NAVAL AVIATION NEWS

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ON HER DECK TROD MANY HEROES

Just last year, Mississippi strengthened muscles with missiles.

★

Change of Command parades a proud crew.

Namesake of a famous state, EAG-128 rests.

★

"Farewell and Well Done" is the epitaph of this proud and historic warship. Bold in battle, guardian of peace, the USS Mississippi has "swallowed the anchor" and, via the furnaces of her purchaser, is bound to emerge in this supersonic age in sturdy instruments for defense.

CVA'S TO THE NTH POWER

AIRCRAFT CARRIERS are ready to enter a new era. The nuclear powered carrier (CVAN) is the next logical step in a program of progress designed to keep the Navy equal to its assigned missions and the tremendous responsibilities which they entail. Nothing less than atomic power can compete on equal terms with the potential enemy offensive, an offensive which would take full advantage of atomic weapons.

The reasons for projecting a nuclear powered aircraft carrier have been succinctly set forth in an educational booklet recently published by the Chief of Naval Operations under the appropriate acrostic title:

C arriers are
V ital to the
A tomic
N avy

This justification is predicated on the fact that the United States is a maritime power, separated from friend and foe alike by vast expanses of water. We are half way around the world from the sources of some of our most vital raw materials. Our cities and industries are so concentrated and disposed as to facilitate an attack by sea or air.

We must, therefore, be able to project our power across the seas, control the seas and the air over them, in order that we may have access to our allies and to certain raw materials.

Weighing some 85,000 tons, the CVAN class will have the facilities and power to restrain aggressors from initiating military adventures.

The first nuclear powered carrier is not to be an experimental ship. It will be fully operational. The world's nuclear power pioneering was done by the Navy with the *Nautilus*—an outstanding success. A nuclear powered cruiser and additional nuclear powered submarines will be operating several years before the CVAN becomes operational and joins the fleet.

The CVAN will represent the latest in a long series of progressively improved aircraft carriers, a series which began with the USS *Langley* in 1922. Introduction of nuclear power is one more step, though a major one, in this evolution.

USS YORKTOWN, WW II VETERAN, LIVES UP TO A PROUD NAME

USS F. D. ROOSEVELT, CVA-42, HAS SPECIAL WEAPON CAPABILITY

FLEET'S FIRST ANGLED DECK WAS BUILT ON THE USS ANTIETAM

THIRTY-FIVE years of experience in building aircraft carriers is the guarantee of the kind of ship that will meet the needs implicit in military planning in the atomic age. In World War II, the supremacy of the fast carrier task force was proved beyond all doubt. In a report made early in 1947, the Chief of Naval Operations stated: "In a war whose pace was at all times governed by what was logistically possible, the carrier task force was an economical weapon independent of the investments in time, personnel, and priceless shipping space required for construction of airfields and facilities soon to be left far behind the advancing front. Its mobility gave to the attacker the advantage of continuous initiative and surprise."

The necessity of changing designs to meet changing requirements is not new to the Navy. Immediately after World War II, U. S. Navy planners were faced with the need to design a carrier that would be able to handle the heavier, faster jet aircraft soon to be produced. Thus it is only a part of a long tradition of willingness to anticipate necessities that the Navy looks beyond the *Forrestal*-class carriers to those that will be nuclear powered.

The last ten years of building experience—which have included a large amount of conversion—have not only preserved an effective force in being, but also provided a basis for continuing progress in the large and complicated field of aircraft design.

In 1946, it was originally proposed that an entirely new aircraft carrier be built embodying all the accumulated lessons of the last war with the most far-sighted provisions for future development. Once it was constructed, an offensive air group with modern aircraft would operate from it and determine from the whole experiment, by trial and as few errors as possible, the design of the future.

On second thought, it seemed wiser to take an intermediate step by selecting an existing CV-9 class carrier and making on it the changes and improvements which would most nearly fulfill the originally determined requirements. Thus in 1947, CNO requested BUAER and BUSHIPS to determine the characteristics of the conversion which should be incorporated to operate the airplanes coming into being and those on the drawing boards. The program determined upon was called "Project 27A of the Shipbuilding and Conversion Program, Essex-Class Development"—or just 27A.

Beginning in 1947, there has been a steady phasing of conversion projects to keep carriers capable of handling faster and heavier aircraft. From October 1947 to October 1953, nine *Essex*-class carriers underwent Project 27A conversion. These carriers—now the *Oriskany* class—were the USS *Oriskany, Essex, Wasp, Kearsarge, Lake Champlain, Bennington, Yorktown, Randolph* and *Hornet*. Project 27A called for, among other things, the installation of H-8 catapults, strengthened flight decks clear of guns, special weapon capability, increased elevator capacities, enlarged bomb elevators, increased aviation fuel capacity, including jet mix fuel, installation of jet blast deflectors, hangar deck subdivision fire doors, and increased aircraft crane capacity.

The three *Midway*-class carriers also were part of a modification project called "Ships Improvement Program No. 1" and executed between 1947 and 1949. The CVB carriers, as they were first designated, had been built in the last years of WW II and had not been in action in that conflict. The *Midway* and the *Franklin D. Roosevelt* were commissioned in the fall of 1945, and the *Coral Sea* was commissioned in October 1947. Practically on the heels of their commissioning, a program was needed to provide them with special weapon capability. In 1951 this same program was extended to the first *Essex*-class carriers that had received the 27A conversion—the *Oriskany, Essex* and *Wasp* —ships which had not received the special weapon capacity in their first modification.

In 1951, there was inaugurated the Axial Deck 27C conversion program which was designed to increase still further the capability of certain *Essex*-class carriers. This conversion involved many more changes than the 27A and was designed to keep the carriers involved in longer useful life as CVA's. Three of the conversions were completed by 1954—the *Hancock*, the *Intrepid* and the *Ticonderoga*. The changes included the installation of two C-11 steam catapults, Mk. 7 double-reeved arresting gear, an improved barrier system, and all the 27A modifications with the very latest improvements.

The *Shangri-La*, the *Lexington* and the *Bon Homme Richard* were converted under the Angled Deck 27C project. The outstanding modification in this latest project was,

OLD SHE MAY BE, FIRST OF A CLASS, ESSEX IS RIGHT IN STYLE

as its name indicates, the installation of the angled deck. There were other changes—new hurricane bows, air conditioning, and improved flight deck lighting. The *Hancock*, the *Intrepid* and the *Ticonderoga* were retrofitted, and all six are known as the *Hancock* class.

The angled deck was, of course, one of the major postwar innovations in carrier design. By having aircraft land on the angled deck, operations were speeded up, and one airplane could land safely as another took off. The landing plane was in no danger of hitting working personnel or parked aircraft on the forward section of the deck. The angled deck is the "new look" in carriers, and while there is nothing antique about the axial deck, it is definitely not in fashion.

An angled deck conversion was, in due order, extended to the *Midway* class and planned for all the carriers that had received the original 27A conversion. It has been installed in all but two of the *Oriskany* class.

On 8 August 1953, a new classification of aircraft carriers was established, the antisubmarine warfare support carrier (CVS). Ships assigned to this class were former *Essex*-class carriers which had capabilities vastly superior to the smaller escort carriers previously used for antisubmarine purposes. These CVS carriers are capable of operating new types of antisubmarine warfare aircraft. They have relatively stable decks in rough seas, efficient catapulting and arresting equipment, large shop, ammunition and living spaces and low vulnerability to attack. They provide greatly increased effectiveness against enemy submarines.

THE CARRIERS now designated as CVS's are the *Boxer, Philippine Sea, Antietam, Leyte, Princeton, Tarawa, Valley Forge, Wasp, Essex, Franklin* and *Bunker Hill*. (The last two named have been inactivated and are in the reserve fleet.) Although replacing CVE's with CVS's has reduced the total number of active antisubmarine warfare carriers, the CVS carriers operate more planes and mean greater ASW capability for the Fleet. One of the CVS carriers has the angled deck, the USS *Antietam*. It was on this ship that the new deck design was tried to determine its worth.

But, of course, the most valuable and significant advance thus far in the art of naval warfare was the new *Forrestal*-class carriers. These fighting ships of the line are today the pride of the Fleet. Everything that the converted carriers have, the new ships have—only better. The *Forrestal* (CVA-59) and the *Saratoga* (CVA-60) are in the Fleet, and the *Ranger* (CVA-61) will be in the near future. Two more are being built, the *Independence* (CVA-62) and the *Kitty Hawk* (CVA-63). And still another has been authorized, the *Constellation* (CVA-64).

