chief of Naval Operations (Air), is nominated for Admiral to succeed Admiral Charles D. Griffin as Commander U.S. Naval Forces Europe. Admiral Griffin succeeds Admiral James S. Russell as Commander in Chief, Allied Forces, Southern Europe. Admiral Russell retires April 1. Vice Admiral Paul H. Ramsey, Commander Naval Air Force, Atlantic Fleet, is to become DCNO(Air). Vice Admiral William Schoech, Chief of Naval Material, formerly DCNO(Air), retires March 1. He is succeeded by RAdm. I. J. Galantin, nominated for Vice Admiral.*

Merging Two Commands

Naval District Washington Named

On January 1, 1965, the Potomac River and Severn River Naval Commands were merged and became the Naval District Washington (NDW). No changes or reductions in personnel, military or civilian, were involved.

Geographically the consolidation means that the Potomac River Naval Command, with headquarters in the Washington Navy Yard, has been expanded to include Anne Arundel County, Md., once the boundaries of the Severn River Command.

As the first Commandant of NDW, Rear Admiral Andrew J. Hill, past Commandant of the Potomac River Naval Command, relieved Rear Admiral Charles S. Minter, Jr., of his duties as Commandant, Severn River Naval Command. These Naval Command duties were in addition to Admiral Minter's duty as Superintendent of the Naval Academy.

FAA Rules Are Streamlined

Number of Regulations is Reduced

Aviation regulations governing the nation's pilots, airlines, manufacturers and other users have been reduced approximately 60 percent by the Federal Aviation Agency. A major simplification program has compressed the number of rules from 125 to 55.

Compact and easier to understand, the new Federal Aviation Regulations (FAR's) result from a recodification program which was begun in 1961 and completed last December.

The FAR's are written in simplified English with a minimum of legal lingo. Each rule was widely circulated for comment before adoption.

Outstanding for 6th Time

VAP-62 Maintains its Top Rating

Heavy Photographic Squadron 62 scored a rating of outstanding for the sixth successive year at its annual Administrative and Material Inspection. The inspection was conducted in January by Rear Admiral Robert Goldthwaite, ComFAir JACKSONVILLE, and his staff.

The squadron believes that it is the first squadron to achieve this rating for six years in a row. Commanding Officer is Commander J. P. Cullen.

'Silver Lance' is Now On

Fleet Exercise is Over This Month

A major Fleet exercise code-named *Silver Lance* is scheduled to be completed March 12. It began February 23. The exercise, conducted off the coast of Southern California, involves more than 80 ships and 70,000 men, making it the largest Navy-Marine Corps training exercise ever held in peacetime.

Exercise *Silver Lance* is designed to demonstrate the mobility and strike capability of the U.S. Pacific Fleet. It also trains participating forces in planning and executing amphibious and support operations of varied types, under circumstances which might logically be encountered in the world today.

Vice Admiral Lawson P. Ramage, Commander First Fleet, is in over-all command of *Silver Lance*. Rear Admiral Marshall W. White, Commander Carrier Division Five, commands the force which supports and protects the amphibious task force element during assault landing and operations ashore. Under his command are 34 ships, including two attack aircraft carriers and an antisubmarine aircraft carrier.

The exercise is based on a "scenario" involving two mythical nations, Lancelot and Merlin. Lancelot is a small, weak nation being undermined through subversion by its more powerful neighbor, Merlin. Guerrilla forces, which control a portion of Lancelot, have terrorized U.S. citizens in the country and Lancelot has appealed for assistance from the United States.

Composition of the "enemy" sea and air forces, under command of Rear Admiral J. M. Taylor, Commander, Naval Defense Forces, Eastern Pacific, which engaged the "friendly" task force at sea, was withheld from the participating units so "enemy" capabilities would be unknown.

GRAMPAW PETTIBONE

Lame Duck

A flight of A-4C's landed at a West Coast NAS. One of the pilots had directional control problems during landing rollout because the starboard main gear shock strut remained fully extended. He shut down on the runway and the aircraft was towed to the servicing area without mishap.

The strut was serviced but, as the aircraft was being towed to the transient line, the strut "popped up" again. Maintenance personnel discussed the situation with the flight leader. He elected to have the air bled from the strut until normal extension was obtained and fly the aircraft back to home base for servicing by squadron personnel. The flight leader had more experience in the A-4, so he exchanged planes with the pilot who had flown the aircraft in. He knew he might have control problems on the next landing.

The flight back was uneventful, but as he came in to land, he realized the starboard strut was fully extended when the aircraft swerved to port and a waveoff was executed. During takeoff roll, the starboard wheel struck the midfield arresting gear chain damaging the wheel and brake assembly. With a fuel state of 1800 pounds, the pilot requested that the midfield gear be rigged and was advised there would be a five-minute delay. Approximately 20 minutes later, he was informed that the gear could not be rigged. By this time he was down to 1200 pounds of fuel. Unable to divert to another field with high speed midfield arresting gear, the pilot elected to utilize the abort gear which was 2600 feet from the end of the runway.

On the second pass, the hook engaged the gear on runway heading and about 10 feet to the left of centerline. The aircraft swerved across the unpaid out chain, shearing the port main gear and stopped 15 feet off the runway.

Disassembly of the starboard strut revealed it contained only one quart of hydraulic fluid instead of four quarts as required by the Handbook of Maintenance Instructions (HMI). In addition, the air pressure with the strut fully extended was 200 psi vice a recommended pressure of 25 psi.

Grampaw Pettibone says:

Great horned toadies! This sort of thing has got to go!

A few months ago, a gent on the other coast pulled exactly the same stunt. In both cases, the landing gear struts were improperly serviced. In both cases the pilots were fully aware of the questionable condition of the struts. Luckily, neither pilot was injured and both aircraft are repairable, but the Navy lost two good birds for several weeks and somebody could have got hurt.

The HMI is pretty clear on just how to service these shock struts and the A-4 NATOPS clearly states: "If at any time prior to landing, it is known that a directional control problem exists or a minimum roll-out is desired, a short field arrestment should be made and assistance of an LSO requested."

One of the endorsers on this particular mishap said, "Pilot education can not replace good judgment, but knowledge certainly augments it." I'll buy that 100%.

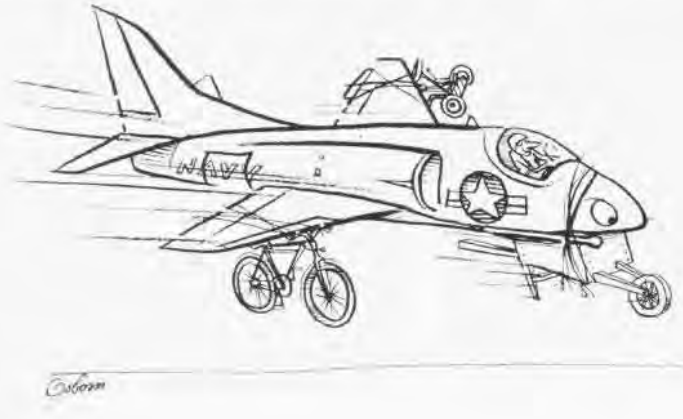
Hope this same gent made it his business to find out why that midfield gear couldn't be rigged.

So Long, Friend

An F-4B departed a West Coast NAS for a practice fire power demonstration flight. The pilot and RIO were told that if fuel and time permitted, after completion of the primary mission, they were to test the airstart capability of the ram air turbine (RAT).

After the demonstration, the pilot proceeded to an area just off the coast where he extended the RAT and secured the port engine. At an airspeed of 220 knots, RAT power was regained; port engine started normally.

While the pilot was waiting for



ILLUSTRATED BY Osborn

the engine to accelerate to idle RPM, he informed the RIO of the progress of the test. After both engines were operating normally, the pilot switched the main generators back on. As he did so, the ICS, radio, AJB-3, and gear and flap indicators failed. The pilot immediately checked the operating instruments and determined that no immediate danger existed.

Knowing that the RIO would be concerned about the electrical failure, the pilot looked in the mirror and saw the RIO looking forward. He gave him a "thumbs up" signal with the left hand to indicate the situation was under control. The RIO returned the "thumbs up" signal which the pilot acknowledged by nodding his head. The pilot was watching the RIO in the mirror. Just after nodding his head, the pilot saw the RIO position himself for ejection and reach for the curtain!

The pilot was unable to regain the RIO's attention. The RIO ejected at 8000 feet, 250 knots. The pilot did not see the RIO after he ejected and, as his radio was inoperative, he returned to base for landing and alerted SAR.

The RIO experienced little difficulty during seat separation, chute deployment and water entry. He released the rocket jet fittings, swam clear of the shroud lines and entered the raft.

A C-54 was sighted in the area. The RIO was able to attract the pilot's attention by igniting a day flare. A rescue helo arrived in approximately 10 minutes and returned the RIO to home base.

Grampaw Pettibone says:

Egads, lads! This little mix-up really didn't turn out too bad, but makes me break out in a cold sweat to think what could've happened if this bit of confusion had been in reverse.

This should be warnin' enough for you pilots and RIO's to get your signals squared away once and for all.

Crunched Crusaders

Two pilots on alert duty scrambled in their F-8's for a practice intercept mission under GCI control. While they were airborne, a rain shower moved across the field. As it was squadron policy to make Morest landings where the runway was wet, the squadron duty officer advised the tower to expect the two aircraft to make Morest landings.

After being airborne a little over an hour, the two *Crusaders* returned to the field. They were advised by the tower that the runway was wet but braking was fair to good. The flight leader elected to make a normal landing and the wingman took a normal interval after break.

The flight leader landed on the right side of the runway and during the roll-out, the tower cleared him for a right turn. Since the braking action was good, the lead aircraft was slow enough to turn off at the 6000-foot marker, but when he saw the de-arming crew on the left side of the runway, he announced over the radio that he was turning left.

The wingman touched down on the left side of the runway a little fast and started braking at the 4000-foot marker. In less than 1000 feet, the starboard tire blew. Realizing the other aircraft was still on the runway, the pilot applied heavy port brake. As the wingman neared the end of the runway, he suddenly saw his leader turn in front of him. He immediately applied right brake in an effort to pass behind him. Instead, the nose and port wing caught the tail assembly of the other F-8 and spun it around 180 degrees. Both aircraft were substantially damaged, but luckily neither pilot was injured.

Grampaw Pettibone says:

Giminentlies! I've heard of a lot of ways to foul up your buddies but this takes the cake. Guess a lot of people have been laborin' under false impressions 'cause I thought everybody knew better than to turn across the path of the aircraft landing behind you.

This flight leader elected not to use the Morest gear even though it was squadron doctrine on a wet runway, failed to follow tower instructions in order to clear the runway safely, and then to really cap things off turned in front of his wingman rolling out behind him. I'll admit a lot of things have changed in the flyin' business the past few years, but tricks like this have been TABOO since the days of the open cockpit and streaming white scarf.

Has the Old Man "bugged" you lately about flying in circles? If so, don't feel bad. Several of your fellow Naval Aviators have been making . . .

LANDINGS ON A ROUND RUNWAY!

By Lt. Gary Caron, USN

THE "circular landing theory" was successfully proven in a recent series of flights by the Navy at the General Motors Corporation's Desert Proving Grounds track, near Mesa, Arizona.

The pilots, Commander Lloyd H. Smith and LCdr. George H. Furlong, from the Naval Weapons Evaluation Facility (NWEF), Kirtland AFB, Albuquerque, New Mexico, and Lt. Peter N. Anderson, of Air Development Squadron Five (VX-5), Detachment *Alfa*, Kirtland, easily made dozens of landings and takeoffs on the completely circular GMC track.

The curvilinear landings culminated several years of concerted effort by a circle of R&D activities.

This all happened in a "roundabout" way.

To begin with, the idea of of landing an airplane in a circle is not really as far-fetched as it might seem.

There are many potential advantages to be gained by using a circular runway, some of which are: an infinitely long runway available; elimination of the problems associated with takeoff aborts; no runway over-run problems; reduction of taxi length and time; a runway into the wind, regardless of wind direction; the simplest possible low visibility approach (circular); reduced airspace required for instrument approaches; and reduced ground area required for airport construction.

Perhaps the prime reason for using a circular runway is the space saved. Modern airports cover from ten to 16 square miles. A circular runway would require only three to four square miles, with air terminal buildings located in the center, and taxiways spoking out to the runway.

The circular runway concept was first suggested to the Navy by the late LCdr. J. R. Conrey, in 1961, while stationed at NWEF.

The Bureau of Naval Weapons put LCdr. Conrey's proposal into an administrative orbit for some time. Finally, in early 1963, with issuance of a Problem Assignment, BuWeps bounced the ball back to NWEF for action.

NWEF approached the project from three aspects—theoretical, legal and operational.

The theoretical formula for landing in a circle is basically the same as the equation used in instrument flying, and/or highway construction:

$$\text{Tan } \phi = \frac{V^2}{gR}$$

where: ϕ is the angel of bank,
V is the ground speed of the aircraft,
g is the gravity constant, and
R is the radius of turn (a constant in this case).

By defining any two of the three variables (velocity, radius and angle or bank), the third can be determined. Theoretically, no lateral forces are imposed on the aircraft, at lift-off or touchdown, if the aircraft is maintained in a constant radius turn.

LCdr. Conrey's original circle size was based on a standard rate turn, at 125 knots, in a no-wind condition. This was later refined to a circle size of 32,000 feet in circumference, measured about the imaginary "runway" centerline.

To accommodate the different landing speeds of various aircraft the runway is sloped increasingly upwards (parabolically) from the inner portion to the outer ridge.

This facet tends to naturally steer the airplane toward that portion of the runway which matches its ground speed, just as an automobile experiences lateral forces when rounding a corner at a speed greater, or lesser, than that for which the turn was designed.

If the airplane is landed too fast, on the relatively flat inner portion, it will try to roll to the outside. If the airplane touches down too slow, on the steeply-sloped outer portion, it will drift inboard.

The General Motors track, in Arizona, represented a ready-made and nearly ideal test facility for the project. The track is somewhat smaller than the theoretical track, being exactly five statute miles, or 26,400 feet, in circumference. The track is 45 feet wide and graded from nearly flat on the inside to 22 degrees of bank at the outside. Equilibrium speeds for the track vary from 50 mph at the inner radius to 174 mph (about 152 knots) along the outer edge.

After receiving the project, NWEF assumed contractual authority to reach an agreement with General Motors for the use of the test track. GMC, although receiving no compensation for the project from the Navy, cooperated fully.

For the actual flight tests, NWEF borrowed a T-28C from VX-5, NAF China Lake, Calif. The T-28 appeared to be a suitable airplane to use because of its large propeller-to-ground clearance. The T-28's inherent directional stability during ground roll, owing to its tricycle landing gear, was considered to be an additional advantage.

A drawing of the test track cross section was obtained from General Motors and compared with the silhouette of a T-28 drawn to the same scale. The wing tips cleared the track by almost three feet in the most critical position, and even cleared by a few inches when the plane was tipped in simulation of a flat tire and collapsed landing gear oleo.

The three pilots selected by NWEF to fly tests had varied aviation backgrounds.

The project officer, Commander Smith, had over 10,000 hours flight time, in everything from gliders to globe-girdling jets. Merely landing in a circle could hardly ruffle the feathers of a veteran "bagger" like Cdr. Smith, whose background includes, among other things, crop-spraying, charter

A NAVY T-28C IS MAKING LANDINGS AND TAKEOFFS ON THE G.M TEST TRACK, MESA, ARIZ. NOTE BANKING OF RUNWAY TURN

flying, sky-writing, advertising banner towing, trans-oceanic transport driving, R&D project work at Patuxent River and NWEF, and heavy attack carrier operations.

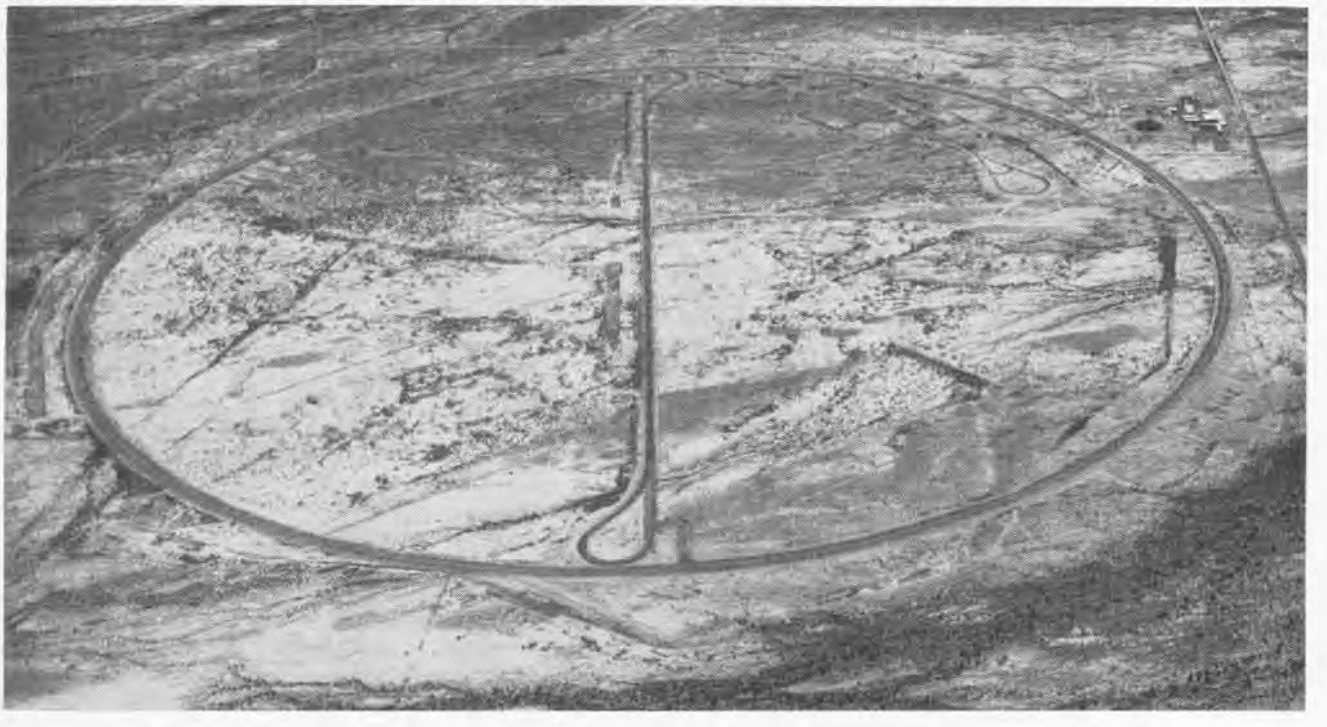
LCdr. Furlong's credentials included 1650 hours flight time—mostly in F-11A's and F-4B's—and the distinction of being a finalist in the screening for the new astronaut group in 1963.

Lt. Anderson's log book showed over 2300 hours, including training command time in T-28's and T-34's, Fleet duty with AirLant and AirPac in A-1's and all-weather jet time in VX-5 as the squadron's project officer for the operational evaluation of the A-6A.

Pilot refresher training in the T-28 was conducted at Kirtland Air Force Base. Major emphasis was placed on making "touch-and-go" landings in an arc, and on maintaining a constant speed during ground roll-out.

On March 7, 1964, the T-28 and a NWEF C-47, with photographers and support personnel aboard, were flown to Williams AFB, Arizona, which is only two miles from the test track. At Williams, Cdr. Smith conducted a final briefing for all personnel involved in the project, including Air Force support personnel. Williams provided a crash crew, mobile tower crew, crash helicopter crew, and an additional helicopter for photo work.

RUNWAY OFFERS ADVANTAGES: NO OVER-RUN PROBLEM, LESS TAXI-LENGTH, RUNWAY INTO WIND REGARDLESS OF WIND DIRECTION



Photos by W. E. McKee, PH1, O.V. Williams, PH1, and A. M. Castro, PH2, USN

In addition to the movie-camera equipped helicopter, other film coverage included: one high-speed movie camera set up inside the track; one movie camera in a special high-speed Chevrolet provided by General Motors; and a still camera handled by a roving photographer.

Dawn edged across the desert on the morning of March 8 to provide shadows for the Navy, Air Force and GMC people already at work. Cdr. Smith launched out of Williams on the first sortie and circled the track several times, to get the feel of things.

After three constant speed touch-and-goes, he set the T-28 down at 80 knots indicated airspeed, decelerated to 50 knots, and then throttled forward to 80 knots again and became airborne.

The aircraft responded smoothly and predictably during the "touch-and-slow." Cdr. Smith circled back for another approach and this time he drove the plane all the way in to a full stop.

All subsequent landings were made to full stops.

LCdr. Furlong and Lt. Anderson made their debuts on the track under deliberately different circumstances.

This was done to determine what advance briefing and training requirements should be considered, as a necessary minimum, to adequately prepare pilots for the circular landing situation.

LCdr. Furlong observed a takeoff and landing, from the back seat of the T-28, then moved to the front seat for his series of takeoffs and landings.

Lt. Anderson observed all the other operations, from the deck, and was briefed on the physical factors of the test area, such as dimensions, possible track obstacles, etc., but was not informed of the pilot psychological aspects and aircraft control forces and displacements.

Both pilots adapted quickly to the circular situation, and, surprisingly, they reported separate but similar reactions.

A primary consideration in the project was to find out the psychological reaction of the pilots.

Each pilot had the impression he was "flying into a hole."

The track being much narrower and more steeply curved in cross-section than an ideal circular runway, this problem might not normally exist. In any case, after several landings this feeling of flying into a hole disappeared.

At first, each pilot had to deliberately fight off the tendency to "level the wings." This tendency, resulting in less than enough angle of bank, caused the airplane to drift slightly to the outside of the track.

Positioning the aircraft over an imaginary equilibrium circle—for a pre-determined speed—was easy when the circle (speed) coincided with a painted line on the deck. When the speed required putting the nose wheel more than three or four feet from the painted line, it became a problem of pilot judgment. However, after several landings and takeoffs, this was determined not to be a significant problem. Touchdown/takeoff speed was found not to be a critical element. In any case, color-coded lines, or flush-deck, color-coded lights, could probably be used to indicate the different equilibrium speeds for lineup for a circular runway.

The tests confirmed the validity of LCdr. Conrey/NWEF's theoretical computations.

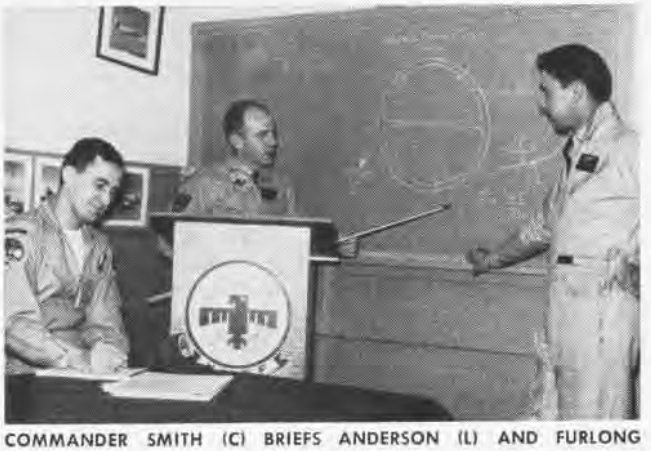
Touchdown over the correct equilibrium circle matching the airplane's groundspeed resulted in extremely stable rollouts. Each pilot was particularly impressed by the less than "normal" control force required during both landings and takeoffs. The airplane actually appeared to have a greater positive stability in both yaw and roll than on a flat straight runway. Landing outboard of the optimum equilibrium point proved to be more "comfortable" and required less control displacement than landing inboard of the proper point.

Weather was not a factor, except for surface winds. The early landings were made into a six knot headwind. Later, the wind varied in direction and intensity with the worst condition being a direct crosswind of gusts to twelve knots. Theoretically, a headwind should require lesser—and tailwind greater—angle of bank to hold the airplane over the runway. However, the effects of the surface wind on angle of bank, control forces, and control displacement, were negligible.

It is possible the tests may herald an entirely new concept in airport construction.

In addition to the Navy, the Army and several civilian aircraft companies have shown an interest in the possibilities of circular airfields as a result of the tests.

As a result of NWEF's flight tests at the General Motors test track, the standard axial runway may someday be as obsolete as the Ford tri-motor.



COMMANDER SMITH (C) BRIEFS ANDERSON (L) AND FURLONG

SMITH AND FURLONG PREPARE FOR THEIR TAKEOFF IN THE T-28

'Walleye' Contract is Made

North American to Outline Plans

North American Aviation's Columbus Division has been awarded a $622,000 contract to outline a program for the production of the *Walleye*, the Navy's newest air-to-surface missile system. The missile is called *Walleye* because of its unique television unit which "locks" the weapon on a still or moving target and automatically "homes" it to the target.

The award by the Navy is a Project Definition Phase study contract, and will result in the formation of complete, detailed plans for production of the *Walleye* system.

Cdr. William Knapp Dies

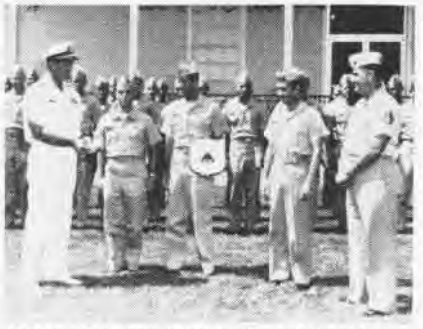
Was First Navy Helicopter Pilot

Commander William G. Knapp, USN (Ret.), the Navy's first officially designated helicopter pilot, died at the Bethesda Naval Hospital of cancer in January. He was 49 years old.

Commander Knapp joined the Navy in 1940, served in submarines, and was designated a helo pilot on April 15, 1944, after training at the Brooklyn Coast Guard Air Station. He was a pioneer test pilot in helicopters and for three years, during the Korean War, was executive officer of HU-1, flying rescue and supply missions. He later commanded HS-4.

In 1955 he received the American Helicopter Society's honorary fellowship award for outstanding achievement in the development and advancement of helicopters.

He retired from the Navy in 1957.



RADM. DANIEL F. SMITH, JR., *CNABaTra, receives $100 from Aviation Officer Candidate Class 28 for the Naval Aviation Museum at NAS Pensacola. At Adm. Smith's left are MarCad Robert Sabia, NatCad Wm. Elliott, Capt. W. O. Grubbs, USMC, Class Officer, and SSgt. J. P Rudman, the Class Sargeant.*

COVERED BY TARPAULIN, *the Gemini capsule is positioned on YFU-8 after off-loading from the Lake Champlain at Roosevelt Roads. Task Force 140's recovery went like clockwork.*

TASK FORCE RECOVERS GEMINI

THE COUNTDOWN was slightly delayed but, at 0904 on January 19th, the *Titan II* burst into the sky above Cape Kennedy toting its unmanned *Gemini* capsule. A vast network of tracking and recovery units swung into action as the spacecraft raced at 16,600 miles per hour on its 1879-mile journey over the Eastern Test Range. It splashed into the sea 19 minutes later, only 23 miles from the chief recovery ship, the USS *Lake Champlain*.

The *Champ* immediately dispatched a helicopter which, aided by a myriad of radar "eyes" from a variety of units, sped to the scene and dropped a three-man underwater demolition team into the water. Within minutes a flotation collar was rigged on the capsule to insure its safety while awaiting the carrier.

In another flight, slated for April, astronauts Maj. Virgil Grissom and LCdr. John Young will man the *Gemini* for a similar test. And again, Task Force 140, the coordinated recovery arm for the National Aeronautics and Space Administration, will be responsible for the pick-up.

The Task Force consists of more than 4000 men who handle 11 Navy ships, 40 Navy planes and 17 Air Force aircraft. Minesweepers, destroyers and other type ships, some specially instrumented for recovery operations, were strung out in a path covering 2310 miles in the Atlantic. The Navy planes were attached to CVSG-54, embarked aboard the *Lake Champlain*.

Once in position, a retrieval crane from the carrier hoisted the 6900-pound *Gemini* to the flight deck. This marked the ship's second spacecraft recovery. On May 5, 1961, the CVS picked up Commander Alan Shepard and his *Freedom 7 Mercury* capsule following his unprecedented suborbital flight.

Practice for the *Gemini* recovery was begun weeks in advance and included a large scale rehearsal. A mock-up *Gemini* was used and all units adhered to strict procedures which resulted in the professionally performed operation of January 19th.

The capsule was taken to Naval Station, Roosevelt Roads, in Puerto Rico by the *Champ* two days after the flight. After a 12-hour de-arming operation, the *Gemini* was loaded aboard a KC-130 *Hercules* and flown to Patrick AFB where it was disassembled and given thorough study.

DALLAS RESERVE PILOT AND CHASE PLANE MAKE TOUCH-AND-GO LANDINGS ON THE RUNWAY AT NAS DALLAS DURING FAM CHECKOUT

DALLAS' SMOOTH TRANSITION TO F-8

TAKE 19 commercial pilots, a handful of experienced Navy and Marine fliers just out of the Fleet, combat fighter pilots with Korean war records, and a sprinkling of company test pilots and project engineers; give them a new-type supersonic aircraft to fly on weekends; turn them loose after a thorough checkout in the plane, and how do they perform?

Naval Air Station, Dallas, Texas, tried out that formula as the "guinea pig" in the Naval Air Reserve Training Command when the Weekend Warriors switched to the 1000-mile-an-hour F-8A *Crusader* fighter. After 12 months of concentrated flying in 1964, four squadrons of Navy and Marine Reserve pilots at Dallas piled up 5132 flight hours in the plane—twice as fast as the *Furies* they had been flying—without an accident.

To help Captain W. A. Racette, Commanding Officer at Dallas, amass a spotless safety record like that for 1964 took a lot of advance planning, pre-flight checkouts, expert aircraft maintenance, and thorough check-flight techniques by the station's training officers and chase pilots.

When the Navy decided to have its Reserve aviators step up from *Furies* to *Crusaders* more than a year ago, Dallas was selected to be the first station to receive the F-8A's. Its closeness to logistic support available to it from Ling-Temco-Vought's plant which built the planes was one factor in choosing Dallas for the big step up. The Navy turned over to Dallas 23 F-8A *Crusaders*, taken out of mothballs at Litchfield Park, Ariz., or retired from active Navy squadrons receiving later models.

Some experienced fliers thought Reservists with their four drills a month of flying could not tame the hot *Crusader*. The Navy decided to increase the number of hours a month it would permit its *Crusader* squadrons to operate. (This was also done where other high performance and more complex aircraft were involved.) Thus pilots maintain the sharp edge of proficiency.

Three dozen regular Navy squadrons had been flying *Crusaders* for several years, but these pilots were younger and flew more hours a month. Could the lawyers, salesmen and merchants of the Reserve do as well? They could. Now that the Texans have been flying the *Crusaders* so successfully for a year, the Reserve Command has started delivering F-8's to NAS WILLOW GROVE, Pa., near Philadelphia. Its quota of 15 planes will permit training one Navy and two Marine reserve squadrons.

NARTU ANDREWS at Washington, D.C., received the first of 17 *Crusaders* in January, and NAS Atlanta was to get the first of 18, starting in February. Two more Reserve stations at Olathe, Kans., and New Orleans, La., are due to get *Crusaders* this year. The Marine Air Reserves at New Orleans are scheduled to receive RF-8A photographic *Crusaders*. That will

AIR RESERVE PILOTS GET GROUND SCHOOL CHECK AT CECIL FIELD

COMMANDER LAMOREAUX GIVES LT. BILLY BELL 1000-MPH PATCH

make 20 Reserve squadrons trained in *Crusader* aircraft available for combat duty call should a national emergency arise, in addition to regular Navy and Marine squadrons also flying them.

To get the program underway at Reserve Stations, Commander Claude Levinge, a pilot with 3600 jet hours, was named to supervise the F-8 program for the entire command. Working out of Glenview, Ill., home base for the Reserve Command, he set up the program which provides for two VF training officers from each station to be sent to the Carrier Aircraft Readiness Wing at Cecil Field, Fla., or to the Marine base at Beaufort, S.C. There they receive the complete ground training syllabus, which includes the maintenance and systems simulators and the operational jet trainer simulator. They also get a full flight checkout in the F-8. Back home, they become the "deans" of their own *"Crusader College."*

Not all pilots in the Dallas squadron were changed to *Crusaders*, but those who were selected for the F-8 squadrons went to Cecil, Miramar or Beaufort for a week's ground syllabus of pilot familiarization, then returned home for flight training. Aircraft maintenance enlisted men, who have to keep the *Crusaders* flying, also went to Cecil, Miramar or Beaufort for their training in the mechanical, electrical, hydraulic and other systems, which is offered by the Naval Air Maintenance Training Groups at those stations.

NAS DALLAS has four squadrons flying *Crusaders*—VF-701, commanded by Commander Norman L. Jennings; VF-703, Commander Clayton H. Beck; VMF-111, Major Glen Davis, and VMF-112, Lieutenant Colonel Ramon Gibson.

Just as a football team has to have coaches, so the Reservists called on experienced jet pilots, some with hundreds of hours in *Crusaders*, to train the squadron pilots. At Dallas, Commander T. C. Lamoreaux, Lt. J. D. Davis and LCdr. H.E. Trout trained the Navy men while Major R.E. Carey and his two assistants, Captains N.F. Schnippel and K.W. Langford, checked out the two Marine squadrons' pilots.

Commander Lamoreaux has more than 2200 hours in jet fighters and 400 hours in F-8's. Lt. Davis has more than 1000 hours in *Crusaders*. LCdr. Trout was in the first Pacific Fleet F-8 squadron and is a former ferry pilot. Maj. Carey is also a 1000-hour *Crusader* pilot.

To keep the proficiency of Dallas Reservists high, the Naval Air Reserve Training Command has outlined a minimum flight program of 100 hours a year for pilots. Besides drilling once a month and a two-weeks active duty period each year, they are authorized 36 additional drill periods a year with pay.

COMMANDER LEVINGE HEADED TRAINING

Since the F-8's began flying off NAS DALLAS runways last January, a total of 76 Navy and Marine pilots have transitioned to the *Crusader*. Each Navy pilot is scheduled six hops to familiarize himself with the plane, three for instrument flying, one performance flight, five tactics flights and two night-hops—a total of 25.2 hours. All were made in 14 days of straight flying. Marine pilots perform five fams, seven instruments, three tactics, two navigation and one night hop.

Since each of these flights had to be made with a chase pilot along, the staff of training officers under Commander Lamoreaux and Maj. Carey got in plenty of flying in 1964. Lamoreaux, for instance, flew the F-8 175 hours between July and Nov. 30, 1964 as a chase pilot instructor.