WITH CVG-4 ABOARD, THE YORKTOWN SAILS OUT OF GOLDEN GATE

PORTION OF HER 2000-MAN CREW STANDS ABOARD THE LEXINGTON

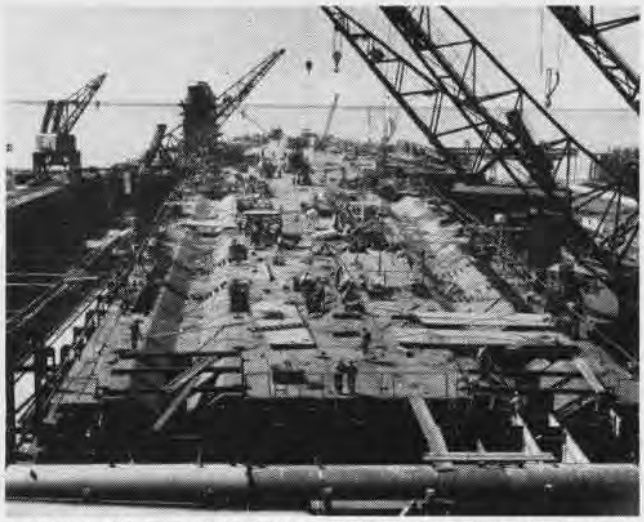
Each has or will have the angled deck, four steam catapults, single-reeved Mk. 7 arresting gear, a flight deck that is the strength deck, increased special weapons capability, guided missile capability, four deck-edge elevators, hurricane bow, increased aviation fuel storage, and air-conditioning.

The need for increasing the launching and recovery areas is readily seen when one considers the new series of jet aircraft with their high approach speeds, aircraft such as the A3D *Skywarrior*, an attack aircraft weighing 70,000 pounds, and such outstanding fighters as the F8U *Crusader* and the F11F *Tiger*. To have these aircraft without modern carrier decks beneath them would be arrant foolishness economically and downright disastrous strategically.

But the most important consideration prompting the Navy to continue its modernization program and new construction is the fact that aircraft carriers make it possible for the Navy to execute its strategic mission. New construction which keeps the Navy abreast of its vast responsibilities must continue in regular and orderly fashion. Such a program is the *sine qua non* of a rounded defense program.

Before a Congressional Committee, Adm. Arleigh Burke, CNO, highlighted this consideration: "Worldwide cold war commitments and mobilization requirements dictate that certain forces be continuously deployed at overseas locations to act as deterrents against aggression: and, in the event of hostilities, that these and additional forces be immediately available and ready, to conduct offensive operations against the aggressor. The backbone of these forces is the attack carriers with their embarked air groups."

Under present cold war conditions, the Navy has agreed to keep a minimum of six carriers overseas in support of our national security policy. Since the Navy can have only 35-40% of its forces deployed overseas at one time, the



BUILDING OF THE FORRESTAL MARKED THE FIRST OF A CLASS

FORRESTAL IS REMOVED FROM DRYDOCK #10, NEWPORT NEWS, VA.

WHAT WAS ONCE EXPERIMENTAL WAS STANDARD ON THE CVA-59

Fleet must have a minimum of 15 combat-ready attack carriers. The requirements for training and for periodic maintenance and overhauls create tight schedules for the nine home-based carriers. In event of a general war, all 15 would be immediately needed for combat operations, so there is actually no margin for back-up purposes.

In a limited war, a powerful carrier force will be required at the scene of the trouble for an extended period, but at the same time, the Navy must still maintain carriers in potentially dangerous areas. For example, during the Suez crisis, it was still important that the Seventh Fleet be ready for immediate action in the Western Pacific. With only 15 carriers available, these extended deployments stretch the available force to the utmost.

By overlapping the conversion and building programs in the last ten years, the Navy has maintained current combat capability at the same time it has been looking ahead to the day when even modernized carriers can no longer operate the then existing aircraft without restrictions.

The *Essex*-class carriers which had not received the 27A conversion had all been redesignated support carriers by the spring of 1956 and assigned to antisubmarine warfare. They will continue to perform this one function satisfactorily for four more years. In orderly progression they will be replaced by the *Hancock*-class as those carriers become incapable of operating high-performance aircraft. But even then, the 27A converted carriers and their successors will still be useful to the Navy in limited antisubmarine warfare work, or as helicopter ships or transports.

By continuing to build one new carrier a year, the Navy insures its capability to provide effective naval support to the U. S. national policies in the cold war, a limited war or a general war. The orderly program of retirement and building of carriers has been set forth by CNO as follows:

ONE NEW CARRIER A YEAR

Year Ending	Modernized ESSEX Hydraulic Catapults (ORISKANY)	Modernized * ESSEX Steam Catapults (HANCOCK)	Modernized MIDWAY	FORRESTAL	CVAN	TOTAL
57	3	6	3	3	—	15
58	2	6	3	4	—	15
59	—	7	3	5	—	15
60	—	6	3	6	—	15
61	—	5	3	6	1	15
62	—	4	3	6	2	15
63	—	3	3	6	3	15
64	—	2	3	6	4	15
65	—	1	3	6	5	15
66	—	—	3	6	6	15

* Includes ORISKANY.

The Navy, notably conservative in accepting innovations until fully proved, is convinced that the time has come to take full advantage of the proved capabilities of nuclear energy, by applying it to the propulsion of a capital warship, the aircraft carrier. The shift to nuclear power is as imperative today as the shift from sail to steam was 100 years ago. By the time the new carrier is in operation four years from now, nuclear power will be regarded as a military necessity, rather than merely a military advantage.

Some of the advantages stem directly from the use of nuclear power, some are incidental to its use, and some result from general progress in aircraft carrier technology.

First and most spectacular advantage is the ability to steam indefinitely at top speeds without concern for the conservation of fuel and without hazard to the power plant. The usefulness, versatility and tactical flexibility of the carrier are tremendously increased.

It is also this capacity for sustained speed which reduces the carrier's vulnerability to attack. The carrier, always elusive, will prove an even more difficult target. For example, the submarine will have less chance of gaining a favorable position for attack.

The CVAN will have another great advantage: it will carry almost double the aviation fuel supply carried by the *Forrestal* class. Whereas the conventionally powered carriers can conduct air operations for only three to five days, the CVAN will increase this interval between replenishments to at least eight days. And this would appear to be a conservative estimate.

Even her conventionally powered escort ships will be able to stay on station with her for extended periods, because the CVAN bunkers will also carry black oil for their refueling. When the escorts are nuclear powered, this bunker space will carry additional aviation fuel and there will be even longer operational periods between replenishments. In the future, ammunition supply, fresh food and personnel replacement may be the principal considerations in determining replenishment schedules, rather than aviation fuel supply.

Another great advantage of the CVAN will be the installation of long range radar. Absence of smoke stacks allows for an island configuration required by new high performance electronics. This radar, which is difficult to jam, will give detection ranges on smaller targets at vastly greater ranges than present equipment. Thus air defense and air offense are substantially improved.

Reduced combat vulnerability is another gain made possible by the elimination of the smoke stack and uptakes. There is no longer a chance of smoke fumes entering the ship through punctured uptakes. Not only does the absence of stack gasses solve certain serious problems of aircraft corrosion and crew discomfort, it also eliminates the danger of the ship's being detected at long range by certain technical means other than radar which the enemy might use.

The nuclear power plant will eliminate the tremendous air intakes and forced-draft blowers needed for oil-fired boilers—these intakes cannot be closed in combat. There is no danger that water, gasses, boiler fumes, or radioactive or biological warfare agents will penetrate the ship.

Increased space will enable the nuclear powered carrier to operate more of the larger aircraft. The CVAN will have about 4000 square feet more of flight deck space than the *Forrestal* class, and 2000 square feet more of hangar deck space. These large areas will yield great benefits in the way of increased aircraft servicing and maintenance.

This is no time for hesitation. The United States must go ahead with its plans for nuclear powered aircraft carriers to meet the possible challenge of Soviet aggression. As Adm. Burke has pointed out, "In any hostilities, the Russians can, and there is every evidence they will, contest the control of the sea by every means at their disposal —by air, submarine, missile and surface ship. The most effective protection from these threats is to attack the bases from which the attack vehicle comes. It is evident, then, that our Navy must be able to operate in the presence of and towards the elimination of these threats. It cannot be done without a strong mobile air arm. . . .

"Carrier striking forces are the heart and backbone of modern naval forces; they are the principal offensive power of the Navy. The carrier striking is and will continue to be multi-purpose. It provides an effective means of applying tremendous striking power, with versatility and flexibility for coping with varying situations. . . .