Maintenance of the 23 Dallas planes is handled by station personnel with the aid of Ken Meredith, LTV field representative. Availability of F-8's at Dallas has been on a par with Fleet squadrons, better than 60 per cent.

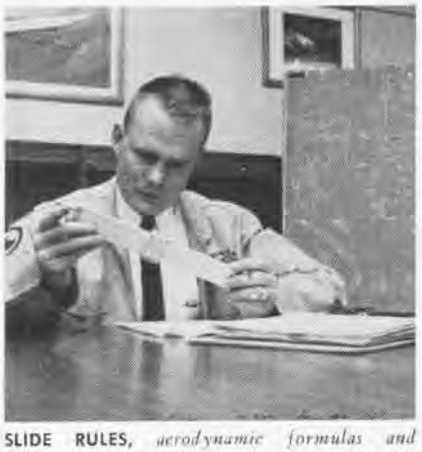
Dallas' first-year record with the sleek, swift *Crusader* has belied the skeptics who said its pilots would have trouble transitioning to F-8's. Commenting on the record, Rear Admiral George P. Koch, Chief of Naval Air Reserve Training, says: "Dallas has done an outstanding job. . . . This bears out my belief that Naval Air Reservists can do anything they set their minds to do."

A DAY WITH THE TEST PILOTS AT TPS

By Lt. Rosario Rausa, USNR

TO CLASS 40:
IF WE WERE WHERE YOU ARE NOW, WE'D SHOOT OURSELVES. WELCOME TO TPS FROM CLASS 38
(Sign on study room door at Naval Test Pilot School).

LT. STAN COBB, *a former A-1H Skyraider pilot, is enrolled in Class 40 which began classes at the Test Pilot School in October. Class includes Marine, Army, Air Force and Civilian men.*



SLIDE RULES, *aerodynamic formulas and equations are routine tools for Lt. Cobb.*

TEST PILOTS have been progenitors of progress in the age of flight since its beginning and, although the spirit of these men remains unchanged, nearly everything else in their profession has. Take for example, Lt. Jean Chaput of World War I vintage who, in 1915, held the terrifying conviction that by grinding the spinning propeller of his aircraft into the tail end of a German Fokker, he could destroy the enemy plane.

"But won't you crash, too?" he was asked.

"Ah!" laughed Chaput, "my engineering training hasn't given me an answer to that question, but I am going to try it."

And he did. He literally smashed a Fokker out of the sky and glided his own ship to a safe landing with a drastically broken propeller.

At its unpretentious headquarters in Patuxent River, the U. S. Naval Test Pilot School teaches jet-age Chaputs a sounder and more technically sophisticated way of evaluating the capabilities of military aircraft. Unlike Chaput, all of their preliminary work is done through books, classrooms and lectures rather than in the battle skies.

CLASS 40 *commenced its day with a stimulating, final hour examination in calculus.*

Compressed into an eight-month syllabus is a curriculum which demands every effort from the officers carefully selected for enrollment. The intensity of the study load and the speed with which it is administered, evoked Class 38's comment to Class 40. An adjunct to this attitude is a popular saying at the school, often quoted to visitors: "Attending TPS is like trying to get a drink of water from a fire hydrant!"

But the rewards, personified in the satisfaction of answering the challenge TPS offers, and the important work that the test pilot does after graduation in the many test activities all over the world, are multifold. He has learned to apply his talents and to play a significant role in the progressive pace of Naval Aviation.

Classes comprised of about 18 men matriculate every four months at TPS.

NAVY LTS. *Bob Sallada, George Myers and Stan Cobb brush up on their study notes.*

Naval officers normally account for eight of the 18 while the Marines, Army and Air Force enroll one to three officers. There are also from one to three civilians or allied military personnel in a class.

Navy Lt. Stan Cobb, a former A-1H pilot, is in Class 40 which began the TPS course last October. A routine day with Stan and his colleagues is split, half for ground school, half for flying. One typical day in December went like this for Class 40:

At 0800, the class warmed up with a final examination in calculus. The pilots filed into an austere room equipped with a lectern, blackboard and desk-chairs. The students wore expressions ranging from confidence to downright anxiety, but, oblivious to the occasional whine or roar of an engine sounding through an open window, they huddled in determination at their desks and went to work.

A little over an hour later they emerged, heads and shoulders noticeably drooped. Gathered in the "Sunshine Room," a lounge with leather couches and the inevitable coffee pot, they expounded en masse on the strain of the test. One student's voice rose above the chatter. His words, perhaps, represented the collective comment of Class 40 regarding calculus:

"I feel as if my brain is a damp rag which has just been wrung out!"

"How did you do?" someone asked Stan Cobb. He answered with a simultaneous shake of the head and a severe frown.

Nevertheless, the tests were promptly graded. Everyone passed. Lt. Cobb scored in the 90's.

After the break, Class 40 attended a lecture on report writing. This is an essential phase at TPS because the pilots must be able to record, in the intricate, scientific language of aerodynamics, what he learns on a test flight. Technical equations, phraseology accentuated by complicated formulas—all become familiar tools for the literary duties in a test pilot's career.

The third and final session of ground school was a lecture on helicopters. This was followed by a lunch break, after which the pilots donned exposure suits and other flying paraphernalia for the airborne half of the working day.

Stan Cobb manned an F-6 *Skyray*. He was scheduled for a syllabus flight entitled "Airspeed System Error Calibration." After roaring into the air with the bat-wing fighter-jet, he sped a short distance away from the runways to a range specifically set-up for such flights. Observers in a tower recorded speed, altitude and other various items as the F-6 was flown at low altitude, high and slow speeds, along the prescribed course.

In the meantime, pilot Cobb flipped a switch which actuated an internal wing camera set to film a duplicate set of cockpit instruments situated in the wing. Later, when these films have been developed, the pilot studies them and uses the information to compose an elaborate report, which is to be graded, of the flight and the *Skyray's* performance.

Others in Class 40 flew several different kinds of aircraft on several different kinds of missions. TPS has on hand F-8A/B, F-6A, T-1A, T-28B, A-4B, S-2A, SH-34G, UH-1B, HU-16 aircraft. A B-26, rigged to simulate variable stability of planes, is also used. Although there are two flight syllabi, one for rotary wing, the other for fixed wing, pilots check out in both helicopters and the straight/swept wing planes.

As Lt. George Myers of Class 39 put it, "It's really great. I was an S-2 pilot with an ASW background, and I've already checked out in the T-1, A-4 and F-6."

In the 32 weeks of training, pilots average about 20 hours per month while completing the 70-hop syllabus. The types of flights are too numerous to mention but the names of a few give an idea of the curriculum in the air: sawtooth climb, paced stalls, buffet boundary and turning performance, lateral-direction flying qualities, transonic Mach investigation, spin investigation and chase, autorotation, hover performance, and so on.

SECOND HALF *of working day is for flying. Lt. Cobb preflights the F-6 Skyray.*

SKYRAY *is but one of the eight types of aircraft flown by the TPS students.*

LT. COBB *views film report he made on an Airspeed System Error Calibration hop.*

Photographs by C. M. Apo, PH3

TOY AIRPLANE *provides momentary break in a tedious day of study and flying.*

CAPTAIN SMITH, *TPS Director, confers with Lt. Cobb regarding school syllabus.*

At the end of a hop, there isn't much time for the student to sit back and expound on his ventures in the sky. Everyone, like Stan Cobb, returns to his study room and individual desks.

Slide rules and sheets of paper etched with the hieroglyphics of their trade are familiar trappings for the test pilot. And these trappings do not remain behind at day's end. Students study from four to six hours a night. On Saturdays and Sundays, you are liable to find the men of TPS back at their desks in an effort to sustain the rapid pace. There is always plenty of work to be done when one engages himself in courses with lofty titles, such as aero-thermodynamics, dynamic stability, weapons systems analysis, or lateral directional stability control.

Yet, regardless of the incessant pressure, a high spirit of morale pervades the atmosphere at TPS. As Stan Cobb remarked, "Right from the first day everybody—especially those in the advanced classes—tries to help you out. Everyone is concerned about everyone else getting through.

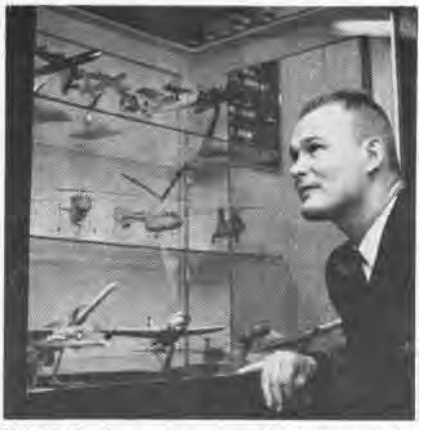
Lt. Fred Hueber, an A-4 *Skyhawk* pilot previously, said that "TPS is tiring, but never boring. There is always something new to learn. For example," he went on, "the idea of flying different airplanes each day makes you a little more aware of check lists. In general, variety keeps you stimulated."

Captain Nick Smith, Director of TPS, is an ideal man for the job. He's flown just about everything but a Sopwith *Camel* and is as much at home in a helo as a supersonic fighter.

TPS GRADUATES *go on to apply their talents in such projects as in-flight refueling.*

Captain Smith said, "I'm very much satisfied with the caliber of men we enroll here. But we do have a strong need for helicopter pilots with the appropriate background for TPS. We just don't get enough applications from this category."

COUGAR, *Crusader, Phantom, and pair of A-6 jets fly above Patuxent's test center.*



DISPLAY *of aircraft at TPS indicates types Lt. Cobb and colleagues may soon fly.*

The Test Pilot School is comparatively young—an informal training program began in 1945—but already a tradition has been established. On one wall in the "Sunshine Room" hangs a set of portraits of impressive graduates of the school. The names Schirra, Carpenter, Lovell, Young, Shepard and Glenn, need no introduction. One of these men, Commander Walter Schirra, is shown posing in his spacesuit with a space capsule in the background. His inscribed greeting, to students like Lt. Stan Cobb and all those who went before and are to follow in this select training, is an appropriate and sober comment on the significance of the U. S. Naval Test Pilot School:

"Best Wishes and Happy Landings to all at TPS—the bridge between great pilots and all engineers."

Requirements for TPS Admission

All Naval Aviators from Ltjg. through LCdr. ranks are eligible for the Test Pilot School, provided they have completed mathematics and physics through the college level. Calculus is highly desirable and two years of a college engineering curriculum is advantageous. Applications should be made in accordance with BuPers Instruction 1331.3.

Needs of the Naval Air Test Center, recent Fleet operational experience, availability of the student in terms of rotation to shore duty, and endorsements are significant factors.

The selection board considers 1500 hours to be the minimum flight time for applicants although this total can be lowered if the man's other qualifications are deemed to be outstanding.

Landing System is Shown

'Hands-Off' Approaches are Made

High ranking officers of all three military services and officials of other governmental agencies were shown, first-hand, a new all-weather landing system at Washington's Dulles International Airport in January. The revolutionary "hands-off" system, installed on a United Air Lines *Caravelle* jetliner, positioned the aircraft, controlled its speed and attitude during landing approach, and automatically landed the plane using present airport navigational aids.

Manufactured by Lear Siegler, Inc., of Santa Monica, Calif., the system is the only one now being evaluated by an airline that allows automatic landings all the way to touchdown.

Its development was undertaken in 1961 by Lear Siegler's Astronics Division with joint sponsorship by SUD Aviation, the FAA and the French Government. Since that time, more than 2000 automatic landings have been made, some under Europe's worst weather conditions. The pilot monitors the system and can override it at any time by taking control in a fraction of a second.

The aircraft aligns itself with the runway, "locks on" to the airport's electronic Instrument Landing System (ILS) beam, and follows it down to the runway for a smooth landing. During the approach, electronic signals from airborne computers control the plane's heading, attitude, rate of descent and speed, all automatically.

Just before touchdown, the system automatically flares the plane, raising the nose, closing the throttles, and letting it settle to the runway as gently as with any manual landing. A warning system instantly alerts the pilot if any part of the system malfunctions so he can immediately take control.

Corrosion Prevention Kits

Lower Maintenance at Pacific Sites

A portable corrosion preventive maintenance kit, developed by Pacific Missile Range (PMR) Technical Support Directorate at Point Mugu, Calif., is now being used widely at PMR tracking sites throughout the Pacific.

W. L. Mackie, materials consultant, was instrumental in designing the kit. The materials in the kit combat the destructive effects of salt spray, high relative humidity and temperature on range equipment at the PMR stations in the South Pacific. Communication antennas, radomes, and electronic equipment vans can be treated. It is also used for sealing electrical connections against moisture or salt spray.

The kit contains coating and laminating materials, sealants and adhesives, all of which require mixing. Tools and equipment, including stainless steel, scouring pads, stainless steel wire brushes, mixing sticks and shears for cutting glass cloth also are included in the new kit.

VF-121 Makes 1964 Report

Pilots Flew 14,000 Hours in F-4

Fighter Squadron 121 ended 1964 with the impressive total of 14,000 F-4B *Phantom II* flight hours. The outfit claims that this is more than any other F-4 squadron has flown since the introduction of the *Phantom*.

In amassing the flight time, VF-121 transitioned three Navy squadrons and one Marine squadron, sending 79 replacement pilots and 67 replacement radar intercept officers to Pacific Fleet squadrons. VF-121 is commanded by Commander F. J. Murphy.

ASW Facility is Planned

Will be Located in Hawaiian Area

The Navy has announced plans to establish a new training facility for Pacific Fleet ASW forces in the Hawaiian area. It will be a necessary augmentation in maintaining WestPac training and readiness at a high level in the antisubmarine warfare category.

The underwater range will enable units to evaluate operational performance by tracking target and launching vehicles as well as the weapons used in non-explosive firing exercises.

The range will be located in an ocean area northwest of the island of Kauai. Technical development and direction of the range will be controlled by BuWeps and the Pacific Missile Range which has headquarters at Point Mugu, California.

A SPECIAL HELMET *for flight deck personnel will provide communications between flight deck personnel in high noise areas and primary flight control. The AN/SRC-22 system, designed for aircraft carriers, includes a primary flight control base station and 16 radio-equipped helmets. The three-pound helmet incorporates a transmitter in the right ear pad (left, above) and receiving equipment in the left ear pad (above). Center picture shows the helmet with gear covered. The attached microphone is of noise-cancelling differential type. Personnel wearing the helmet can communicate with each other, with primary flight control and with radios operated by personnel in less noisy areas.*

FUSELAGE *was built in three sections by using vertical jigs for easy accessibility during assembly.*

NEW MARINE CORPS HELICOPTER *takes shape in experimental assembly section. Five aircraft had rolled off the line by December 31, 1964. Delivery begins this year.*

Integrated Maintenance Management

THE PLANNING BEHIND THE CH-53A

A HEAVY ASSAULT transport helicopter for the U. S. Marine Corps, the CH-53A, is undergoing rigorous tests, both flight and static, at Sikorsky Aircraft's Stratford, Conn., plant.

Five of the giant (88 feet long, capable of carrying 38 troops, having a gross weight of more than 33,000 pounds) aircraft were off the assembly line as 1965 began. Preliminary reports showed a helicopter capable of 200-mile-an-hour speed (using only partial power), with enough agility to turn on a dime.

One of the most important parts of this new Marine weapons system is unique, since it isn't part of the physical equipment—such as landing gear or rotor head. It influences the design of the helicopter and its supporting hardware from a maintenance viewpoint to provide compatible and total logistics support for the CH-53A during test, evaluation and operation, both on land and on carriers, in any part of the world.

This recently developed system so far has saved the customer, the U.S. Navy, more than $1,000,000, a considerable amount at an early stage.

What is this system? Who designed it? Who implemented it? Who managed it?

The system is called IMM for Integrated Maintenance Management, and it is defined in WR-30 (Weapons Requirement-30) by the Navy's Bureau of Weapons in Washington. Ashley Monroe of BUWEPS is known as father of WR-30. A recognized leader in logistics support planning, he was assisted by John (Jack) Witten, BUWEPS, and other members of the BUWEPS Fleet readiness organization. Assistance in the logistic support area was given by A. C. Barlow and other members of the Navy's Aviation Supply Office in Philadelphia. The AIA (Aerospace Industry Association) helped IMM through its contacts with manufacturers. Sikorsky took an active part in AIA's WR-30 efforts.

IMM was a planned part of Sikorsky's CH-53A program even before WR-30 had been completed and officially released. It was written into the basic Navy-Sikorsky contract. Using its knowledge of WR-30 goals, Sikorsky fitted the concept into its existing departmental structure under the direction of P. W. Holt, division vice president (programs). Thomas R. Griffith (service) was named IMM coordinator, responsible for liaison between departments at Sikorsky, and between Sikorsky and the Navy. A MEAR (Maintenance Engineering Analysis Record) group was formed in Sikorsky's service department under the supervision of Paul P. Shurko.

The basic IMM program prepared by Sikorsky for the CH-53A was presented to BUWEPS at the IMM planning conference in May 1963. The program, based on the "plan for use" and required availability goals of the helicopter, included major logistics milestones and maintainability procedures, and was accepted by the Navy. The initial IMM design was approved.

How does IMM work? Who is responsible for its management? Sikorsky had the primary responsibility for implementing the WR-30 system for the CH-53A, and shares management responsibility with an IMM Team, in accord with BUWEPS instructions. The team, which meets regularly, is

By Thomas R. Griffith
Sikorsky Aircraft

made up of representatives from BuWeps, operating and support units of the Navy, the Marines, and Sikorsky.