"These wonderful innovations—nuclear power, nuclear weapons, supersonic aircraft, guided missiles — are the harbingers of the Navy of the future. They hold the promise of the new Navy of fantastic power, range, and mobility—a Navy which will prove equal to the greatest challenge the maritime world has ever faced. The future is limited only by our imagination and our zeal."

In the modern carrier striking force, we have what our first president, George Washington, once described as essential: "In any operation and under all circumstances, a decisive naval superiority is to be considered as a fundamental principle, and the basis upon which every hope of success must ultimately depend." ★ ★ ★

SARATOGA HAS SAME DESIGN CHARACTERISTICS AS THE FORRESTAL

THE EIGHTH RANGER, THIRD OF HER CLASS, CVA-61 IS LAUNCHED

GRAMPAW PETTIBONE

Boondocks Bound, Jet-Style

About 3000 feet down the runway the starboard engine of an AJ-1 cut out, recovered, and cut out again. Midway down the 8000-foot strip, the pilot elected to abort the take-off and pulled back both reciprocating throttles to the idle position.

Sheets of water covered the runway, and neither normal nor emergency braking produced the desired effect on the slick runway surface. Straight as an arrow, the airplane roared off the end of the runway. *The jet engine was still at 100%.*

While trying to rein in his runaway airplane, the pilot heard the tower transmit instructions to drop the hook to catch the arresting wire at the end of the runway. He dropped the hook, but got no engagement — *the wire wasn't rigged!*

After crossing a newly-filled ditch which caused the nose gear to shear off and tore both reciprocating engines from their mounts, the *Savage* came to a halt some 500 feet into the muddy overrun area. Not until after the crew had evacuated the aircraft did they discover that the jet engine was still running full tilt.

Grampaw Pettibone Says:

The pilot — a LCDR — is probably still running, with the AAR Board in hot pursuit.

Why this chap was still on the deck halfway down the airstrip is beyond me unless he deliberately held the airplane on the runway. He held his brakes while applying take-off power and, according to the Handbook, should have been airborne at a safe flying speed long before his engine ever started cutting out. He still might have had trouble on the slick runway on the subsequent landing with one engine secured, but he'd have had a fighting chance of stopping and probably would have remembered to cut the jet on touchdown.

The plane captain, standing between the pilot seats as the AJ started its take-off roll, ran back to the third crewman's compartment and strapped himself in, stood up to take a look when the engine cut out, then strapped himself in again before the airplane ploughed into the mud. He showed excellent timing as a jumping jack, but a miscalculation would have meant one plane captain all broken up. The third crewman, an AT2, occupied the right-hand seat of the pilot's compartment.

And now for the Air Station's responsibility. Leaving the arresting gear unrigged makes about as much sense as wearing an oxygen mask with the hose disconnected.

BUAER'S "Emergency Chain Type Arresting Gear Bulletin Number 5" states: "The gear when located at the end of the runway shall be maintained in the battery position at all times." Unfortunately, by present estimates, only 15% are now being kept in the battery position. And that's not good, since at least one-third of the time the urgency of the impending arresting gear engagement doesn't permit the 5 to 15 minutes required for rigging the gear. The answer is obvious—*keep the gear in readiness at all times.*

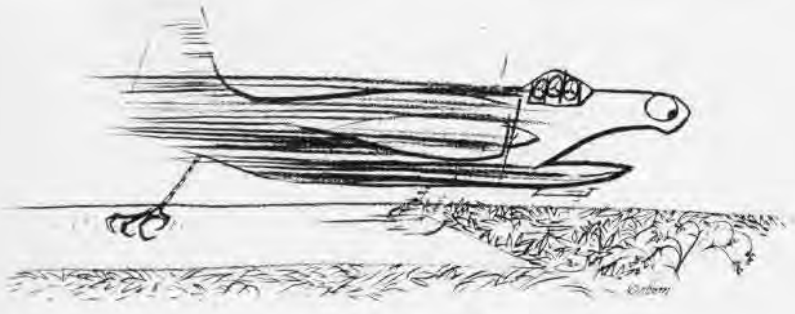
HANGAR FLYIN' *like these lads are doing is O.K. in its place, but it can never replace thorough flight planning—the very best antidote for April Folly or year-round goofin' off. SO—PLAN IT, BRIEF IT! FLY IT!*

Bread and Bored

After successfully completing two touch-and-go landings on the angled deck of an *Essex*-class carrier, the pilot of an AD-6 made an uneventful, hook-down, arrested landing. The plane director immediately gave the "hook-up" signal. The *landing gear* retracted, and the aircraft settled on its belly.

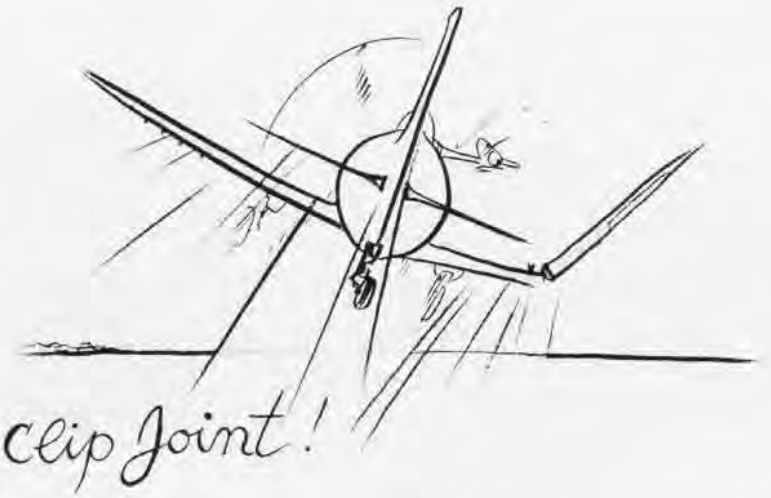
Said the pilot: "Anticipating a 'come-on,' I reached for the throttle and put on a few inches. The director was then giving me a 'hold' so I reached to take off what little extra power I had and then felt myself sinking. I had put the gear handle in the 'up' position.

"I sat for same seconds not comprehending what had happened when I heard someone calling to cut the engine. I pulled back the mixture and



after further hollering noticed that the prop was still trying to turn over. I then pulled the mixture all the way back and turned off the mags, battery and generator and left the aircraft."

Said the flight surgeon: "Presuming the landing gear was actively retracted by the pilot, the explanation for such a confused action is that of disengagement of conscious awareness (or recognition) and the motor responses for a series of rapid manipulations required by the pilot immediately after landing aboard a carrier. This temporary cerebral dysfunction probably was preceded by diminished alertness due to preoccupation and/or boredom."



Grampaw Pettibone Says:

Well, Doc, the fog count for us pilot types is a little high in that last paragraph, but I take it the lad was preoccupied or bored. And that's what a pilot can't afford to be, in spite of the long-standing definition of flying—endless hours of boredom punctuated by brief moments of sheer terror.

Reminds me of the story about the two Mexicans who were so preoccupied in racing their dynamite-loaded trucks that they failed to notice the train into which they crashed. A number of lives were lost in the ensuing blast. And blast it was, for, according to the story, when a balcony in a theatre a mile distant collapsed, Pedro, who had been enjoying a matinee with a new companion, was moved to say, "But Senorita, how you can kees!"

The truck drivers were led into their final spectacular escapade simply because they were bored. Hauling explosives had become so routine that they raced to ease the monotony. While their solution to the problem worked on a one-time basis, it wasn't worth a plugged peso on the second go-around.

The same is true of aviation. If flying has become monotonous, taking risks or relaxing vigilance is *not* the answer and it *can* get pilots killed. It doesn't matter whether daily bread is provided through driving trucks or airplanes, the solution lies in having an interest in one's job, studying it from every angle, and finding ways of doing it better. In addition to the more obvious benefits, the relief from monotony is automatic, since a job gets tedious only when there is time left over to make it that way. The professional approach in the pursuit of the better mousetrap allows no extra time for being bored to death.

'Way Below Par

The tow target plane had already taken off, so the lieutenant piloting the AD-4 chase plane hurried to follow. Because of congestion along the taxiway which necessitated leaving the wings folded, the pilot delayed starting the spread cycle of the wings until just prior to pulling out onto the duty runway. He taxied into position, checked his mags, and took off.

Two ordnancemen in the process of laying tow lines noticed that the starboard wing was not fully spread, but they were unable to attract the pilot's attention. The pilot of an aircraft awaiting arming (engine cut and radio off) couldn't sound a warning in time. The crash crew got the word and was underway before the inevitable crash.

The AD got five feet in the air, then crashed in a nose-down, right-bank attitude when the right wing folded. Some of the side forces were dissipated as the airplane shed its engine and landing gear.

The pilot remembered looking out of the right side of the cockpit while the plane was still sliding sideways and seeing the burning engine in hot pursuit. When the airplane stopped sliding and the flames began licking around him, the pilot stood up in the cockpit—parachute still attached—and dived headfirst into the marsh grass, tearing his flightsuit and underwear, spraining an arm and scratching his abdomen. As the pilot put it, "I felt this would be the speediest exit and the safest, considering the circumstances."

The accident board determined that the pilot failed to check to see that his wings were completely spread, did not attempt to lock his wings, and didn't go over his check-off list. Secondary causes of the accident were the probable physical and mental fatigue of the pilot and his haste to join the tow plane.

Grampaw Pettibone Says:

Bub, I hope your belly-whopper into the marsh had a sobering effect on you. CNAResTra's Week-end Warriors have an excellent safety record, no thanks to the likes of you.

This pilot knew he had a flight the next morning, yet he partied at the "O" Club and didn't turn in until about 0100. He failed to get sufficient sleep and rest, and he accepted the flight when he didn't feel well. Following the accident, the pilot couldn't remember whether or not he went through his check-off list, whether he made a visual check of the wing lock indicators, or whether he locked the wing lock. I'm surprised that he remembered his attempted take-off.

A lot of reports cross my desk and too many of them give accounts of pilots who aren't with us any more because their pride or their devotion to duty kept them from speaking up when they didn't feel up to par or who disregarded the need of getting sufficient food and rest. It's pretty easy to see that if a pilot "feels poorly," he flies poorly.

It's high time *every* pilot realized that taking to the blue is not to be taken lightly. Flying is serious business requiring an alert mental attitude, a healthy respect for physical condition, and the exercise of mature judgment—in short, the professional approach. Anything less—by either full-time flyer or part-time pilot—is a flaw in the Navy's combat readiness and a threat to the happy homestead.

SAFETY RECORD FOR ATU-201

'TIGERS' OF ATU-201, CORPUS CHRISTI, GET CHECKED OUT IN F9F PANTHER TRAINER

ADVANCED Training Unit 201, based at NAS CORPUS CHRISTI, is making its mark in Naval Aviation. The unit has established a new safety record for single seat, jet aircraft.

Flying the F9F *Panther*, ATU-201 has flown 14,861 hours without an accident of any sort.

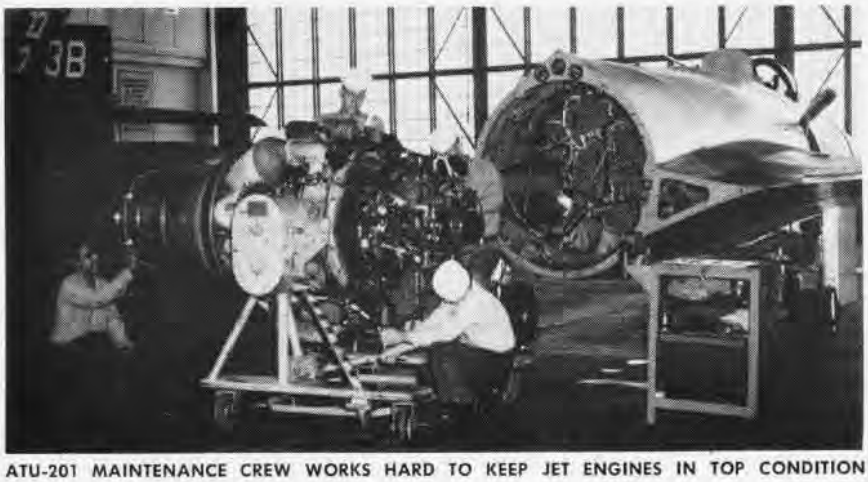
The unit is one of several which give flight students operational training and imbue them with a sound foundation of actual experience prior to flying with the Fleet.

Since August 1956, ATU-201 has compiled 14,861 flight hours and has made 12,384 landings without any accidents. This is the equivalent of a single aircraft staying aloft, 40 hours per week, for seven and one-half years; or flying a jet around the world 208 times. This is an impressive record.

During the calendar year of 1956, ATU-201, which has an average of 65 aircraft assigned, flew a total of 37,594 hours. Not one student was injured during the course of the year.

The unit has received four consecutive "Ace" awards. These are presented by the Chief of Naval Air Advanced Training to the one jet unit in the command which has displayed outstanding qualities.

Skippered by Cdr. A. L. Lewis, personnel of ATU-201 are known as the *Tigers*. Cdr. Lewis attributes the safety record to outstanding spirit, teamwork and aggressiveness by all personnel. This includes officers, enlisted men, and students who have been a part of ATU-201 during this period.



ATU-201 MAINTENANCE CREW WORKS HARD TO KEEP JET ENGINES IN TOP CONDITION

Early Aviator Makes Gift

Documents Go to Proposed Museum

A group of rare historical mementos were donated to the proposed Pre-Flight Naval Aviation Museum by Carl Adams. VAdm. A. K. Doyle, CNATra accepted the donation.

Mr. Adams, an aviation pioneer himself, is a half-brother of the famous Glenn Curtiss.

The treasures consisted of five rare aeronautical photographs, concerning early Naval Aviation, and a book, "The Flight Across the Atlantic," published in 1919 in limited edition.

These historical documents will go with the battle flag of the *Enterprise*, the bell of the *Hornet*, and other mementos of Naval Aviation in the proposed museum at Pensacola.

U. S. Dollars in Japan

Add Eight Billion Yen to Economy

Over $22,541,000 was turned into the Japanese economy in 1956 by the three installations controlled by Commander Naval Air Bases, Japan. This money, totalling more than eight billion yen, included the year's official expenses, non-appropriated funds paid out for recreational programs, and the spending of individual personnel.

ComFAir Japan controls the U. S. Naval Air Stations at Atsugi and Iwakuni, and the U. S. Naval Air Facility at Oppama. Although these three bases are only a small part of the total Security Forces' strength in Japan, they provide jobs for thousands of Japanese people in a wide range of occupational fields. The bases are also a market for a variety of Japanese commodities and manufactured goods.

A break-down of the money spent shows that nearly half of the total amount came out of official Navy Department funds. About six and a half million dollars went to local contractors while $3,000,000 was used to pay the wages of Japanese personnel employed by the bases. Local material and utilities accounted for about a million and a half.

From the non-appropriated funds $1,726,000 was drawn for operation of the recreation facilities. Individual Navy men and Marines and their clubs and charitable organizations converted $9,662,000 of their own earnings into yen at the base banking facilities.

MR. GATES ON BRIDGE OF USS INTREPID

Thomas S. Gates SecNav

UnderSecNav Successor Not Named

Effective 1 April, the Hon. Thomas S. Gates, formerly the Under Secretary of the Navy, becomes Secretary of the Navy. At the time of going to press, his successor to the post of Under-Secretary had not been named.

Mr. Gates succeeds the Hon. Charles S. Thomas who has served as Secretary of the Navy since May 3, 1954. Previous to that time he had been Under Secretary of the Navy, February 9 to July 28, 1953, and Assistant Secretary of Defense (Supply and Logistics) July 28, 1953 to May 3, 1954. Mr. Thomas has resigned to return to civilian life.

Mr. Gates was graduated from the University of Pennsylvania in 1928. He began a successful career in investment banking, which was interrupted by WW II. He was commissioned in the Naval Reserve and served on active duty from 1 April 1942 until his release to inactive duty in October 1945.

After being graduated from the Quonset Point Air Intelligence School, he was assigned to CinCLant, to help organize and develop that command's Naval Air Intelligence Center. In 1943, he was assigned to the USS *Monterey*, serving aboard that carrier in the Pacific for approximately a year. In 1944, he was on the staff of RAdm. C. T. Durgin (now VAdm., retired) during the invasion of southern France.

Then the new Secretary went back to the Pacific, taking part in the Philippine liberation and the Iwo Jima and Okinawa campaigns. For his war service, Mr. Gates was awarded the Bronze Star and a Gold Star in lieu of a second Bronze Star. In December 1953, he was promoted to Captain, USNR, and placed on the honorary retired list.

Since the war, Mr. Gates has been active in Reserve and Veterans organizations, including service as a Director and National Vice President of the Navy League, and as a member of the Naval Advisory Council of BuAer.