The main purpose of IMM is to influence aircraft design from the maintenance man's point of view and to provide an integrated logistics support system efficient in mission support and cost effectiveness. Maintainability changes to more than 220 items in the CH-53A were recommended to achieve this goal. More than 120 design changes were made as a result of these recommendations. Other changes were made in procedures and items of support. These changes are passed on as a reduction in maintenance requirements and a reduction in—or more effective use of—defense funds.

Maintenance analyses of the CH-53A, begun in the aircraft's conceptual phase, have continued through later phases, including current production and flight tests. Design and reliability-maintenance engineers send data to MEAR analysts who conduct the major portion of the study, including all logistic support determinations. These, relating to spare and repair parts, tools and test equipment, technical publications, personnel requirements, training requirements, and facilities, are recorded in the MEAR. Compatibility is assured by parallel development of each item required to support a specific maintenance task. The CH-53A is designed to require a minimum number of maintenance tasks, with extended intervals between tasks. An example: the 150-hour inspection performed at the lowest maintenance level.

MOCKUP SHOWS *cargo loading ramp and interior. Powered cargo-handling system is used.*

MEARs (again, Maintenance Engineering Analysis Records) are prepared for the complete helicopter. A MEAR breakdown includes functional systems, sub-systems, and assemblies. The functional systems breakdown used in technical manuals parallels the MEAR breakdown, and test and support equipment is designed with the functional systems in mind.

A major part of the IMM program at Sikorsky and BuWeps is the liaison between contractors and customer through the IMM team. Marine Capt. Barker P. (Buck) Germagian, representing the Fleet Readiness Division of BuWeps, is IMM team chairman. He has established a continuing link between members by requiring IMM "action chits" whenever the need arises, rather than waiting for formal team meetings which occur every three or four months.

The continuous interchange of data via action chits and meetings keeps the operating and support commands briefed on the progress of all aspects of the CH-53A program, and affords a medium for their input.

The IMM system has been successfully developed and implemented on the CH-53A by Sikorsky and BuWeps. The flight test program currently is being supported by Sikorsky under the augmented (contractor) support concept. This support, in the form of technical aid, spare parts and tools, and support equipment, will continue through initial trials and Fleet indoctrination. The Navy eventually will take over complete logistics support based on Sikorsky's maintenance engineering analyses as approved by the IMM team. The Aviation Supply Office will base its procurement on the range and quantity of support material thus established. Materials from the augmented support phase, including all repairable components, will be turned over to the Navy. The goal of IMM then will be achieved: completely compatible logistics support at a minimum expenditure of manpower and dollars.

FIRST FLIGHT *of Marine Corps' CH-53A took place over Sikorsky flight field in October 1964. Using only partial power, the new aircraft has been clocked at 200 mph. Manufacturing time and costs were reduced in many ways; for example, cockpit section is made of plastic.*

ALL THE MILITARY *services participated in rescue operations. Here, an HH-52 gas-turbine, amphibian surveys area. Coast Guard units accounted for 400 rescues, 160 by helicopter.*

NAVY AND MARINES IN RELIEF ROLE

WORKING WITH UNITS from all the military services, Navy, Marine Corps and Coast Guard personnel played an essential role in the December disaster relief operations in Oregon and northern California.

Hampered by fog, rain, wind and snow, helo crews used the USS *Bennington*, alerted two days before Christmas, as a mobile air base. The Marines flew UH-34D's from MCAS EL TORO. Navy helicopters supplemented the effort and helped deliver 161,000 tons of supplies. The units logged 162 missions, evacuated hundreds and accumulated 213.4 hours of flight time. Rear Admiral R. A. MacPherson supervised rescue operations.

MARINE SQUADRONS *HMM-363 and HMM-164 worked with Navy helos from Ream and Moffett Fields during relief operations in isolated areas. Navy and Marine C-130's also helped.*

A New Visibility Concept

Aids Accurate Weather Reporting

A new concept in measuring runway visibility is appearing on aviation weather reports at some Naval Air Stations. Called Runway Visual Range (RVR), it gives pilots the landing and takeoff visibility directly along the runway. A transmissometer, which provides basic meteorological information on the light transmission characteristics of the atmosphere, complements high intensity runway lights to produce an instrumentally derived value based on standard calibrations.

RVR represents the horizontal distance a pilot will see down the runway from the approach end and is based on the sighting of either the high intensity runway lights or the visual contrast of other targets along the path—whichever yields the greater visual range.

About 10 naval air stations have RVR while many others are scheduled to receive it in the near future. The U.S. Weather Bureau developed the concept.

HU-4 Saves Mountaineer

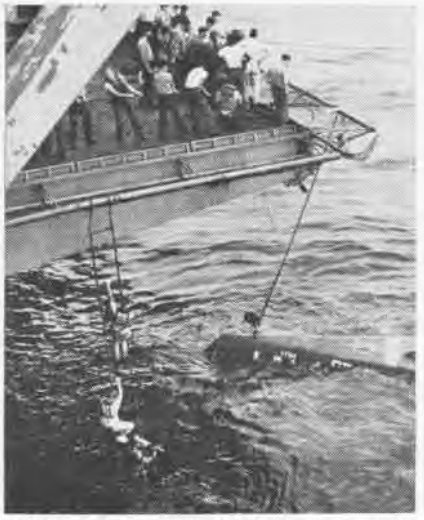
Injured on Icy New Zealand Peak

Two helicopters of HU-4 attached to USS *Glacier* effected the rescue of a badly injured mountain climber when an avalanche swept him over a 200-foot cliff. The climber was 500 feet from the summit of 9200-foot Mount Arrowsmith in New Zealand's Southern Alps.

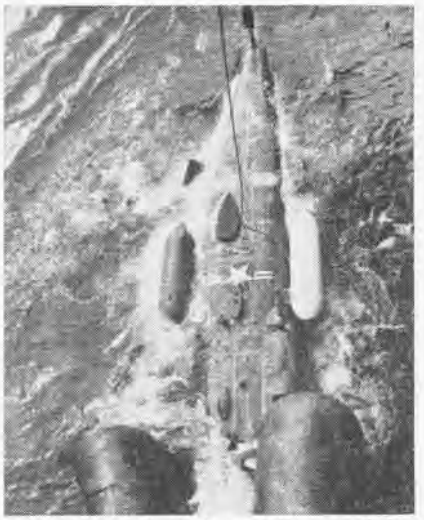
A fellow climber, also injured, was able to make his way down to a lower camp where other members of the party were staying. The advanced headquarters of U.S. Navy Support Force, Antarctica, was contacted and Rear Admiral James R. Reedy, Commander of the *Deep Freeze* operation currently in progress, gave full support for the rescue.

The HU-4 helos shuttled rescuers over ten miles to Cameron Hut at the 8700-foot level where helicopters could maneuver safely. This party then carried the injured man down the treacherous mountain to Cameron and he was flown to Christchurch airport where a waiting ambulance took him to a hospital.

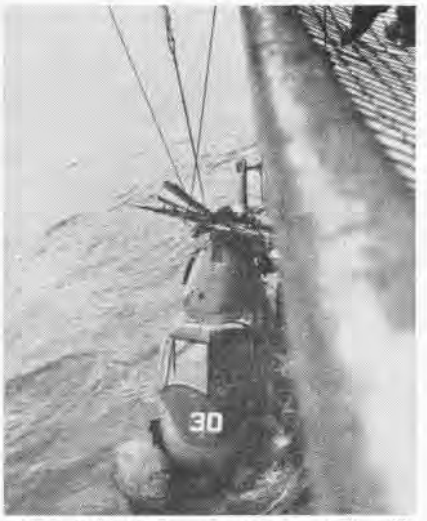
Participating in the rescue flights were Lts. Mike Meier and Frank Lobb, Ltjgs. Kenneth Kleiber, Fred Riddle.



DIVERS GO *down the ladder to enter water to attach recovery lines to downed helicopter.*



RANGER DIVERS *(look carefully) attach line to rotor head to right inverted aircraft.*



LIFTED SLOWLY *by use of heavy duty cables and ship's crane, helo is drained of water.*

NAVY DIVERS RECOVER DOWNED HELICOPTER

THREE NAVY DIVERS from the Seventh Fleet's USS *Ranger* recovered a downed helicopter after it crashed and overturned in shark-infested waters in the South China sea.

Just after delivering a passenger to one of *Ranger's* destroyers, the USS *George K. MacKenzie,* the helicopter sputtered and fell into the sea. Minutes later, another *Ranger* helicopter had plucked the uninjured crew members out of the water.

At the time of the accident, *Ranger* was conducting an unrep with the supply ship, USS *Sacramento.* After breaking from *Sacramento, Ranger* turned and maneuvered to recover the downed bird. Meanwhile, the *MacKenzie* lowered her whaleboat. A diver tied a line to the helo's tail wheel.

Ranger Explosive Ordnance Disposal divers, Ens. Dennis P. Rejda, Gerald C. Evans, TMC, and Jay C. Irving, AM1, attached a line from *Ranger* to the *MacKenzie's* line and 40 *Ranger* men pulled the helo alongside the ship's number 4 aircraft elevator.

The divers inflated three liferafts inside the submerged aircraft to make sure it did not sink. The belly of the helicopter rose to the surface as the liferafts filled with air.

There was difficulty with the lines which were to be used in righting the helicopter. A manila line failed, and then a wire rope. But finally divers tied heavy duty cable to the rotor head and were able to right the helo. At the same time, three sharks were spotted and fended off with Marine rifle fire.

When the helo was finally raised by the crane over the elevator, one of the helo mechanics climbed into the cockpit and dropped the landing gear so that the helo could be lowered and set on the deck. The helo had been in the water for just three hours.

THE HELICOPTER, *drained of water, is finally swung over to the USS Ranger's elevator as onlookers watch the procedure anxiously.*

BATTERED, CRUSHED, *torn and soaked, the helicopter is brought to rest on Ranger's No. 4 elevator after being in the ocean three hours.*

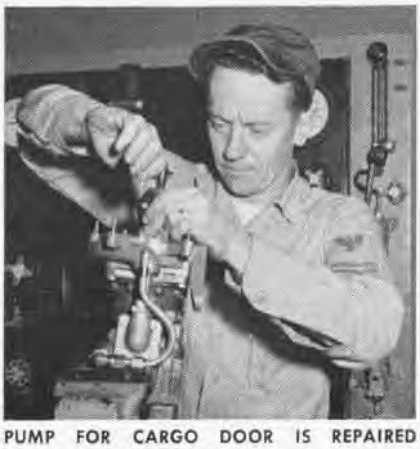
VR-8 MAINTAINS THE MIGHTY HERCULES THAT FLY THE PACIFIC

By L. E. Heck, JO1

THE C-130E HERCULES OF VR-7, MAINTAINE

THREE MEN FROM TANK SHOP ARE DISPATCHED TO CHECK LEAK IN A FUEL TANK

JAMESON, AMH3, 'FIXES A FLAT' ON TIRE



PUMP FOR CARGO DOOR IS REPAIRED

THE C-130E *Hercules* is winning an unassailable reputation for being able to move *anything, anywhere, anytime*. This is partly due to two Pacific squadrons. Air Transport Squadron Seven, which flies the giant, and Air Transport Squadron Eight, which maintains it, operate under one Wing command, Naval Air Transport Wing Pacific (MATS), based at NAS MOFFETT FIELD, Calif. Their combined efforts enable *Hercules* to live up to the mythical Roman demigod, renowned for his strength, for which the airplane was named.

To maintain the 23 assigned aircraft, VR-8 requires 1000 enlisted men, eight officers, a detailed book of instructions and a sizable fleet of "yellow" support equipment. The "do-it-yourself" kit, the Air Force Maintenance Management Manual (AFM 66-1), sets procedures.

VR-8's main divisions are Maintenance Control, Flight Line Maintenance, Periodic Maintenance, Field Maintenance and Quality Control. The work of the divisions is indicated by their titles. Each division has its skilled technicians and mechanics, and the work is coordinated and efficient.

Two divisions, Flight Line Maintenance and Periodic Maintenance, make up what is referred to as Organizational Maintenance. Flight Line is responsible for the pre-flight, thru-flight and post-flight inspections, servicing and unscheduled maintenance of aircraft. Close liaison and coordination is maintained between the Flight Line function and Maintenance Control.

Within the Divisions are Sections.

Y VR-8, CARRY THE INSIGNIA OF THE U.S. AIR FORCE. BOTH SQUADRONS BELONG TO THE NAVAL AIR TRANSPORT WING PACIFIC (MATS)

For example, Field Maintenance has several. Avionics is made up of electrical and radio/radar crews. All navigation gear, communications equipment, weather radar and spare parts are its responsibility.

The Power Plants Section is primarily concerned with the depreservation and buildup of engines. In the Prop Shop, the 13-foot, 4-bladed propellers are repaired and tested.

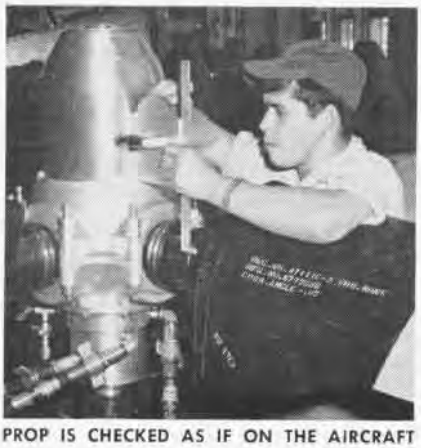
Approximately 239 metalsmiths make up the Air Frames Division which is responsible for all metal work done on the C-130. This division also includes the Tank and Tire Shop.

No division is more important than another, yet a word needs to be said about Quality Control. This department performs inspections on aircraft and equipment to certify that the required work has been accomplished. Quality Control supervises and handles all test flights and processes any unsatisfactory reports concerning the work done. If something still remains to be done, Quality Control schedules it.

From the Maintenance Officer, who, under the Commanding Officer, heads the maintenance organization, down to the newest mechanic on the job, the goal is to make sure that the requirements of the flying schedule are fulfilled by safe, mission-ready aircraft.

The 27,000 accident-free flying hours logged by the assigned *Hercules* during 1964 prove that "the men behind the scenes" are doing an outstanding job. These hours represent approximately 6,000,000 air miles or 273 complete trips around the world.

AT MOFFETT FIELD, MEN FROM POWER PLANTS DIVISION INSTALL A PROP ON C-130



PROP IS CHECKED AS IF ON THE AIRCRAFT

GARNER, AT1, CHECKS NAVIGATION RADAR

THE NEWLY ADOPTED FLAG *of the Chief of Naval Operations flew high over NAS Key West during Admiral David L. McDonald's visit, January 7-8. It was the first time the flag had flown over any Navy facility or ship since its adoption January 1, 1965. It was presented to Admiral McDonald by Secretary of the Navy Paul Nitze (L) on December 11. The flag was designed by Dr. T. W. McKnew (C) of the National Geographic Society.*

Marine Unit Joins CVW-16

Arrives in Miramar from Kaneohe

Marine Fighter Squadron (All Weather) 212 arrived at NAS MIRAMAR the end of January from Kaneohe Bay, Hawaii, to replace VF-161 in Air Wing 16. VF-161 has been transferred to CVW-12 to transition to the F-4B *Phantom II*.

While staying at Miramar, VMF-(AW)-212 will participate in field landing practice and in gunnery exercises at Yuma, Ariz., and make at least one WestPac deployment. The unit is commanded by LCol. G.H. Ludden.

Air Wing 16 is commanded by Commander T. M. Taylor and is assigned to aircraft carrier *Oriskany*.

NUCLEAR BLAST EFFECTS STUDIED

How will guided missile equipment withstand the effects of a nuclear blast? To answer this question, a series of tests are being made by the former light cruiser, USS *Atlanta* (IX-304, formerly CL-104) under the direction of the Serviceability Division of the U.S. Naval Missile Center, Point Mugu, Calif., commanded by Captain C.O. Holmquist.

The tests are sponsored jointly by BuWeps and BuShips. For the tests, launchers, radars and associated missile equipment have been put aboard the *Atlanta* in place of its standard gear. The ship is being subjected to blasts of up to 500 tons of dynamite, simulating a one-kiloton nuclear explosion. Plans call for blasts set off underwater, on the surface and overhead and at various ranges from the ship.

The first and mildest of the tests was conducted in November off San Clemente Island (California). More severe experiments took place off the Island of Hahoolawe (near Mauri), Hawaii, in February. There will be further tests in the San Clemente Island area again in June.

For the tests, NMC placed aboard the *Atlanta* unarmed *Bullpup*, *Sparrow*, *Sidewinder* and *Shrike* missiles as well as the modular magazines in which the missiles are stowed when deployed with attack carriers of the U.S. Fleet. Instruments for recording the effects of the blasts were placed near the equipment being tested.

All the NMC equipment is located in a berthing area of the *Atlanta* within an armored space comparable to the magazine space of an attack carrier where the missiles and stowage modules would normally be maintained.

In addition to NMC, other organizations participating in the tests aboard the *Atlanta* include the David Taylor Model Basin, Washington, D.C., and the Naval Aviation Development Center, Johnsville, Pa.

Lt. Charles A. Kennedy of NMC's Serviceability Division is the project officer on the tests. He was in charge of installing the NMC equipment.

The remotely-operated instrumentation was installed by Harry McMahon, Douglas Everett and Robert Noriega of the Environmental Division and by Glen Jackson and Robert Cook of the Photo Lab. These men were aboard the *Atlanta* during the first two tests. The *Atlanta* will be evacuated for the more severe tests.