Mr. Gates was appointed Under Secretary of the Navy by the President assuming that office in October 1953.

Japanese Visit USNTDC

Tour R&D Activities of the Navy

Five Japanese Army colonels and one civilian scientist from the Technical Research Institute, Japanese Defense Agency, visited the Naval Training Device Center, Port Washington, N. Y.

The visitors are on a tour of research and development activities within the Navy Department. They are sponsored by CNO under the Mutual Defense Assistance Program.

Other stops were made at NRL and Operational Development Forces, Norfolk. The tour will end with visits to the Naval Electronics Laboratory, San Diego, and area industrial firms.

Thomas on Forrestal

Makes CCA Approach to Carrier

Chalk up another first for the USS *Forrestal!* Arriving aboard as a co-pilot of a TF, SecNav, the Honorable Charles S. Thomas, was guided aboard by the carrier-controlled approach unit. This marks the first time in Naval history that a Secretary has flown aboard under these conditions.

OFFICERS TAKE SECNAV ON SHIP'S TOUR

Assigning the plane an altitude and bearing, LCdr. R. S. Severns, the CCA officer, brought the Secretary within six miles of the ship. Switching over to the approach scope, he brought the TF, obscured in fog, closer to the super-carrier.

At an altitude of 300 feet, and at a distance of a quarter of a mile, the plane was spotted by the LSO. It was coming in the groove. Seconds later, the plane made a perfect carrier landing aboard.

On hand to welcome the Secretary were RAdm. M. E. Arnold, ComCar Div-4, and Capt. W. E. Ellis, CO.

AT FIRST GLANCE, *this looks like it should be smothering a steak, but it is a WF-2, named Tracer, Grumman Aircraft's entry in the field of Early Warning. The contrivance looking somewhat like a mushroom houses the antennae and other electronic gear for aircraft's mission.*

THE SARA TALKS TO HERSELF

"THERE ARE more automatic telephones in service on board the USS *Saratoga* than there are people in my home town of Woodbourne, New York." This statement, surprising at first glance, was made by Ross Kelley, Interior Communications Electrician First Class, trouble-shooter for the *Sara's* Interior Communications team.

USS *Saratoga* (CVA-60), population 3500, is indeed a self-sustaining, good sized community, with an intricate dial telephone system connecting 660 automatic phones about the ship. But to Kelley and other members of the 'IC' gang, the principle of operation of this system is very simple and is, in fact, similar to that of a switchboard in an average size community.

TESTING THE LINE RELAY ON '200 BOARD'

Designed especially for service on this, the world's largest warship, the *Sara's* modern shipboard telephone system provides rapid, automatic telephone communication between various, and oftentimes widely separated, points on the super-carrier. The installation can accommodate 800 telephones on a two-party-line basis with selective party-line ringing. It is also equipped with a special "Executive Right-of-Way" feature so that urgent or high priority calls can be cut in immediately on any conversation in progress at the time.

Three types of improved phone sets are used on the *Sara:* a desk type that can be bolted to desk tops; a bulkhead type somewhat similar to a standard wall-type telephone; and a weatherproof type for use on the ship's weather decks. Both the bulkhead and outdoor telephones are equipped with intensity-adjustable dial lighting devices which give off a soft glow of light so that numbers can be dialed when the ship is darkened.

Another feature is the special locking device on each telephone instrument to prevent the handset from falling off the hook when the ship is rolling, or is subjected to the shock of sudden motion of combat.

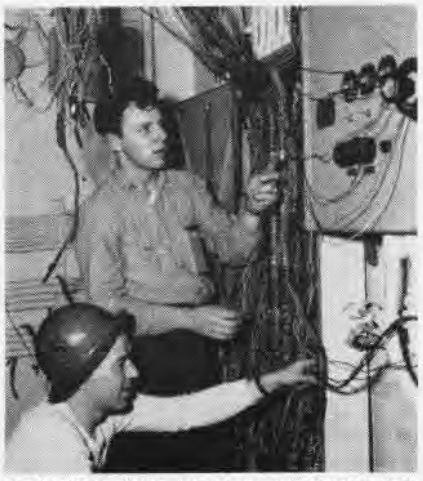
"Since the *Saratoga's* commissioning on 14 April 1954, there has been an average of 32,000 calls made weekly through the ship's automatic telephone switchboard," Kelley said.

When the ship is in port, a shore station may be reached from any of the telephones on board by means of a cordless manual switchboard, equipped with eight shore-line trunks, and attended by an operator. While at sea, the system is completely automatic.

It is the job of the IC gang to keep *Sara's* many telephones and equipment in top working order. To accomplish this requires constant routine maintenance, as well as the more complicated repairs and the continual job of moving and installing phone instruments. But all this pays off in the high rate of efficiency reached by this modern automatic communication system.

'THIS SWITCH WORKS THUS,' ROSS KELLEY TELLS L. NEUMAN

ENS. ZERBEL INSTRUCTS O'CONNOR ON SWITCHBOARD OPERATION



REPAIRING LINES IN MAIN JUNCTION BOX

By Dick Graddick, J01

CNO Speaks at Houston

Air Reserve Facility Commissioned

Adm. Arleigh A. Burke, Chief of Naval Operations, was on hand for the commissioning ceremonies, on 17 February, of the Naval Air Reserve Facility, Houston, Tex.

He said in part: "It is axiomatic that our best chance of preventing war is our obvious readiness to engage in it. . . . The Naval Air Reservist in discharging his peacetime duties as a responsible American citizen is giving a very practical demonstration of that readiness which is so essential to free nations: the ability to mobilize essential strength rapidly at the outset of an emergency.

"In the event of war there will be a sudden and great demand for combat aviation skills. This demand can be met only by a well-trained and ready Reserve force.

"To Captain [Cdr. S. G.] Parsons and to all of you who will work and train here . . . my warm congratulations on your commissioning and my sincere good wishes for happy and productive fulfillment of your mission."

Awards at Corpus Christi

DAR Honors 4 Outstanding Pilots

Four flyers, representing the Navy, Naval Reserve, Marine Corps Reserve and Coast Guard, were honored on January 19 as the outstanding student pilots graduated from the Naval Air Advanced Training Command during the fiscal year 1956. The ceremony took place at NAS CORPUS CHRISTI.

Each of the four pilots received an engraved gold wristwatch from the Texas Society of the Daughters of the American Revolution. During the annual CNAATC personnel inspection, Mrs. Felix Irwin, State Regent, presented the awards.

Honors for outstanding achievement were given to First Lt. Phillip F. Oestricher, USMC, jet fighter course; Ltjg. Eugene H. Parker, USN, single-engine attack plane course; Ltjg. Warren E. Farwell, USNR, multi-engine landplane course; and Lt. Robert A. Carlston, USCG, multi-engine seaplane course.

This was the second annual award by the DAR. The awards are based upon flight ability, ground school grades, and officer-like qualities.

'ANGEL' PRACTICES *mercy mission at NAF Oppama where a detachment of HU-1 is located. The squadron is based at Ream Field but, like HU-2, has detachments scattered widely.* *(See story on page 18 in this issue.)*

New Housing for Navy

Bids Opened for Capehart Project

Bids have been opened for the first Navy housing project authorized under the Capehart Act. Six bids have already been received for construction of 435 units at MCAF NEW RIVER, N. C.

It is expected that the contract award will be announced shortly after approval by RAdm. R. H. Meade, CEC, USN, Chief of Civil Engineers, and the Federal Housing Administration. The bids include all FHA and other costs, such as legal, financing, architectural, engineering design fees.

The units in the New River project will include 110 married officers' quarters and 325 married enlisted men's quarters.

This is the first of a total of 56 projects presently planned for the Navy portion of the Capehart program.

HU-2 Receives the HUL-1

First to Operate New Helicopter

Helicopter Utility Squadron Two at NAS LAKEHURST reports that it is the first operational squadron in the country to receive the Navy's new HUL-1 helicopter. Three of the craft were flown from NAS PATUXENT RIVER where HU-2 pilots and crewmen had participated in fleet indoctrination trials of this latest addition to the whirlybird family.

Ltjg. R. E. Williams, Jr., Ltjg. P. C. Norwine, W. F. Banks, ADC/AP, and E. L. Ransdell, ADC/AP, all from HU-2, and four other pilots from HU-1 at Ream Field, San Diego, flew the HUL-1 for 500 hours during the 18 days of testing.