HS-1 Scores Safety Mark

Flies 10,000 Accident-Free Hours

During the year of 1964, Helicopter Anti-Submarine Squadron One established several squadron records. First and foremost was 10,000 hours of accident-free operations.

On December 14, 1964, Lt. Kirk Stubbs, pilot, Ltjg. Richard E. Bayse, copilot, Kenneth E. Logan, AX2, and Barry N. Schubert, AXAN, completed the 10,000th safe hour while on a training flight in an SH-3A.

The crew was met at the completion of the flight by Commander J. A. Seargeant, HS-1 C.O., and Commander R. E. Shock, Exec, and Lt. D. B. Blair, squadron Safety Officer.

In 1964, HS-1 received the Commander Naval Air Force, Atlantic Fleet, Safety Award for helicopter squadrons.

VS-30 Trains Argentinians

ASW Crewmen Refresher Course

Four crew members of the Argentine Naval Air Anti-Submarine Squadron are attached to VS-30 at NAS Key West, Fla., for a period of nine weeks. They are undergoing carrier air-antisubmarine warfare replacement pilot and aircrew training. Lt. Barry M. Hussey, Lt. Alfredo C. Andersen, CPO Miguel A. Mottura, and CPO Jose R. D'Amico comprise the second Argentine ASW aircrew to receive replacement aircrew training at VS-30 under the Navy Military Assistance Training Program. They are already qualified ASW crewmen and this period at VS-30 serves as a refresher.

The men are stationed at Commandant Espora Naval Air Station in Bahia Blanca, Argentina. The air station contains fighter, attack, patrol, helicopter and utility squadrons, as well as the carrier antisubmarine squadron. The base is also the homeport of the multi-purpose Argentine aircraft carrier, *La Independencia*. This ship has participated in many joint Fleet exercises with the U.S. Navy.

MAJOR F-111 MILESTONE *was passed on the first prototype's second flight at the General Dynamics/Fort Worth plant. The wings were moved from the forward position (16°) in steps to the maximum sweptback positions (72.5°), then unswept to 26° for landing. Variable swept wings provide minimum sweep for best low speed and subsonic flight where maximum lift is desired, and high sweepback angles for maximum supersonic performance at all altitudes. Flight test phase for the joint Air Force/Navy program, begun last year, will continue at Fort Worth, Grumman's Peconic River plant, Edwards AFB and NATC. First Navy F-111B is to be rolled out this spring.*

'Guard' Frequency Rules

Must be Used for Real Emergency

OpNav Instruction 3730.6B, entitled "UHF Military Emergency and Distress Frequency, 243.0 MCS," spells out the limitations on the use of this frequency to ensure that its misuse is eliminated.

The instruction points out that "the inability to utilize the guard channel during a bona fide emergency has been a contributing factor in several severe accidents and fatalities." It also notes that a joint effort is being undertaken by the Military Departments and the Federal Aviation Agency to curtail the channel's use consistent with flight safety.

Limitations on use are defined as follows: "The military emergency and distress frequency, 243.0 MCS, will be used only to provide a communications channel to and from airborne and ground stations or surface craft involved in an actual emergency or distress condition. This includes immediate assistance by other aircraft or surface units in the vicinity acting to alleviate or avert the distress or emergency condition. It does not include communications incident to a coordinated search and rescue operation."

Individual responsibility rests with all Naval personnel to use the military emergency and distress frequency for the purposes described. Judgment as to what constitutes an emergency requiring the use of the frequency is the responsibility of the Naval Aviator and other personnel whose duties include employment of this frequency.

Pilots who lose contact with FAA Air Traffic Control and cannot reestablish communications on the last assigned frequency shall use 255.4 and 272.7 MCS to contact the nearest Flight Service Station.

VT-29 Lieutenant is Cited

Rescued Five in Auto Accident

Lt. Gene E. Biggs of Training Squadron 29 at NAS Corpus Christi received the Navy Commendation Medal in December for his alert and unselfish action during an automobile accident. Lt. Biggs rescued five women from a submerged, inverted car that had skidded off a bridge in Corpus Christi in March, 1964.

Commander H.H. Elliott, VT-29 executive officer, made the presentation. The accompanying letter stated, in part: "By your actions, you displayed an unselfish regard for the welfare of your fellow man, and thereby distinguished yourself as an outstanding member of the Naval Service."

Historical Items are Needed

Marine Museum Requests Aid

The Director of Marine Corps Museums has issued a call for help in locating historical recruiting material. The Museum is particularly anxious to find A-signs, posters, placards, cards, booklets or original paintings from which these materials were reproduced.

Of special interest to Museum officials are recruiting materials from WW I through Korea.

Material donated will be maintained in the Museum at Quantico, Va., with credit given the donor. It will be photographed for record purposes and preserved for use in reproductions and exhibits.

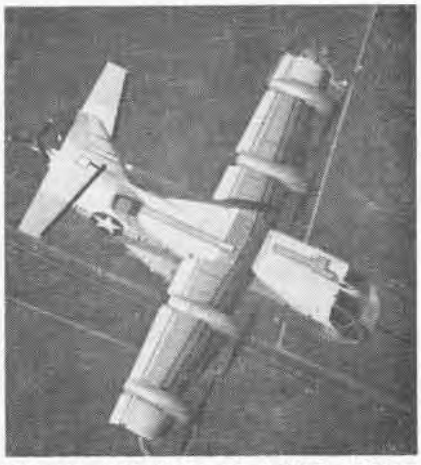
Museum officials request that correspondence and materials be addressed to: Director, Marine Corps Museums, Marine Corps Schools, Quantico, Va.

WITH WING APPROACHING DOWN POSITION, XC-142A ACCELERATES TOWARD CONVENTIONAL AIRPLANE FLIGHT AND FLIES AWAY

VTOL TRANSITIONS

High point for tri-Service LTV-Vought XC-142A VTOL assault transport program was first full transition: vertical takeoff to conventional airplane flight and back to hovering for vertical landing. Early in January, LVT Chief Test Pilot, John Konrad, and copilot Stuart Madison, both well known as Crusader test pilots, flew XC-142A through flawless initial transitions. Navy program pilot, Lt. Roger Rich, USN, was copilot on the next transition flight, trying out the new plane.

GEAR UP, WINGS DOWN, XC-142A REACHES SPEED OF CONVENTIONAL PROP PLANES



XC-142A HAS LINES OF FLYING BOXCAR

FROM HOVER, WITH PROPS CARRYING ALL 37,000+ POUNDS, WING IS TILTED FORWARD AND XC-142A STARTS INTO FORWARD FLIGHT

ON PATROL WITH ATLANTIC AIR WINGS

VICE ADMIRAL WEAKLEY, *Atlantic Fleet ASW Force Commander, presents Isbell ASW Trophy to Commander Hunter, VP-44 skipper.*

ACHIEVEMENT COMMENDATION *is given to Ltjg. James Schneider (R), with Mrs. Schneider, by RAdm. Matter (C), ComFAirWingsLant.*

A FORMER Combat Aircrewman has received the Navy's Commendation for Achievement award for helping implement the new concept of "mobile avionics maintenance" among the Maritime patrol squadrons.

In ceremonies at Norfolk, Rear Admiral A.R. Matter, ComFAir Wings-Lant, presented the commendation to Ltjg. James M. Schneider, staff Avionics Material Officer. Mobility and readiness were advanced by Ltjg. Schneider, the commendation stated, through the use of a series of vans and trailers containing test and repair equipment in support of the P-3A *Orion* and P-2 *Neptune* patrol aircraft used in the Atlantic Fleet. The vans may be transported on short notice to advanced bases in support of deployed squadrons.

During World War II, as an aircrewman in VB-18 in the Pacific, Ltjg. Schneider was awarded the Air Medal and two Navy Commendations. He previously had received a Commendation for Achievement in connection with the updating of P-5 ASW equipment.

* * *

VP-44 received its second Isbell Trophy for ASW Excellence in ceremonies held at NAS PATUXENT RIVER. The award (named after Captain Arnold Jay Isbell) was presented by Vice Admiral C.E. Weakley, Commander ASW Force, U.S. Atlantic Fleet. Accepting for the squadron was Commander Perry F. Hunter, III, VP-44 C.O. In attendance at the ceremony were Commander J.L. Ball, who commanded the squadron during most of the competitive year, and Rear Admiral A. R. Matter, ComFAirWings-Lant. VP-44 had won the trophy in 1959 while flying seaplanes. It now flies the P-3A *Orion* after having transitioned into P-2 *Neptunes* from P-5's.

Captain Isbell, a 1920 graduate of the Naval Academy, was an early patrol aircraft pilot and ASW task group leader. As C.O. of VP-54, he took part in the pre-war survey of land for bases in Newfoundland. He later commanded the USS *Card*, an escort carrier which participated in ASW duties in the Atlantic during World War II. Captain Isbell was killed in action aboard the USS *Franklin* in March, 1945.

* * *

What happens when 10 aircraft unexpectedly develop troubles just prior to an extended deployment? Why, you call for help and start working around the clock. This is what Fleet Air Wing Three, NAS BRUNSWICK, Me., did. VP-23 needed a quick permanent fix on the nacelle barrel structure of its SP-2H *Neptunes*. An augmentation crew of 66 metalsmiths and supervisors arrived from Norfolk to assist FAW-3 and squadron personnel in the incorporation of the designated airframe change, accomplishing the fix in five days of accelerated work. When VP-23 departed on schedule for assigned duties in Iceland and Spain, hangar spaces returned to normal maintenance chores "after having taken on the appearance of an Overhaul and Repair shop" for the week prior to deployment.

VP-23, with a six-plane detachment at NS KEFLAVIK, Iceland, took on board a new commanding officer, Commander Charles L. Wyman, in Rota, Spain, early in December. Its *Neptunes* recently added a hashmark emblematic of two consecutive Battle Readiness E awards within FAW-3.

* * *

Fleet Air Wing Eleven, at NAS JACKSONVILLE, concluded an extended Project *Short'nin* late in 1964 with the hope that 90,000 man-hours per year can be saved in the maintenance of P-2 *Neptunes*. The project started last March when 12 skilled enlisted men—from Maine, Jacksonville and NS ROOSEVELT ROADS—received orders to the Fleet Study Group, Atlantic, for an accelerated course in time and motion analysis. After assembling key data at their home stations, the group met again in May and commenced preparation of a "Comprehensive Maintenance Requirement System" for the P-2. In October, having organized their ideas into a maintenance "Card System," the group performed an actual inspection on a VP-30 aircraft with the new system. With the production of cards

PROJECT SHORT'NIN TEAM *assembles at Fleet Air Wing 11 to help put together a new card maintenance system for Fleet ASW Neptunes.*

CHIEF ELKINS, *right, Project Short'nin member, shows new card maintenance work procedures for P-2 aircraft to Chief Hudson, VP-30.*

slated for early 1965, the group dispersed to home stations again to put the card system to work.

* * *

Orions of VP-16 took over the missions of VP-49 at Kindley AFB in Bermuda late in 1964 in a routine changeover. The departing squadron detachment headed homeward to Patuxent River, Md., for a period of crew training. The VP-16 detachment is making its first deployment in P-3A *Orions.*

* * *

Crews from VP-16 and VP-7 were among early arrivals at NS ROOSEVELT ROADS as the Fleet began its annual gathering for another Operation *Springboard* in the Caribbean area. More than 2000 men were to be billeted at the Roads during the exercise, which will give training in ASW, missilry, amphibious operations and vertical assault landings to a variety of squadrons, ships and men. The operation ends in April.

The *Black Falcons* of VP-7 spent the first two weeks of the new year at the Roads, maintaining a round-the-clock operational status before heading back to NAS JACKSONVILLE. The entire squadron, commanded by Commander T. A. Graham, participated.

* * *

A former editor of *Approach Magazine,* the Naval Aviation Safety Center publication, has assumed command of VP-45 at NAS JACKSONVILLE. He is Commander David M. Hume, who had been the squadron Operations Officer and Executive Officer prior to taking command. He relieved Commander John D. Collins in December.

* * *

With a new C.O. at the helm, Commander J. T. Kosnik, Patrol Squadron Five commenced another deployment to NAF SIGONELLA, Sicily, in support of ASW operations in the Sixth Fleet. Commander Kosnik, who had served as X. O. for the past year, relieved Commander J. A. Pate on January 15. Commander M. D. Marsh became X. O.

* * *

VP-21 used laughter as a re-enlistment weapon—and with apparently good results. With a lively Plan of the Day campaign, the squadron's career information team—consisting of Lt. Bob Rohr, Oscar Hellman, ATCA, and John Aquilino, AMSCA—have taken nicknames as "Heckel, Jeckyl and Hyde" in squadron posters. They conduct a relentless campaign based on the following sales technique: "The more often you advertise, the more people you reach; the more people you reach, the better your product sells." It must be paying off; since taking over their jobs in September last year, first cruise enlistments are up 45 per cent, career re-enlistments, 12 per cent.

HASHMARK *for VP-23's second consecutive E is added on SP-2H by James Grant, AT3.*

* * *

Under a new Commanding Officer, Commander Albert Carneghi, the men of VP-18 will move from Jacksonville, Florida, to Roosevelt Roads, the squadron's new permanent home port. Two crews and their *Neptunes* visited eight countries in South America during Operation *Unitas V,* which ended in December. The crews were headed by LCdr. G. J. Evans and Lt. A. M. Ames. It was the second *Unitas* assignment for VP-18.

* * *

Crew #4 of Patrol Squadron 26 acted as "Angel of Mercy" twice within five days in the Caribbean. Under LCdr. Charles Gerhan, the P-2 NEPTUNE crew spotted (on December 31) a lone figure on a remote island in the Bahama chain. It turned out to be a survivor of a shipwreck who had spent 30 days on the uninhabited little island. Help reached the man after LCdr. Gerhan notified British naval authorities of his location.

On January 5, LCdr. Gerhan and his crew intercepted a distress call from a civilian aircraft. The crew spotted the aircraft burning on a beach of Long Island. After a four-hour orbit and on being assured that the three aircraft passengers were all right, the NEPTUNE crew guided a Navy amphibian to the island for a pickup.

A FORLORN *resting place for a downed helicopter is Erebus Bay at the foot of Mount Erebus, an active volcano near McMurdo Station.*

FURLONGS *by the miles are trudged by men from the icebreaker USS Staten Island as they haul the helo, mounted on skis, to the ship.*

HOT-FOOTING IT ON THE COLD ICE

By Lee Quinn, JO1
Photos by Gerald V. Graves, PH3

MEN IN THE ICEBREAKER USS *Staten Island* are used to pounding the ice in both polar areas. But as 1965 started, they got off the ship and pounded ice in a different way.

It all started when a VX-6 helicopter pilot, Lt. Charles Montag, maneuvered his UH-34D *Sea Horse* into position over the ice on Erebus Bay, at the foot of the only active volcano discovered in the Antarctic, Mount Erebus. The pilot had been sent from McMurdo Station to evacuate four scientists and newsmen before an impending storm struck. In their position, the men were surrounded on three sides by sheer ice cliffs, rising hundreds of feet skyward.

When a crewman aboard the helo, William Leoffler, ADR1, prepared to drop a smoke flare to determine wind direction for the landing, the flare went off prematurely, filling the chopper with dense smoke. This reduced cockpit visibility to "less than six inches," according to Lt. Montag. Unable to see his instruments and not anxious to risk flying into one of the nearby ice cliffs, he elected to make a forced landing.

Touching down firmly on the port main mount, the chopper tilted, striking the rotor blades and the helo came to rest on its port side. Shaken but unhurt, Lt. Montag, Leoffler, and a third crewman, Keith Smith, AE2, hurriedly abandoned the aircraft.

Meanwhile, Commander Frederick S. Gallup, the squadron's C.O., had taken up duties as SAR commander when the helo was reported overdue. He directed LCdr. Jim Brandau, senior VX-6 helo pilot, to search the Erebus Bay area. And he continued a communications check of ships and aircraft in the area.

Less than two hours later, the group of men was spotted by Brandau, embarked, and returned to McMurdo. Then the storm hit, with blowing snow and gusts of wind up to 80 knots.

After the storm, Commander Gallup was faced with the problem of salvaging the downed helo for return to an overhaul facility in the States. Considering many proposals—some bizarre ones were advanced—he accepted the help of the stout men in the *Staten Island*.

The icebreaker maneuvered to within four miles of the downed craft. Aboard were VX-6 maintenance men. They hiked to the helo and installed tail skis from the squadron's C-47's on each landing gear and then secured long lines to mooring points along the fuselage.

Then, on the morning of New Year's Day, every available man aboard the icebreaker heaved to on the lines and began the long trek back to the ship. Five hours and four miles later, after many grunts, groans, and cigarette breaks, the craft was manhauled to the ship's crane which lifted it aboard. The ship then returned to McMurdo and offloaded the stricken helo.

Commander Gallup sent warm words of praise to the captain and crew of the *Staten Island*. "The admiration this command has held for our surface shipmates," he said, "has just been enhanced by the professional performance of the VX-6 helo recovery operation by the crew of the USS *Staten Island*. The spirit in which the event was completed at the expense of a well earned holiday is deeply appreciated and will be long remembered.

"While all aspects of the operation were impressive, particular note is taken of the men who physically towed the aircraft several miles across the rough ice and snow of the deteriorating ice shelf in a display of the ability of the Navy's most vital commodity—manpower."