HU-2 crewmen who participated by providing maintenance were: B. I. Paul, ADC; G. L. Stuart, AD1; J. Kalian, AD1; I. H. Bennett, AD3; T. N. Wheeler, AD3; C. A. Schweizer, AN; R. J. Lingo, AN; R. W. Blaney, AN; J. Cannistraci, ATAN; and R. E. Schmidt, AN.

The HUL-1's 50-gallon, long-range inside fuel tank boosts its range to five hours, more than twice the range of the Bell HTL-5. Provisions have been incorporated into the basic helicopter for the installation of a lifesaving rescue hoist, two inside litters for transporting stretcher patients, various winterization equipment, and floats to facilitate landings at sea.

The pilots and crewmen from HU-2 received a commendation for their work from Cdr. J. A. Harman, CO of HU-2.

His commendation was prompted by a letter from Capt. Donald Gay, Jr., Director of Patuxent Service Test, who praised the men for their good work.

Noted Artist Goes Navy

Takes Sketching Tour with CVA-59

Charles H. Hubbell, noted aviation artist, was a guest of the Department of Defense on a sketching tour of the Mediterranean area. This, his first Atlantic crossing by ship, was made aboard the USS *Forrestal*.

Mr. Hubbell's sketches and stories about the carrier and its flight operations, men and planes made headlines in the *Cleveland Press* in a series of published features. The artist is nationally recognized for his paintings and sketches on aviation subjects.

SITE OF *the first Japanese Naval Air Training center, as it looked in the early 1900's.*

OPPAMA, YESTERDAY AND TODAY

TWO WORLD *wars and 45 years later, Oppama is now the site of the U. S. Naval Air Facility and the Army's Ordnance Command, Japan. Emphasis is now on support of the fleet repair program.*

"EVERY TIME I saw that red meat ball at first I got a funny feeling inside, but I'm used to it now," remarked one of the old time patrol plane pilots. He was watching a PBY-6A with a large rising sun painted on its side taxi up the ramp at the Naval Air Facility, Oppama, Japan. His remark expressed a feeling common to many of the personnel on duty at Oppama—men who still have vivid memories of World War II.

That *Catalina*, a training and utility aircraft, is a part of the air arm of the Japanese Maritime Self Defense Force, Japan's modern Navy. The six P2V-7's transferred from the U. S. to Japan in 1956, and the S2F's in the process of transfer now give Japan a nucleus of its ASW organization. PBY pilots and crewmen are trained at NAF OPPAMA.

This is not the first time that Japanese Naval Aviators have received their training at this base. Indeed, it seems very appropriate that Japan's post-war naval aviators should be trained here, for it was at Oppama that Japanese Naval Aviation was born in 1912.

It was in the fall of that year that a beach on the west side of Tokyo Bay, about 25 miles south of the city of Tokyo, was selected as a site for a seadrome and placed in commission. Two very favorable factors influenced the choice of this site: it provided comparatively sheltered water for seaplane operations, and it was only two miles across an inlet from the naval stronghold of Yokosuka.

To procure planes for training purposes, the Japanese Imperial Navy in 1912 sent observers and attaches to France, England and the United States. Their travels produced two Farman seaplanes in France, as well as two Curtiss seaplanes in these United States.

Interest in the Curtiss "hydroplanes" had been fired in Japan by the Oriental tour that early aviators Bill Atwood and his wife had made the same year with two of these Curtiss craft. As a result of this interest, the Japanese government sent three officers, Lt. Kohno, Lt. Yamada and Lt. Nakashima to Glenn Curtiss' "flight school" at Hammondsport, New York, for flight training. There they were a part of an international group of pupils who had come from all over the world.

In "Sky Storming Yankee," the story of Glenn Curtiss' life and achievements, Clara Studer writes: "The juxtaposition of various racial temperaments gave rise to some tense and some comic moments. The three Japanese officers were fatalists and wanted to imitate Beachey's dive [Lincoln Beachey, one of the Curtiss exhibition pilots] after a few lessons, except that they did not see the necessity of levelling off as they neared the water. Fortunately, the instructors were strong enough to wrest the controls from them. [Instructor Francis] Wileman, ordinarily a peaceable fellow, lost his temper completely one day and shouted:

" 'You gosh-danged idiot, we'd have been killed if I hadn't grabbed the controls.'

"The answer was a shrug and, 'We must all die sometime, what matter when?' "

In the first flight class at Oppama, there were four officers and 100 men. Lts. Y. Kaneko and S. Kohno made the first two flights. Taking off from the sealanes which were 600 and 1000 feet in length, they flew at an altitude of 100 feet for about 15 minutes each. (Today Oppama has three sealanes, 8000 feet, extendable to three miles.)

Participation of Japanese naval aircraft in naval maneuvers began in 1915 when they were assigned reconnaissance missions. This reconnaissance flying continued into World War One, as Imperial Navy pilots flew missions out of Tsingtao, China.

In 1916 the seadrome was designated the Yokosuka Naval Flying Station, with a Captain Yamanouchi as Com-

manding Officer, and LCdr. Kaneko, the Executive Officer. By this time a sizeable number of Japanese naval aviators had been trained to fly in the Curtiss and Farman seaplanes. Flight training was begun in Japanese built planes in 1917, and in the following year, a balloon group came into being.

In the fall of 1920, a Yokosho-type seaplane, piloted by Lt. K. Akashiba took off from Oppama and flew nonstop to Sasebo harbor, a distance of 738 miles, in 11 hours and 35 minutes. This flight set a long distance record for Japan. The first flight from a ship by a Japanese pilot was also made in 1920 when Lt. (later VAdm.) Kuwabara flew from a platform built on a turret of the battleship *Yamashiro*.

Oppama's rapidly expanding activities were out-growing its area. In 1921 the landplane training moved to Kasumigaura, northwest of Tokyo, and two years later the seaplane training followed. That same year, landings were made aboard a light aircraft carrier, the *Hosho*.

Oppama as an operational base continued to grow. From the original small beach, it expanded to surround the nearby hills. The mud flats were filled in to form an aerodrome with a 5000-foot runway.

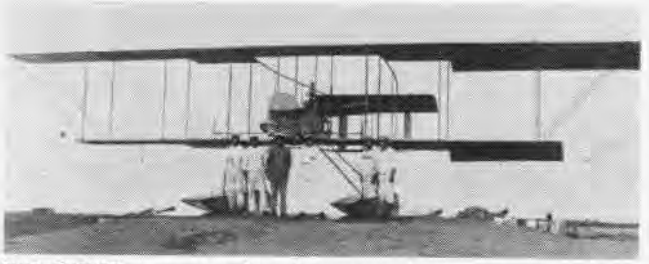
By the early thirties, the station was turning again toward diversified activities. An advanced flying officers' course was instituted, as were air student and air observer courses. Both engineering and operational testing of planes took place. At Oppama, the *Zero* fighter was given tactical tests, as was the *Betty* flying boat. Dive bombing was developed and a dive bombing squadron was commissioned. A torpedo maintenance school was conducted in support of aerial torpedo testing done there.

RAdm. Fitzhugh Lee, Commander, Fleet Air Japan and Commander, Naval Air Bases, Japan, gives an interesting sidelight on the station in 1934. In those days there was no air attache at the Embassy in Tokyo so various aviators from ships in the western Pacific were assigned as occasional observers.

The then Lt. Lee was assigned to spend a week at Oppama. His time was carefully controlled and every place he visited was highly protected from a security standpoint. On one walk, however, he spotted a hanger in which there was a new Sikorsky flying boat. The Japanese had purchased it, but had not shown it to him. Upon the completion of his week, there was a conference. Adm. Lee reports that Lt. Lee couldn't refrain from asking, "How do you like the Sikorsky flying boat over there in the hangar?" And he still smiles as he remembers the stammering of his nonplussed escorts.

A research center, called "Aeronautical Arsenal," was established close by the operational station, Oppama. Some of the facilities of that center remain. There still stand shells of the vertical wind tunnel, a horizontal wind tunnel, and engine test cells. The big tank that once was used for testing seaplane hulls is now an indoor swimming pool.

During WW II, Oppama's activity continued, greatly increased. Every hill around the station was a honeycomb of caves and tunnels which housed shops and offices. By 1945, over 10,000 men were stationed there. Here, too, *Kamikaze* pilots were trained. Oppama flight instructors formed a group known as the Hachiman and aided in the bloody defense of Iwo Jima.