Rear Admiral James R. Reedy, commanding Operation *Deep Freeze*, extended his personal "well done" to the Commanding Officer of the *Staten Island* and the men who man-hauled the helo.

For the men aboard the icebreaker who seldom get ashore during the deployment, it was a great adventure.

BIG K'S PHILIPPINE CARGO: GOOD WILL

KEARSARGE *men with their "helpers" string electric cable before rewiring the classrooms.*

J. A. WILLIS, *SH3 (R), and Philippine co-workers build new rain awning for school.*

GALLON DRUMS *are mounted on specially built platform for new water supply system.*

HAMMERS, nails, hard work and a ship load of good will were the ingredients of a Seventh Fleet People-to-People Program undertaken by the USS *Kearsarge*. Crewmembers of CVS-33 and the PTA of the Tapinac Elementary School in Olongapo, Republic of the Philippines, co-sponsored an "improve the school" project while *Kearsarge* was nearby in Subic Bay for a 10-day upkeep period.

The PTA-American team installed new wiring and electric lights in classrooms, rebuilt a water system to provide running water, constructed seesaws and basketball goals, refloored a classroom, built new steps, added new rain awnings, and made other improvements. The Naval Base at Subic Bay furnished transportation for the *Kearsarge* personnel and provided much of the salvage material used in the project. Other materials were paid for by USS *Kearsarge*.

Special dividends for the sailors were savory lunches prepared by the teachers of the school. These meals gave many of the men their first taste of a wide variety of delicious dishes available in the Philippines.

But perhaps the most lasting memory for the men who took part in the project were the beaming faces of the clamorous, ever-present Tapinac children who surrounded them. From the first day, they were the Americans' constant companions, following them about and enticing them to play volley ball and other games.

Finale of the People-to-People activities before the *Kearsarge's* departure was a special program celebrating the completion of the project. Mayor James Gordon of Olongapo and Capt. Charles P. Muckenthaler, C.O. of *Kearsarge*, were the main speakers. The program featured folk songs and dances. Approximately 3000 people attended the festivity and the Com-ASW Group One band played on.

Reluctantly, the *Kearsarge* crew left their hundreds of new friends. They did carry with them, however, the satisfaction of having participated in a real adventure in friendship.

R. D. BEAGLE, *AX1, might be called the Pied Piper of Kearsarge, even without a flute. Kids don't seem to mind his substitution of a guitar. Men spend spare time entertaining the children.*

SELECTED AIR RESERVE

ON A VISIT, *while on leave from Pensacola's Pre-Flight School, NAOC Hogan toured NARTU Andrews facility with Miss Sandra Tannozini.*

"CONGRATULATIONS *on being a jet pilot," says LCdr. Rab Butler, who originally recruited Ltjg. Mike Downs for the Naval Aviation program.*

A Return of Thanks

When John B. Hogan, NAOC at the Navy's Pre-Flight School at Pensacola, returned to thank NARTU ANDREWS recruiting officials for introducing him to Naval Aviation when he was a sophomore at Mount St. Mary's College, he found himself in charming company. Public Information secretary, Miss Sandra Tannozini, escorted him on a tour of the NARTU's training facility.

Home in Silver Spring, Md. for a holiday, Hogan said that he had first been interested in becoming a Naval Aviator when a NARTU ANDREWS recruiting team visited his college his sophomore year. The team's frequent visits to Mount St. Mary's led him to decide on a career in Naval Aviation. In fact, seven students from this college have been accepted for flight training.

On February 29, 1964 Hogan enlisted in the Naval Reserve; on June 3, he received his B.S. degree: last October he began pre-flight training.

A Winning Secret

During the holidays, Chief Norman Weiss, a bachelor stationed at NAS WILLOW GROVE, appeared on Steve Allen's show with his secret—that he supports 10 children through the Foster Parent program. Mr. Allen, a foster parent himself, presented Chief Weiss with a gift from the CBS Television Network, a round-trip flight ticket to Bogota, Colombia, to see one of his children, ten-year-old Oscar Marin.

Last fall, Chief Weiss visited Europe to see three of his children. He hopes eventually to see them all.

A Sharpshooter Photographer

David F. Reins, First Class Photographer's Mate at NAS NEW YORK, was recently awarded a trophy for firing a high, rapid fire score at the Third and Fourth Naval District's rifle and pistol matches for 1964.

A veteran with over 19 years of Naval service, Reins is president of the station's gun club. He holds two Navy awards for markmanship and is also credited with holding three pistol and two rifle awards.

He is staff photographer and a supervisor for the station's photo lab.

CHIEF NORMAN WEISS *of NAS Willow Grove recently appeared on "I've Got a Secret" with host Steve Allen: The secret? Weiss is foster father to 10 children in various parts of world.*

VICE ADMIRAL *Stroop, ComNavAirPac, swears into Naval Air Reserve his son Patrick (C) and Joseph Robbins, son of Captain Robbins.*

OFFICIALS *of the Academy of Model Aeronautics, Naval Air Training Command and NAS Willow Grove plan for 1965 Model Meet.*

Headed the Navy Way

At NAS NORTH ISLAND, Vice Admiral Paul D. Stroop, ComNavAirPac, recently swore into the Naval Air Reserve his youngest son, Patrick, and Joseph Robbins, son of Captain Orme C. Robbins, USN(Ret.). Both men are assigned to a Naval Air Reserve Unit based at NAS Los ALAMITOS.

Patrick is a high school senior and Joseph is a student at New Mexico Military Institute. Both are working for appointments to the U. S. Naval Academy this summer.

Flies 1000 Hours in Alameda Jet

Lt. William O. Bennett set a record at NARTU ALAMEDA when he completed 1000 hours in his A-4 *Skyhawk*. He is a Reservist with VA-873.

It was in February 1961 when he was on active duty with the Fleet that he flew his first A-4, making 214 carrier landings. He was detached from active duty from VA-153 in January 1964 when he joined NARTU ALAMEDA. He has a total of 2550 hours flight time.

Congratulations Were in Order

When Ltjg. Mike Downs at the controls of an F-4 *Phantom II* arrived on a training mission at NAS ALAMEDA, LCdr. Rab Butler offered his congratulations on Lt. Downs' becoming a jet pilot. And behind that greeting is a story.

The road to success was not easy, for it was Mike's determination that led to the fulfillment of his desire to fly as a pilot, not as a navigator or observer. It all started three years ago when LCdr. Butler visited Downs' college from NARTU ALAMEDA to explain the officer program.

Downs was graduated in June 1962 with a B.S. degree. He did not qualify as an Aviation Officer Candidate, but he did qualify as a Naval Aviation Observer Candidate. In September 1962, when he went to Pensacola, he was assured a switch to pilot training if his grades were high enough during the four months of Pre-Flight. This is no small accomplishment, but Mike made it.

Now he is a member of Fighter Squadron 161 at NAS MIRAMAR.

Model Meet Scheduled

The 34th National Model Airplane Championships are to be held this year at NAS WILLOW GROVE, Pa., July 26-August 1, according to the Academy of Model Aeronautics which directs the event.

LT. W.O. BENNETT, *USNR-R, climbs out of A-4 after logging 1000 hours in the aircraft.*

Some 1200 contestants are expected, entrants coming from every state, Mexico, Canada and other countries. Over 200,000 spectators will attend. The contest is open to any one desiring to enter an appropriate aircraft in one of the 35 different events.

A planning session held at Willow Grove recently included (as shown in the above picture, left to right): Earl Witt, President of the Academy of Model Aeronautics; LCdr. Finrow, NAS Public Works Officer, Captain N. R. Charles, station Commanding Officer, and Commander Paul Boyer, PIO for the CNATra.

The week-long event is a cooperative effort by the Naval Air Training Command, the Naval Air Reserve and the host station.

Weymouth Reservists Honored

Airmen Apprentices Richard J. Shulman and Felix J. Mottola were congratulated by Captain Kenneth D. Helsel, Commanding Officer of NAS SOUTH WEYMOUTH, on their accomplishments while in training at Navy schools.

Shulman graduated first in his class at the Basic Helicopter "C" School in Memphis, and Mottola graduated first in his class at the Aviation Electrician School in Jacksonville, Fla. Both men at present are assigned to helicopter squadrons at South Weymouth.

AT SEA WITH THE CARRIERS

ARRIVING HOME, *after a three and one-half month tour in the Mediterranean, some men in the Wasp spell out a greeting to their home port as the ASW aircraft carrier entered Boston.*

USS ESSEX *(CVS-9) celebrated her twenty-second anniversary last New Year's Eve.*

ATLANTIC FLEET

WASP (CVS-18)

Wasp returned to home port, Boston, Mass., after a three and one-half month deployment to European waters. During her deployment, she participated in Exercises *Master Stroke* and *Teamwork*, the latter taking place in the Norwegian Sea, the English Channel, and the Bay of Biscay.

LAKE CHAMPLAIN (CVS-39)

Sikorsky winged "S" awards were presented Ltjg. Derek Eaton, Lt. Jesse Morris, and Ltjg. Bruce Whitt by the Sikorsky Division of United Aircraft for rescues the pilots performed at sea. They are attached to HS-5 and deploy in the *Lake Champlain*. Eaton and Morris were cited for rescuing a sailor who had fallen overboard from the USS *Tullibee* (SSN-597) and Whitt for the rescue of three women in a downed aircraft off the Florida Keys.

INTREPID (CVS-11)

Quick action by two BT3's in *Intrepid's* No. 3 fireroom undoubtedly saved lives and equipment. During exercises off North Carolina, a coupling in the No. 5 main feed pump broke off and the steam turbine within the pump began to speed up dangerously.

When the overspeed governor failed to control the accelerating turbine, bearing caps, carbon packing housings and other pump components began to shear off and fly at high speed in all directions.

Within seconds, two boilermen on watch—John R. Tarsitana and Lawrence B. Tucker—closed the valves carrying steam to the turbine. They also shut down the No. 4 and No. 6 main feed pumps, preventing additional equipment damage.

Intrepid's C. O., Captain J. G. Smith, cited both men during a Meritorious Mast held aboard the carrier.

The *Fighting I* again attacked the flight deck barricade rigging record. In one week, 75 men from the V-1, V-2 and V-4 Divisions rigged the 25-foot high net in 50 seconds. That night, 40 men set it up in 49 seconds. A few days later, 50 men accomplished it in 44 seconds. In the last reported try, 60 crewmen rigged it in 45 seconds. Lt. E. M. Duben, Assistant Catapult-Arresting Gear Officer, stated that to his knowledge never before has an aircraft carrier flight deck barricade been rigged so consistently in less than 60 seconds.

To show that all the perspiration isn't wrung in barricade exercises, the *Intrepidmen* vied for the honor of being the most physically fit sailor aboard. In five events—pull-ups, push-ups, sit-ups, broad jumps and step-ups (running)—the "grunt and groan" session was supervised by the carrier's Marine Detachment C. O., Capt. J. C. Burger.

Top honors went to Gary Lee Valeu, AN, who scored first in two of the events by completing 76 sit-ups in two minutes and 20 pull-ups.

During *Intrepid's* FRAM overhaul scheduled for the New York Naval Shipyard next month, there will be between 50 and 60 ship alterations, including the installation of a PLAT system and the air-conditioning of the steam catapult control rooms. Also scheduled are improved Flag/Navigation bridges, a re-arrangement of CIC, the installation of an escape scuttle for the LSO, a modification of fuel oil storage, the removing of jet mix blenders, the installation of heavy weather fueling-at-sea rig, and a very long range air search radar.

FRANKLIN D. ROOSEVELT (CVA-42)

The *FDR* returned to Mayport from her 15th deployment with the Sixth Fleet.

X000th landings made during the cruise but not reported in these pages

include the 127,000th by LCdr. Donald D. Aldern of CVW-1, the 129,000th made by Commander Edward D. Herbert of VA-172, 134,000th made by Ltjg. William M. Ranson of VA-172, and the 135,000th by Commander Robert W. Kennedy of VAH-11. The 136,000th was reported last month.

HORNET (CVS-12)

Hornet is scheduled to complete her FRAM II overhaul this month at the San Francisco Naval Shipyard. Upon its completion, she'll undergo extensive operations and training periods at San Diego.

During the overhaul, CVS-12 received modern ASW equipment, the Pilot/LSO Landing Aid Television system, and the Fresnel Lens landing system. Four high-pressure turbines were lifted and overhauled. New four-chair dining tables were installed in her mess decks.

The *Hornet* has already completed sea trials. The full power run is reported to have come off "particularly well." The sonar and two large radars are said to have "performed in fine fashion."

SARATOGA (CVA-60)

LCdr. Gerald K. Loeb and Ltjg. Ronald H. Marron returned to their carrier, the *Saratoga*, by commercial air, after an unexpected week-long stopover at Algiers. The two *Skyraider* pilots were forced down by bad weather while on a search mission and were detained until diplomatic clearance requirements could be met. Their planes suffered prop damage during the landing at Djelfa. The pilots rejoined the *Sara* at Marseilles.

The carrier, earlier, had relieved *FDR* for her sixth tour with the Sixth Fleet.

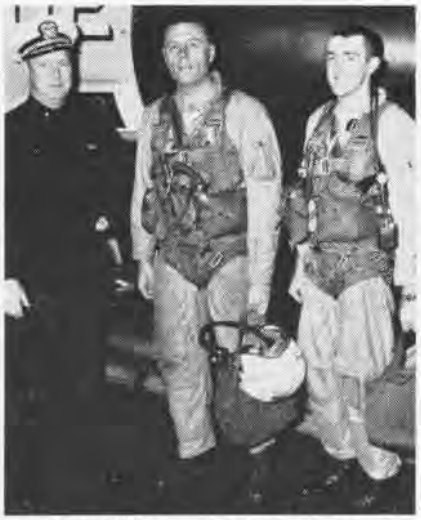
The 89,000th arrested landing aboard was made by Ltjg. R. W. Alcorn of VA-36, in an A-4C *Skyhawk*. The 90,000th was made by Commander R. B. Carter, X. O. of VA-34, also in an A-4C. The 91,000th landing was made by LCdr. R. A. Mackell of Carrier Air Wing Three staff, again in an A-4C. And the 92,000th landing was piloted by Commander G. C. Young, C.O. of VA-34, in an A-4C *Skyhawk*. The 93,000th landing on the *Saratoga* was made in an A-1H *Sykraider* flown by Lt. R. L. Starling of Attack Squadron 35.

600 CARRIER *landings in his log, Cdr. A. V. Barber, C.O. of VF-32, emerges on CVA-60.*

Commander A. V. Barber, Jr., commanding VF-32 in the *Sara*, logged his 600th trap, in an F-8D *Crusader*. Over 200 of these were night landings.

FORRESTAL (CVA-59)

The C.O. and X.O. of VF-74 in the *Forrestal* had cause for celebration. Commander C. A. Rank completed his 500th arrested landing in an F-4 *Phantom II* while his Exec, Commander Richard Thomson, went several better. He not only logged his 500th arrestment, but also completed his 100th in an F-4, his 300th in a McDonnell aircraft, and his 100th carrier trap during night operations.



500 LANDINGS *logged, Cdr. Rank (C) chats with X.O., Cdr. Thomson, RIO, Ens. Evans.*

A change of command ceremonies aboard CVA-59 saw Commander Paul E. Spencer relieve Commander James W. Nance as C. O. of Attack Carrier Air Wing Eight.

SHANGRI LA (CVA-38)

A Well Done to all hands was extended *Shangri La* personnel by Rear Admiral Robert Goldthwaite, ComFAir Jax, for logging over 3000 accident-free carrier qualification landings.

Lt. John R. Baals of VFP-62 logged the 66,000th landing aboard the *Shangri La*, in an F-8 *Crusader*.

After several months of operations off sunny Florida, *Shangri La* sailed north to Boston Naval Shipyard. Upon arrival, the men aboard encountered sub-freezing temperatures and more than eight inches of snow.

Shangri La's stay in drydock was only five days but yardworkers made each one count, working on three shifts to meet a 24-hour scheduled work day. The rudder posts were repacked as were the shaft glands; the carrier's propellers were replaced. This done, the ship sailed for the warmer waters off Mayport Naval Station and readied for her next Med deployment.

RANDOLPH (CVS-15)

The *Randolph* completed her overhaul and repair period at the Norfolk Naval Shipyard and resumed her role as an ASW aircraft carrier.

GUAM (LPH-9)

USS *Guam* was commissioned January 16 by Rear Admiral R. W. Cavenagh, Commandant of the Fourth Naval District. Principal speaker at the ceremonies was Manuel F. Guerrero, Governor of the Island of Guam. Among distinguished guests attending were General W. M. Greene, Jr., Commandant of the Marine Corps, and Mrs. Greene who sponsored the ship at christening ceremonies last August.

Also on hand were Lieutenant General J. P. Berkeley, Commanding General, Fleet Marine Force, U.S. Atlantic Fleet, and Vice Admiral J. S. McCain, Commander, Amphibious Force, U.S. Atlantic Fleet.

Commanding Officer of the amphibious assault ship is Captain N. E. Thurmon, a veteran Naval Aviator

who served as pilot of a bomber during the battle to liberate Guam in 1944. The ship is scheluled to be completed March 31 at the Philadelphia Naval Shipyard.

INDEPENDENCE (CVA-62)

The *Independence* has joined other ships with historical names as a "founder" of the planned Army-Navy Museum (1775-1815) in Independence National Historical Park in Philadelphia. The museum will be maintained indefinitely by the National Park Service.

The C.O. of CVA-62, Captain Robert W. Windsor, Jr., has requested that a room be reserved in the name of the five vessels which have carried the name of USS *Independence*. A check for the initial payment has already been forwarded to Philadelphia.

PACIFIC FLEET

CONSTELLATION (CVA-64)

Lt. George W. Berg saw a ghostly figure when he walked into the ready room of VF-143 in the *Constellation*. It was his own altitude suit, pumped full with air. It was his squadron's way of commemorating his sudden orders to Brooks AF Base as a candidate for the Aero-Space Pilot Training Program. In less than 12 hours after receipt of orders in the Western Pacific, he was detached from the squadron and en route to becoming an astronaut with the space program.

The 33,000th arrested landing aboard CVA-64 was made by LCdr. R. E. Sheets, Assistant Air Ops Officer, in a C-1A *Trader*. Over 10,000 landings have been made during this deployment, with 1400 landings a month average, indicating long hard hours of work by flight deck personnel.

The *Constellation* returned to San Diego last month, completing her Far Eastern tour. Because of their participation in the Gulf of Tonkin attacks during the cruise, men aboard were awarded the Navy Unit Commendation and the Armed Forces Expeditionary Medal.

MIDWAY (CVA-41)

In ceremonies aboard *Midway*, Captain Whitney Wright was relieved by Captain James M. O'Brien as commanding officer of CVA-41. The change of command ceremonies were conducted while the carrier was in the San Francisco Naval Shipyard.

KITTY HAWK (CVA-63)

While in dry dock at Puget Sound Naval Shipyard, *Kitty Hawk* hosted 40 University of Washington ROTC Midshipmen for an instructive tour of the ship.

KEARSARGE (CVS-33)

When *Kearsarge* returned from her WestPac tour, the parents of one lad aboard had a unique greeting for him (see cut). Gerrold R. Nauman, AA, was met at the city limits of Lancaster, Ohio, by his mother, father, and sister—and a 300-square foot billboard. His father is owner of Nauman Sign & Advertising Company of Lancaster.

Ltjg. Nicholas E. Halliday logged the carrier's 95,000th arrested landing aboard, in an S-2 *Tracker*. He is assigned to VS-21. A fellow squadron pilot, LCdr. Richard E. LaBarre, has logged his 500th carrier arrestment, on the *Kearsarge*.

Upon return from her WestPac tour, the *Mighty K* entered the Long Beach Naval Shipyard for a scheduled five-month overhaul.

CORAL SEA (CVA-43)

They had the day off from the *Coral Sea* and were lounging on Sunset Beach north of Honolulu, Ensigns Grant N. Inman, Leslie C. Thurman and Richard W. Allen. It was a warm Hawaiian Saturday afternoon and a welcome respite from the hectic routine of shipboard work. It wound up being a day of deep regret and gratitude for all three.

One of them spotted two youths in trouble some distance from the shoreline, a boy of 17, and a girl of 20, the two caught in an undertow. The three Ensigns dove in and in ten minutes reached the girl who was closer to shore. The waters were rolling and they had an exhausting time of it protecting the girl from the surf. A breaker crashed on them, separating

THREE CREWMEN *in the Kitty Hawk build a giant snowman on the flight deck. No hazard to incoming aircraft, the ship is in drydock.*

A LITTLE STUNNED *with a lot of pleasure, Kearsarge's Jerry Nauman, AA, is greeted by mom, sis, dad, and the biggest greeting card ever.*

A MEMBER *of Battalion Landing Team 3/3 of the Third Marines holds up a sack of food donated to the flood victims of South Vietnam.*

USS PRINCETON *(LPH-5) is shown, escorted by tugs. Helos of HMM-162 embarked carried peas, wheat flour, and clothing to South Vietnam.*

them, exhausting them more. They struggled, working as a team against the force of the water until they reached shallow water and eventually the beach.

The Ensigns started for the boy, but a crowd that had gathered prevented them from re-entering the dangerous waters. A rescue party was formed by the Honolulu Fire Department. Helicopters were launched. But they were too late.

While the *Coral Sea* was moored at Ford Island, change of command ceremonies were conducted aboard. Captain George L. Cassel relieved Captain Pierre N. Charbonnet, Jr., as commanding officer.

BENNINGTON (CVS-20)

HS-8 recorded the 15,000th helo landing aboard the *Bennington*. It was made by LCdr. K. J. Mengle with Ltjg. J. H. Speight and crewmen J.H. Turner, AX3, and J. R. Crawford, ADR3.

PRINCETON (LPH-5)

Pictures of *Princeton's* participation in relief for the flood-stricken Vietnamese last November were late in arriving at the editorial desk of NANews. Two of them are shown on this page.

The LPH loaded over 1000 tons of food and clothing at Hong Kong and, during a seven-day period, helicopters of HMM-162 embarked logged over 600 hours, flying 1020 sorties to three provincial distribution centers.

The Commander of the American Military Advisory Command in Vietnam wrote Captain Paul J. Knapp, commanding the LPH: "Congratulations to you and all hands on the USS *Princeton* for your outstanding performance of duty in the delivery of relief supplies to stricken refugees in the typhoon-affected provinces of South Vietnam. Although I know that all worked long and hard hours in accomplishing this mission, I would like particularly to cite the bakers for their production of thousands of loaves of bread for the hungry Vietnamese. I salute the United States Navy for another job well done."

YORKTOWN (CVS-10)

The 99,000th arrested landing on the *Yorktown* was made by 1st Lt. R. E. Enis of VMA-223 Detachment Tango in an A-4C *Skyhawk*.

RANGER (CVA-61)

Heavy Attack Squadron Two's Detachment Mike, aboard the *Ranger*, recorded that carrier's 64,000th arrested landing. Pilot of the A-3B *Skywarrior* was LCdr. C. D. Ball, III. In his crew were Ltjg. R. L. Cook, bombardier/navigator, and W. E. Sterns, AD2, third crewman.

VA-95 in the *Ranger* reports a new squadron record by flying more than 1300 hours in a month. More than 100 hours were logged in each of the unit's A-1H and A-1J *Skyraiders*. The squadron, commanded by Commander D. E. DeCamp, is home-based at NAS LEMOORE and currently on deployment in the Western Pacific.

Members of the *Ranger's* fuel oil lab are claiming a record of 173,940 gallons of oil transferred in an hour. Two fuel hoses were strung between the carrier and the USS *Sacramento* during a nighttime replenishment. Refueling took one hour, three minutes.

HANCOCK (CVA-19)

Seaman Verlyn L. Smith from the *Hancock* took a short swim in the South China Sea and did not like it.

It happened during underway refueling operations. Smith was signaling the oiler at his refueling station on the main deck when a large wave sent him sprawling and then carried him over the side. "Man overboard" was sounded and within minutes he was in the rescue harness of a helo, wet but unhurt.

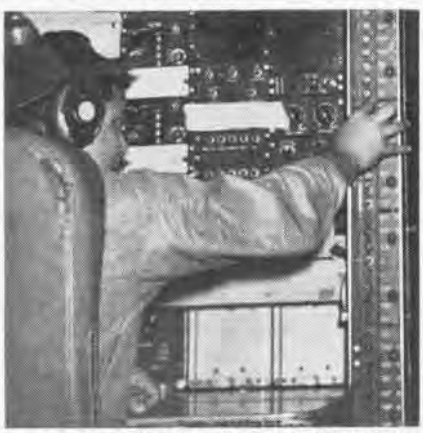
Hancock showed her versatility during a subsequent unrep when she received fuel and supplies by highline and helo while launching her own aircraft. The replenishment came from the *Sacramento* (AOE-1) and the *Mars* (AFS-1) in the South China Sea. For a few minutes, helos, carrying supplies from the *Mars*, hovered while several A-1H *Skyraiders* were launched.

The 69,000th arrested landing was made aboard by Commander W. H. Sells, CAW-21, in an F-8E *Crusader*.

Captain Frank B. Stone relieved Captain A. J. Brassfield as commanding officer in ceremonies aboard while the carrier was in Subic Bay.

FLYING THE WIDE PACIFIC BARRIER

BLIPS ON RADAR SCREEN ARE OBSERVED BY G. D. BARRETT, P. A. DAILEY, ATW3'S



D. J. DONNARUMMA, AC2, CHECKS RADIOS

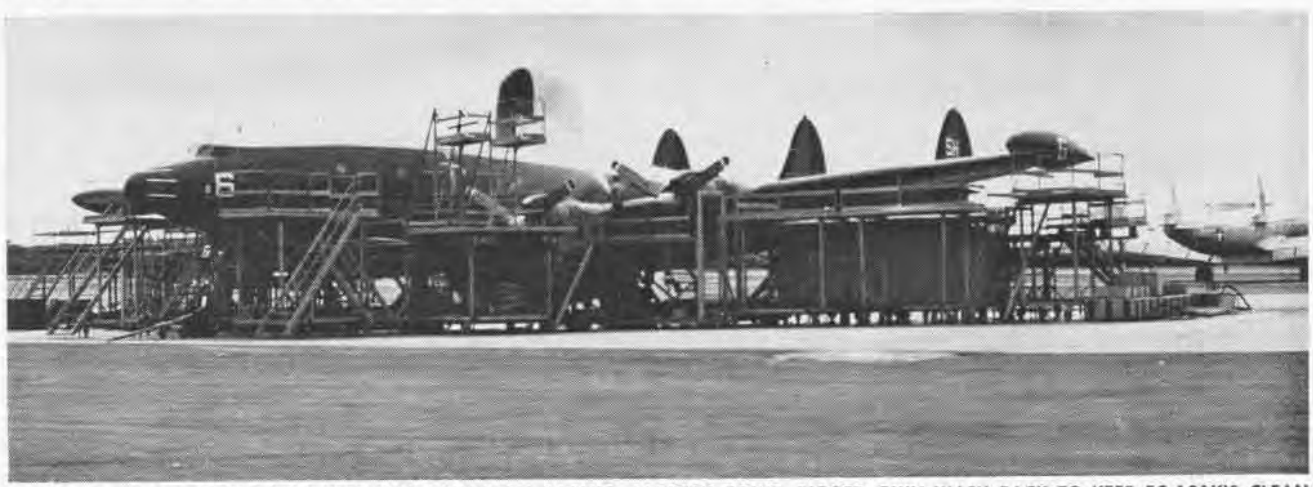
LTJG. J. D. NORDSTROM CHECKS POSITION

To meet the problem of surprise attack in the North Pacific, there are a series of high flying radar aircraft, running from Midway Island to the Aleutians in Alaska. They beleng to the Airborne Early Warning Barrier Squadron, Pacific (AEW). The unit became fully operational in July 1958, and was placed under the command of the Commander, Barrier Forces Pacific.

Home-ported at NAS Barber's Point, Hawaii, AEW maintains a detachment at Midway where all barrier flights originate and terminate. Air crews operate the Lockheed *Super Constellation Warning Star* (EC-121), virtually an airborne radar platform.

A barrier flight covers 1500 miles and requires the *Warning Star* flyers to remain aloft for 14 or more hours. Crews number an average of 20 high-skilled technicians per aircraft. Included are three pilots, two navigators, two Combat Information Center (CIC) officers, seven CIC operators, two radiomen, two flight engineers and one part-time cook, usually the most junior man aboard.

AEW crews undergo constant training for action against any "unfriendly" contact and can be aided by the North American Air Defense Command by working through Control Center, based at Oahu. Safety and survival instruction is also scheduled regularly at Barber's Point and men are periodically sent to Alaska for cold weather training.



PERSONNEL AT AIRBORNE EARLY WARNING SQUADRON PACIFIC, BARBER'S POINT, RIGGED OWN WASH RACK TO KEEP EC-121K'S CLEAN

Vigilante Flies the Pacific

A-5 Logs 25 Hours, 10,500 Miles

The first trans-Pacific flight of an RA-5C was completed on December 21 when a *Vigilante* landed aboard the USS *Ranger* after launching from NAS SANFORD in Florida six days before. The pilot, Lt. Charles E. McKenna, and his navigator, Ltjg. Forrest W. Sherrill, Jr., logged 25 hours of flight time and traveled 10,500 miles.

They made stops at NAS ALAMEDA, Hawaii, Wake Island, Guam and the Phillippines. The final leg of the journey was made from NAS CUBI POINT in the Philippines to CVA-61 operating in the South China Sea.

The *Vigilante* was transferred from RVAH-1 to the *Ranger's* RVAH-5, the first squadron to operate RA-5C's in the Western Pacific. The aircraft was refueled in-flight five times during trip by A-3B's from VAH-123.

El Toro Reduces Reports

First Reports of SCRAP Made

The Marine Corps' new emphasis, in line with SCRAP (Selective Curtailment of Reports and Paperwork), has paid one of its first dividends at MCAS EL TORO, Calif. The first major activity reporting, El Toro lists a 77% report reduction, a 56% forms reduction, a release of 8000 annual man-hours and additional savings of $5,720.00 since October 14, 1964.

Altogether, El Toro reviewed 52 reports and 86 forms required of its subordinate commands. Of the 52 reports, 40 were eliminated and five were improved.

The review and improvement of forms produced a smaller percentage of cancellations, but a higher man-hour saving. Of the 86 forms reviewed, 48 were eliminated, nine, improved.

Safe Touchdowns at Cecil

700th Arrested Landing is Made

Like the Northwest Mounted Police, the arresting gear crew at NAS CECIL FIELD always gets its man.

In October the crew made its 700th successful arrestment. There has never been an unsuccessful one at Cecil Field.

Lt. S. L. Jennings, terminal branch officer of the arresting team, recalls one incident last year. "There was a TA-3B trainer with eight people aboard that hit a bird while in flight and lost all aileron control. The plane took the arresting gear at about 140 knots. Witnesses said that if it had not been for the arresting gear, the plane would probably have crashed."

The arresting gear is inspected continuously, once every four hours. Each time the equipment is used, it is examined piece by piece. If any fault is even suspected in a component, it is changed at once.

Helo Records for Amphibs

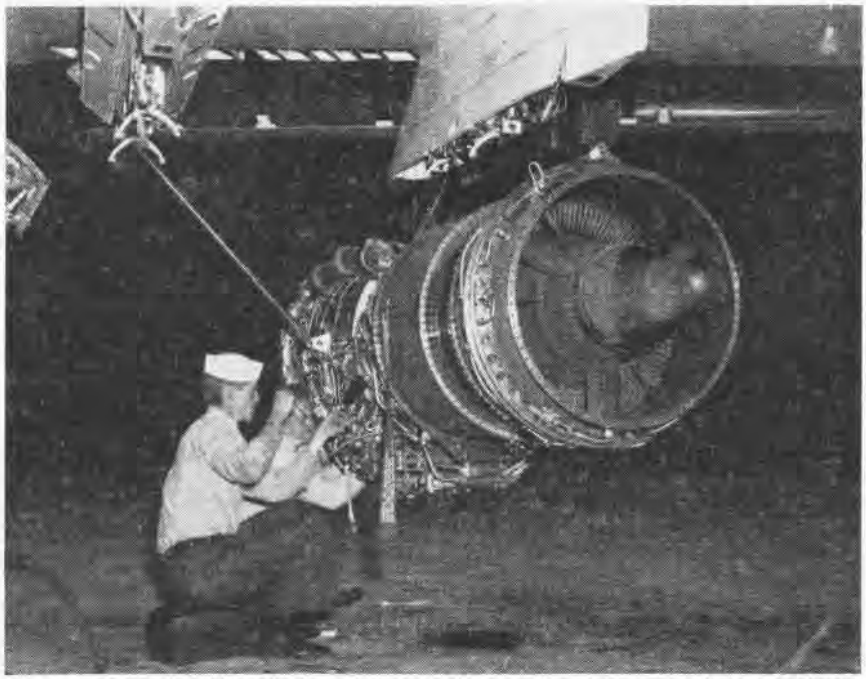
Two 'Gators' Log 1000 Landings

A 1000th landing on amphibious ships underscores the link with Marine helicopters engaged in vertical envelopment tactics for amphibious war.

Amphibious Squadron Six, commanded by Captain Julian T. Burke, Jr., has two ships that have achieved the 1000-landings record. They are USS *Shadwell* (LSD-15) and USS *LaSalle* (LPD-3). Both celebrated their "1000th Landing Anniversary" in January. Landings were accident-free.

USS *Shadwell* is not only a veteran of WW II, but also a veteran of the vertical envelopment technique. *Shadwell's* experience provided background for the designers of the *LaSalle* in equipping it for helicopter handling.

VA-75 DEVELOPS ENGINE WORK SLING



MECHANICS WORK UNHAMPERED ON JET ENGINE IN SLING MADE BY VA-75 PERSONNEL

IF YOU SEE an A-6A *Intruder* with jet engines hanging beneath its wings in an NAS OCEANA, Va., hangar, it isn't a new modification on the plane. It's the result of an idea for new jet engine suspension sling developed by Lt. George E. Matt, Jr., of VA-75.

Lt. Matt broached his idea to two squadron mechanics, B. R. Singleton, ADJ1, and R. A. Roenker, ADR1. They designed a suspension sling from an I beam fitted with lugs from a 300-gallon drop tank for connection with the wing pylon on the A-6A. It provides connections to suspension points on the engine which are normally used to suspend the engine inside the aircraft in flight. With their design complete, Robert A. Cox, AMS1, welded the metal parts of the sling together.

The suspension sling provides unlimited access for maintenance work on the engine and does not tie up an engine stand. VA-75 jet mechanics can work all around—over and under the engine with no obstructions.