THIS PUSHER *type, twin-float Farman seaplane was one of original planes purchased by the Imperial Japanese Navy from France in 1912.*

PBY-6A CATALINA *is used for training Japanese Maritime Self Defense Force pilots and crewmen. P2V-7's and S2F's will fly ASW patrols.*

ORIGINAL FARMAN *Society members and Japanese dignitaries at 1937 dedication of monument to birthplace of Japanese Naval Aviation.*

RE-DEDICATION *of monument in 1956 was occasion of visit to Oppama by many of Japan's earliest Naval Aviators, who had trained there.*

PIONEERS *of Japan's Naval Air history include (l to r), Lts. H. Wada, Y. Kaneko, T. Nanba. This picture was taken in July, 1913.*

AT THE RE-DEDICATION *of monument, these men were honored guests: RAdm. Beppu, VAdm. Hanajima, VAdm. Wada, VAdm. Kuwabara.*

At war's end, a U. S. Marine Air Group moved in and the station became the U. S. Naval Air Facility, Yokosuka. Later its name was changed back to Oppama.

The Oppama of 1957 continues to perform a great variety of tasks. Most of the land area is occupied by the Japan Ordnance Command of the U. S. Army, and the former landing field is covered with an estimated 30,000 Army vehicles and boxes of equipment.

The U. S. Naval Air Facility itself operates four UF *Albatrosses* in support of the fleet. It serves as the Far East home of Marine Air Group 16, which operates transport helicopters, and Detachment One of Helicopter Squadron One, which services the detachments aboard Seventh Fleet ships.

It was from Oppama that BUAER operated its *Transosonde* balloon project in 1956 to perfect the balloon method of collecting weather data.

As previously mentioned, the station trained pilots and crews for the PBY-6A's, and for the JRF amphibian aircraft that had been transferred to Japan a few months earlier in 1956.

The greatest task of the station, however, is to support the repair program of ComFAirJapan. Under this program, aircraft are drawn from WestPac ships and stations and are fed through NAF OPPAMA, into overhaul at Japanese factories. The Supply Department of the Air Facility is expected soon to be a primary stock point for aircraft parts. At present it takes aircraft parts from ships and stations in WestPac, identifies them, puts them in overhaul in Japan, or preserves them and ships them back to the United States. It also provides parts needed in the plane overhaul at the factories in Japan. The fiscal administration of this program, totalling about $2,750,000, is handled in this department.

Of the 700 Japanese civilians employed by NAF OPPAMA, about 500 are highly skilled, either in mechanical trades, or in office work. Many of the present employees had service as Imperial Navy officers, as enlisted or civil service in the historical past of the base. An example is Takeo Yasunobu, formerly a captain in the Imperial Navy, who is the supervisor of the navigation office, Operations department. Mr. Yasunobu took his flight training in 1925 and then was a test pilot at Oppama. He helped develop dive bombing, and was in the first dive bombing squadron at the station.

One day last summer this modern Oppama was visited by many of the Japanese Imperial Navy pilots who had trained there in the early days of its history. Those early aviators who had flown Farman seaplanes during their training period had formed an association known as the Farman Society. In 1937 the members of the Society had erected a monument at Oppama, commemorating the site of the birthplace of Japanese Naval Aviation.

JAPANESE NAVAL *aviator No. 3, VAdm. C. Yamada, attended the memorial ceremonies.*

This granite and bronze monument was a casualty of the war—the granite pedestal was broken, and the bronze plaque was lost. Early in 1956, however, pieces of the monument, including the plaque, were discovered and were turned over to members of the Farman Society.

Through the efforts of Mr. Akimoto Beppu (formerly RAdm.) a representative of the Society, permission was granted for the monument to be reconstructed on its old site.

In an impressive ceremony, attended by high ranking Japanese and American naval and military officers, the monument was rededicated. A Shinto ritual consecrated the memorial. Included in the ritual was a prayer to keep away evil spirits, unveiling of the monument by three girls, a prayer for a god to accompany the monument, and the placing of food in front of a god. A branch of the sacred tree was also offered to the God Tamagushi Hohtei.

At the ceremony were the widows of Naval Aviators #1 and #2, Mrs. Kaneko and Mrs. Kohno. Naval Aviators #3 and #4, RAdm. Chuji Yamada and VAdm. Hideho Wada, were also present, as were other famous members, VAdm. Torao Kuwabara, VAdm. Kohichi Hanajima and RAdm. Beppu.

'Britannia Trophy' Given
Commemorates Joint Training Plan

A solid silver model of a British *Vampire* jet fighter — the type later adapted for use as a carrier plane by the Royal Navy Fleet Air Arm—was presented to the Naval Air Training Command at Pensacola in February.

It was designed to commemorate the training now at an end, of British Air Arm pilots in the command and will be presented annually to the best jet fighter student.

VAdm. R. F. Elkins, R.N., made the presentation on behalf of the British

VADM. R. F. ELKINS, RN, PRESENTED TROPHY

Admiralty. The trophy, known as the "Britannia Trophy," was received by VAdm. A. K. Doyle, Chief of Naval Air Training Command.

The last of 258 British students trained in this country left Corpus Christi on 30 November last year.

New Duties for CVG-15
Stand OOD, Navigation Watches

A changeover from usual aviation duties was made by 23 officers of CVG-15, based aboard the USS *Wasp*. Standing OOD and JOOD watches underway, they helped direct the safe return of the carrier from Yokosuka to San Diego after a WestPac tour.

The program was spurred on by *Wasp* CO, Capt. R. C. Needham, when he promised that CVG-15 could return the ship to the States at the completion of the cruise. An intensive training program was begun so that the officers could qualify or be refreshed in OOD watches.

Cdr. W. A. Shryock, skipper of CVG-15, and Cdr. L. W. Abbott, leader of VF-153, became navigators.

A FAREWELL AT HUTCHINSON

MULTI-ENGINE TRAINING AT ATU-604 WILL NO LONGER USE THE PHASED-OUT SNB'S

TRAINING at NAS HUTCHINSON in the SNB Beechcraft twin-engine airplane became a thing of the past in February. The last official flight was made on 15 February, ending a phase of training at the station that had lasted for almost three years.

On the final flight were NavCads H. H. Smith and H. T. Sallmon. They made a cross country solo to Denver.

This phase-out at Hutchinson ended a long span for the veteran SNB's that have been very familiar to most all Naval Aviators. During the past three years, ATU-604, which used the Beechcraft, trained 1595 student aviators. During the same period, these planes made 111,870 landings at the station, and were flown for a total of 69,984 hours.

Although the SNB's are passing out of use in the training at Hutchinson, they will be integrated into various training periods at other Naval installations. This type aircraft has been a major training plane in the Navy since 1940, when it made its first appearance. Since that time the Navy has purchased a total of 1295 Beechcrafts.

During its peak period, there were 45 SNB's with ATU-604, plus 63 officers and 310 enlisted men. Now there are only eight of the Beechcraft remaining. Four of these are due for transfer shortly. The rest will depart before the end of the fiscal year.

With the transition involved in aviation today, it is necessary for pilots to receive training in more up-to-date aircraft. The S2F *Tracker* has been designated to fill the bill.

Already there are a large number of *Trackers* aboard the station at Hutchinson. They have been used with the SNB's as trainers for some time. Now the S2F's are as familiar a sight in the Kansas skies as once were the now outdated Beechcraft.

Some SNB's were transferred from Hutchinson to Pensacola for student familiarization. Others have gone to various Naval facilities for overhaul.

The SNB trainers served well at NAS HUTCHINSON, but February marked a nostalgic farewell to the plane that was long so familiar to Naval Aviators.

GRUMMAN S2F TRACKERS MAKE FOR A 'NEW LOOK' AT THE HUTCHINSON AIR STATION

REGULUS II PUT ON EXHIBIT

FOR THE FIRST time, the new guided missile *Regulus II* (X-SSM-N-9) was exhibited publicly at a Navy League convention in the Sheraton Park Hotel, Washington, D. C. RAdm. J. E. Clark, Director of the Guided Missiles Division of the Office of Naval Operations, described the missile in a speech to the convention.

The Admiral said: "*Regulus II* has been developed as a direct product of the *Regulus I* program, which has been eminently successful with more than 500 flights to date. Chance Vought Aircraft has been the design and production activity for both missiles.

"In 1953, it became readily apparent to both Chance Vought and the Navy that even though *Regulus I* was a mighty potent weapon, that as time passes, a much faster and higher flying bird would be needed if our attack weapons were to be capable of penetrating enemy defenses. At this time an initial contract was let for Chance Vought to design a weapon system utilizing, whenever possible, components and concepts proven in *Regulus I*. *Regulus II*, which is undergoing flight test at Edwards AFB, has been designed and built with these requirements in mind.