The sling arrangement eases engine maintenance and saves valuable time.

Security Guide is Issued

DOD Instruction Clarifies Rules

The Department of Defense has issued Instruction 5210.47 to provide uniform policy guidance for security classification of official information.

The instruction, signed by Assistant Secretary of Defense (Manpower) Norman S. Paul, applies throughout DOD. It will also provide the basis for classification activities in the Defense industry.

Application of its provision is expected to reduce the quantity of classified information and material, thereby facilitating the flow of scientific and technical information and Defense-developed material into non-Defense activities.

The new instruction incorporates in one package all of the policies, principles, standards, criteria and practices which govern classification decisions. The instruction sets forth for the first time the grounds or reasons for classification, one or more of which must be involved in any particular case of correct classification. Authority to make original classification is curtailed and restricted to designated officials.

Approximately 90% of all classifications are derivative, that is, based on some existing classification. To assure accuracy of these decisions, the instruction requires derivative classifiers to know precisely what requires security protection. Responsibility for making derivative classification is fixed.

Physical things, such as hardware, equipment and the like are to be classified only to the extent necessary to protect from unauthorized disclosure information contained in or revealed by the physical object.

Stated broadly, the instruction is intended to provide the means for safeguarding sensitive information while at the same time reducing to a minimum the amount of documentation and material which is classified.

Intelligence Head is Cited

Lauded for Photo Analysis Work

The Defense Intelligence Agency (DIA) has awarded the Joint Service Commendation Medal to one of their former officers, a Naval Aviator, for exceptionally meritorious achievement. LCdr. John R. Clarke, OinC, Fleet Operational Intelligence Training Center, was given the medal by Rear Admiral David C. Richardson, ComFAirNorfolk, at NAS Norfolk.

LCdr. Clarke was Deputy Intelligence Production Officer of the Joint Photo Analysis Group, DIA, from June 1962 to June 1964.

The citation read, in part: "[LCdr. Clarke] contributed immeasurably to the exploitation of tremendous volumes of reconnaissance materials, and provided timely intelligence material of critical significance for use at the highest national levels. . . ."

Shipyard Closing is Noted

New York Unit Terminates 1966

Secretary of the Navy Paul H. Nitze has determined that the closure date for the New York Naval Shipyard will be June 30, 1966. Decision for this date was based upon several factors, including allotment of enough time to facilitate the orderly processing of job offers from other activities to the many skilled career employees at the yard.

The date also allows for completion of currently assigned work, provides for a gradual phasedown of employment and affords the community a reasonable period to adjust to the economic impact of the shutdown.

Editor's Corner

Pet Name for a Ship. Writing homeward from detached helicopter duty aboard an icebreaker, a correspondent told his commanding officer: "Rough weather and the rolling characteristics of this Mechanized Cork have made crossing the Pacific somewhat unpleasant. . . ."

CAMPAIGN FOR SOAKIES. While between deployments in the Pacific, the USS *Midway* started a collection campaign of "soakies." The carrier asked that plastic containers in the form of many cartoon characters be collected by Ship's personnel and deposited at the NAS Alameda chapel. *Midway* sailors will distribute the "soakie characters" to orphanages in the Philippines and Japan. "When empty, they are great dolls for children," *Midway West* reported.

What's a Tour at Sea? USS *Kearsarge*, now undergoing a yard period, totalled up its statistics for the West-Pac deployment which ended in December. Among the facts were these: that the ship had spent 138 at-sea days out of 180 during the cruise; that the ship sailed 43,438 miles; that the ship got underway or put into port 30 times. When department heads were asked to provide statistical material for the ship's newspaper *Kearsarga*, one added a footnote that said, "Number of man hours wasted if this report is not published—ten."

ONE TOUR EQUALS ONE CHAPTER. Writing of the *Kearsarge's* tour, John Burlage, Journalist First Class, wrote the following summation:

"The work, the watches, the fun, and the pathos can never be adequately described. Whatever the cruise was to *Kearsarge* sailors—or whatever it was not—it did bring into play the hundreds of little things that make every deployment different. And this is the fact that will make the difference to most of us. When the brow drops in Long Beach, it means an end of one facet of a sailor's life. That is the life he has led for the past six months. Even so, arrival in Long Beach isn't really the end of the story. As a matter of fact, it simply starts another chapter."

(Burlage's next chapter, as a matter of fact, is to be written as a staff member of *Naval Aviation News*, to which he reported in February.

Classifieds at Sea. In a page devoted to tongue-in-cheek classified ads, the *Stinger* (USS *Wasp*) published the following advertisements:

Wanted: Better weather in Marseilles.

For Sale: Aircraft tractor. Like new. Only driven to pri-fly once a day by Air Boss.

Personals: Anyone having a picture of a smoking lamp, bring it to the PIO.

Free introductory Yoga lessons: Call USMC, Marine Cultural Center.

RESULTS OF ADVERTISING. Thinking that their Christmas mail "might be lean this year," three sailors on the USS *Yorktown* sent letters to the editors of 18 leading newspapers. In the letters they said, "We are three young sailors aboard a carrier in the Western Pacific. Would you please print our names in your paper so that someone might take a few minutes to write one or maybe all of us?" Each of the young men received more than 200 responses, including cards and even a few proposals. Said the ship's press release, "It proves that there are those who still care, and that the power of the press still reigns."

"It's No Joke, Son." Around aviation training centers there are many years-old jokes about students "who may have to be shot down" when they overshoot the landing runway. Now comes the FAA *Horizons* periodical, in the December 1964 issue, telling "one of the most unusual and exciting scenes ever to be enacted at an airport—a pilot shooting his airplane." It happened at the Ventura, Calif., county airport, when a crop-dusting plane was turned up (alone) by the pilot. One brake gave out and the plane "whooshed off in a series of uncontrolled turns between runway and taxiway."

Tower chief Melvin Couch, who witnessed the action, was quoted as the source of the following: "The pilot took after the plane on foot. At this point, the manager of the firm dashed from his office with two shotguns. He tossed one to the pilot and they blasted away at the airplane for 10 minutes before a tube leading from an upper wing tank was hit and the engine stopped." How about that, Grampaw?

JUST ADD WATER. During the switch from Cuban-controlled water to desalinized water, the residents of Guantanamo Bay had need of a sense of humor. Available at the Navy Exchange—according to the base newspaper—was a canned product known as "Dehydrated Water." The label on the can states, "Empty contents into one gallon of water, stir until dissolved. Chill and serve." Just before opening the pipes and valves of the water plant, Rear Admiral John Bulkeley, base commander, was proclaimed "King of the Water Makers" (See NANEWS, February 1965, P. 12).

Coincidence of the Old Year. LCdr. Louis Hettinger, of Heavy Attack Squadron Two, finished the year 1964 with 1964 flight hours as a Naval Aviator.

SIDE BY SIDE. Heavy Attack Squadron Eight, at NAS Whidbey Island, Wash., has an unusual brother combination. One of the brothers is Seaman Apprentice James Williams. The other is Captain Ronald Williams, USAF, who reported to Heavy Eight as an exchange pilot in December. The brothers are from Salina, Kansas.

The Cake Parade. A cake was ordered by VS-28 aboard the USS *Wasp* "for the 20,000th work order" processed by the squadron maintenance department.

***EYES DECEIVING?* Captain Andrew Reid, C. O. of the Naval Station at Sangley Point, P.I., did a "double take" as a familiar airplane paused at the Sangley seaplane ramp. It was a PBY, the standard USN patrol aircraft of the 1930's and '40's. The visiting plane belonged to the Trans-Australia Airlines and was merely stopping for gas. For Captain Reid it brought back memories of December 24, 1941, when he, as a pilot/maintenance officer of Patrol Squadron 102, flew the last PBY out of the Philippines toward Australia under enemy fire. (The TAA's PBY, which has no wheels, carries up to 28 passengers to remote water landing areas of the Pacific.)**

LETTERS

Rubbed the Wrong Way

SIR: Destroyermen are always pleased to see our fine ships' names appear in print, rather than merely grouped by collective pronouns such as "a squadron of destroyers." This is especially so in your fine publication, *Naval Aviation News*. "The pilot, Commander N. D. Drink, was rescued by a destroyer," rubs us the wrong way, and you are not often guilty of this lack of consideration.

In your article, "Carriers in the Complex Modern Fleet," on page 19 of the January 1965 edition, you show Task Group Bravo ships and aircraft in formation and name *Holder, Rich, Damato* and *Wilson* of DesRon 36. Nice going, but unless my eyes deceive me, I see five destroyers in the picture and the middle one leading the group is USS *Robert A. Owens* (DDE-827). All five of these ships are now DD's, have been FRAMed, and split up into different squadrons, but *R.A. Owens* in her pre-FRAM days was the squadron flagship and easy to pick out.

Just for further information, the destroyers in the Task Group Alfa picture on page 18 are of DesRon 28, when that squadron consisted of *Waller, Conway, Cony, Eaton, Bache, Beale* and *Murray*. *Waller* is the squadron flagship in the lead, one ship is out of the picture to the left and another is hidden by *Lake Champlain's* island.

I enjoyed your article and always find *Naval Aviation News* very interesting.

S. D. LANDERSMAN, LCDR
Flag Secretary & Aide

Office of the Superintendent
U.S. Naval Academy
Annapolis, Md.

* We were FRAM-ed.

Hornet Reunion Announced

SIR: All officers and men who served aboard USS *Hornet* (CV-8 and CV-12) and members of its air groups are invited to attend the 17th annual reunion to be held in Philadelphia aboard the Cruiser *Olympia* on June 26, 1965. For details, write to me at this address: P. O. Box 67, Bethayres, Pa.

LAWRENCE P. WHITE

Quonset Pilot Commended

Flew Air Cover at Gulf of Tonkin

Lt. Samuel L. Smith was commended at NAS QUONSET POINT for his participation in the Gulf of Tonkin incident which took place in August, 1964. A test pilot with the station's O&R Department, he was cited for superb airmanship while assigned to VA-145 aboard the USS *Constellation*.

He received the Navy Commendation along with other members of the Armed Forces Naval Task Group 77.6 and the Armed Forces Expeditionary Medal. Lt. Smith was alerted just before midnight on August 4th to launch in his A-1 *Skyraider*. Once airborne he and other members of his squadron were directed to provide air cover for the destroyers, USS *Maddox* and USS *Turner Joy*, which were carrying out offensive operations against North Vietnamese patrol craft.

Although the flight over the Gulf of Tonkin was conducted in total darkness and in thunderstorm conditions, Lt. Smith and his squadron mates provided the necessary air cover. A letter from VA-145's C.O. stated in part: "Your superb airmanship and conduct under adverse weather conditions were in keeping with the highest traditions of the Navy."

NAVAL AVIATION FILMS

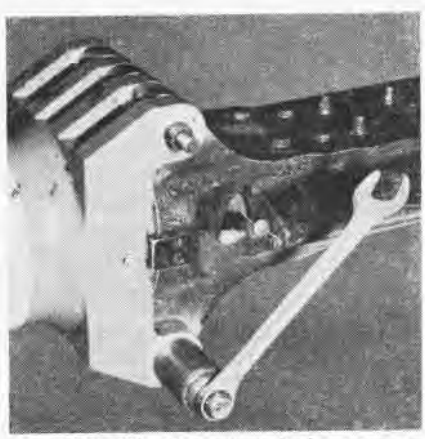
On the latest list of motion picture films released by Head, Film Distribution Division, U.S. Naval Photographic Center, are the following titles of particular interest to officers and men in Naval Aviation:

MN-8984T — Unclassified — *Navy Screen Highlights*. Tonkin Gulf Incident, Adm. Ricketts' funeral, Lt. Klusmann's return, Sea Lab and Sea Orbit. 14 minutes.

MN-10005A — Secret — *Integrated Operational Intelligence System—Concept and Capabilities*. RA-5C combines with CVA integrated operational intelligence center to make efficient, reliable intelligence gathering and interpreting system. 37 minutes.

MN-10005B—Secret—*Integrated Operational Intelligence System—Operation*. System used to update enemy order of battle, using RA-5C and CVA's integrated operational intelligence center. 28 minutes.

Instructions for obtaining prints of newly released films are contained in OPNAV Instruction 1551.1C.



ALF ELLYSON'S *HT-8 devised this taper pin puller for UH-34D/G rotor blades. Smaller, more efficient than previous tool, it weighs a pound, is made with lathe and arc welder. HT-8 has design details available on request.*

Bombing Derby in April

Is Annual Event at NAS Sanford

The Eleventh Annual Reconnaissance-Bombing Derby will be held April 5-10 at NAS SANFORD, Fla. The Derby is considered one of the most comprehensive air readiness exercises in the U.S. Atlantic Fleet.

This year emphasis will be placed on aerial photographic and electronic reconnaissance in contrast to past Derby competitions when bombing was the top event.

A carrier airmanship demonstration April 10 will attract thousands of visitors at the station's open house.

The purpose of the six-day event, according to Captain James O. Mayo is "to provide training for squadron personnel through participation in various competitive exercises."

NAS SANFORD is the joint Atlantic-Pacific Fleet headquarters for the U.S. Navy's RA-5C *Vigilante*.

Navy's Southernmost GCA

Unit is Installed at the South Pole

Installation of the first ground controlled approach equipment to be used at South Pole Station, Antarctica, has been completed. A VX-6 ski-equipped C-130 *Hercules* made the first successful radar controlled instrument landing there.

Coincidentally, this first operational ground controlled approach was made through necessity rather than test, because of ice fog which restricted visibility to about two miles.

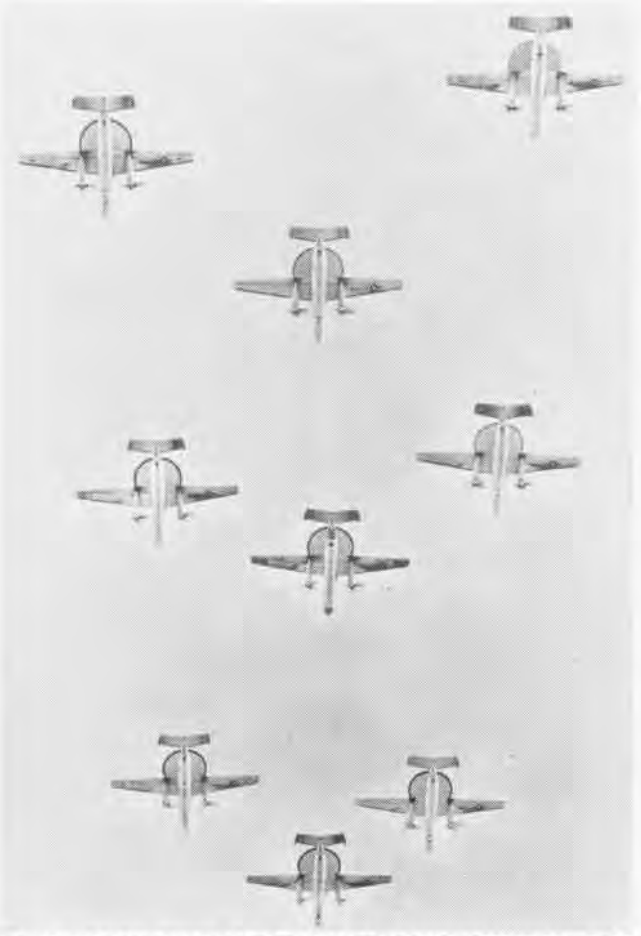
The pilot, Lt. Bob Paty, was "talked down" by R. C. Pedigo, ACC, who, with H.C. Loveless, ETC, and R.D. White, installed the equipment. The approach was monitored by *Deep Freeze* commander, Rear Admiral James R. Reedy.

First A-6A Rework Done

Quonset Point is Overhaul Center

On January 19, Lt. Louis G. Lomheim, an assistant flight test officer, assigned to O&R QUONSET POINT, flew the first A-6A aircraft reworked there. It had been completed well within the allotted period. Two more *Intruders* were in process at the time the first was flown.

Future reworks will be completed at an increasing rate. Rework is to be accomplished in approximately 35 workdays. An increasing number of *Intruders* are expected at Quonset.



E-2A'S (ABOVE) HAVE LATEST IN ELECTRONIC DETECTION GEAR

E-1B (TOP), E-2A OF VAW-11 ARE THE 'EYES' OF PACIFIC FLEET

TURBOPROP HAWKEYE LANDS ABOARD A CARRIER IN THE PACIFIC

SQUADRON INSIGNIA

Provide early warning services to Fleet forces and shore warning nets under all weather conditions—this is the mission of VAW-11. The squadron represents a modern answer to the constant need of sea and air surveillance. To do their job, detachments fly the EA-1E *Skyraider*, which is being phased out, the E-1B *Tracer*, and the new, sophisticated E-2A *Hawkeye*. As 'Eyes of the Fleet,' VAW-11 crews and planes are also responsible for combat air patrol and ASW missions. The squadron is home-based at NAS North Island, San Diego, but detachments serve aboard 13 CVA and CVS ships in the Pacific.

UP IN THE AIR ABOUT RE-ENLISTING?

You don't have to emulate Photographer's Mate Donald Maury (right, above, being congratulated by LCdr. Norman Olson) and re-enlist at 12,500 feet in a free fall. Your unit has a Career Navyman ready to sign you up with both feet firmly on the deck. YOUR NAVY NEEDS YOU AND YOUR SKILL. Re-enlistment is encouraged for Navy personnel who serve with honor. (You'll smile, too!)

NAVY

NAVAL AVIATION NEWS