"As a matter of interest, both *Regulus I* and *Regulus II* use the same Sperry-developed autopilot; they use the same beacons; they use the same recovery system utilizing the same recovery aircraft. In fact, except for size and performance, the two birds are as identical as it has been humanly possible to make them without degrading the performance of the new bird. It is this concept, that of utilizing proven equipments and techniques, that has permitted the rapid development with substantial dollar savings of *Regulus II*.

"As mentioned before, *Regulus II* is roughly similar in appearance to *Regulus I*. It resembles a conventional sweptwing jet fighter, about 57 feet long with a wing span of about 20 feet. Like *Regulus I*, it is designed for launching from submarines and surface ships. Tactically, it will be used against heavily defended shore targets. The guidance system to be used is, of course, classified. As for the warhead, since we have spent a great deal of money for this weapon, I am sure it is obvious to all of you that we intend to put the biggest bang we can into this weapon. Suffice it to say that *Regulus II* will fly to a selected point and detonate with devastating results.

"*Regulus II* has performed well beyond expectations during its current flight testing at Edwards AFB. Tests, now halted by rains, will continue in the spring. To date, *Regulus II* has made 13 flights, and six of these were with the same bird. It has proven itself at over 50,000 feet and it has flown more than one and a half times the speed of sound. I would be delighted if I could tell you that we have not lost any, but after all it is still in the development stage and even manned airplanes occasionally go astray. The fact of the matter is that we have averaged nearly four flights per missile. But what we now know precisely is what happened to each of those lost and we now know how to prevent its happening again.

"Soon *Regulus II* will be flying off ships and land-based tests will be coming to a close, and it will take its place as a powerful atack weapon in the Fleet."

'Dog Tag' Survey Made

Unofficial Results Surprising

While browsing through OPNAV Instruction 3710.7A, dated 31 December 1956, we chanced upon a number of interesting items. How to fill out a DD 175 flight clearance form is spelled out for the first time. The order requiring all personnel to wear identification tags during aerial flight is still in effect.

Little has been said recently about wearing "dog tags," and just out of curiosity, NANEWS had a survey made at a naval air station. Each time a pilot presented a flight clearance for signature, he was asked if he had on his dog tag.

The results were somewhat surprising. Out of 86 pilots surveyed, 20 had on dog tags, 18 had no tags at all, and the rest "had them somewhere, but darned if I know where they are."

VS-23 Moves to New Home

NAS North Island to Los Alamitos

Originally an East Coast squadron, VS-23 was ordered to North Island, San Diego in 1950. The squadron made two West Pac deployments in TBM's, and two more in the S2F *Tracker*, the first in 1954.

They returned from the last deployment aboard the USS *Boxer* on 30 January, and moved from NAS NORTH ISLAND to NAS LOS ALAMITOS in early February.

During the *Boxer* deployment, VS-23 logged 1629 carrier landings in the S2F's without a serious mishap, and flew 4550 hours.

CO of the squadron is Cdr. C. C. Worley, and XO is Cdr. K. D. Helsel.

RADM. R. F. HICKEY, *ComFAirAlameda (fourth from left) awards a charter to the Richmond Council of the Navy League to Mr. S. S. Clark, Council president (center). Ceremony took place aboard USS Yorktown in San Francisco Bay area. Among the other dignitaries were RAdm. T. J. Hedding, ComCarDiv-3 (fourth from right), and Capt. E. E. Colestock, Yorktown CO (far right).*

FIGURE-FIT FOR FROSTY FLOPS

MAJ. PULTORAK GETS ASSISTANCE FROM CORP. J. M. CRICCHI

PILOTS DIVE INTO SWIMMING POOL TO TEST EXPOSURE SUITS

LT. C. R. ENSLEY TRIES ON MITTENS AFTER JUMP IN WATER

LCOL. H. H. LONG PRACTICES GETTING IN AND OUT OF RAFT

UNDER WINTER skies, the ocean gets pretty cold. Chances for survival are pretty slim for a pilot who has been forced to bail out or ditch in the water unless he is wearing an exposure suit.

Most important consideration of the affectionately-termed "poopy suit" is that it be fitted to the individual. All pilots in MAG-11, upon joining the unit, report to the squadron flight equipment section for a fitting. The "tailor" records each man's measurements, and then alters an exposure suit to fit. Sections that require individual work are the neck, wrists, and fit of the boots to the legs.

When the suit is completed, the pilot pours himself into it, and then takes a trip to the NAS swimming pool for testing. Only hands, face and head are exposed, and pilots find that swimming in 44-degree water can be quite comfortable.

Besides testing the suits for leaks, the pilots utilize this dunk in the pool to practice getting in and out of the one-man life rafts which they inflate after hitting the water. In some cases, the suit has to be returned to the flight equipment section for a re-fit. The usual places where leaks are discovered are around the neck or wrists.

The "poopy suit" comes in two parts. An inner liner, made of heavy quilted material, is put on first over the "G" suit. The outer garment is made of a rubberized material, and a pilot usually requires a little help in donning it.

The suits are not too uncomfortable. One pilot, while a Korean prisoner of war, lived in his for two months. (See NANEWS, December 1953.)

Temperatures of the water and the air determines the length of time a pilot will survive, of course. Wearing of an exposure suit will protect him in icy 35 to 40 degree water. Without the suit, his chances of survival will be cut to a very few minutes. MAG-11's program sells pilots on "poopy suits."

UNITED EFFORT IN HU SQUADRONS

ANOTHER *rescue, all in a day's work for utility helicopter pilots, assures this pilot and his crew places in the roster of members of the Pelican Club, those who have picked up ditched pilots from a watery disaster. Note tail of sinking plane on the left of picture.*

ECONOMICAL life insurance, a sterling type of varied services, and fast transport of men, supplies and mail—these add up to Helicopter Utility Squadrons. Their unlikely looking craft, with a distinctive flap-flapping sound, are a familiar and welcome sight throughout the Fleet, particularly when seen from the fish-eye view of a water-treading pilot who has had to ditch.

The utility helicopter has come into its own in the past decade. In 1946, a helicopter development squadron, VX-3, was formed at Floyd Bennett Field. In September of that year, VX-3 moved to NAS LAKEHURST, long a center for airship operations and development. The value and use of helicopters grew so rapidly, that on 1 April 1948, VX-3 was decommissioned and personnel and aircraft were split between two helicopter utility squadrons, a Marine Corps squadron and a unit at NATC PATUXENT RIVER. One utility squadron was assigned to each coast, and HMX-1 was formed at MCAS QUANTICO. The unit sent to Patuxent River was the nucleus of the group which now conducts the Navy's helicopter flight and service tests.

ALMOST HOME, *this very damp pilot was happy to see the hovering "angel" with its dangling sling. He'll be back aboard ship shortly.*

Today, Navy helicopter utility service is provided to the Fleet by HU-2, based at NAS LAKEHURST, and HU-1, based on Ream Field, near San Diego. HU-2 also maintains a permanent detachment at NAS NORFOLK. A permanent detachment from HU-1 is based in Japan to service the WestPac area, and another in Hawaii.

Take HU-2 for example. Its operations officer can, on almost every day of the week, look at the pins on the chart and see his planes scattered from the Arctic to the Antarctic; from South Dakota to the farthest reaches of the Mediterranean; from Scandinavia to the Caribbean. HU-2's aircraft will be aboard CVA's and CVS's, flying plane guard missions, effecting transfers of mail and personnel from ship to ship and ship to shore. There will be HU-2 copters on battleships, on cruisers, command ships (AGC), LST's, LSD's, and ice breakers. They may be in the Antarctic with *Deepfreeze*, or in the Arctic, on oilers, or on survey ships.

Some planes will be on special missions or details, such as a mining or amphibious exercise, or a phase in the *Stratolab* balloon project sponsored by Office of Naval Research.

THE UTILITY helicopter pilot, then, has an opportunity almost unequalled in other types of duty, to serve in many kinds of ships and units. While deployed for periods of one week to eight months, he operates in a one or two plane detachment, so he is on his own to a much greater degree than in other types of squadrons. A tour in an HU squadron is broadening, interesting, and offers a variety of background and experience.

While aboard ship on TAD orders, the average helicopter detachment consists of one aircraft, two pilots, and a crew of five to seven mechanics and flight crewmen. The detachment is considered "ship's company," and the officers are often able to qualify to stand deck watches, in port and underway.

Maintenance is always a necessity, and on a carrier, is usually performed at night so that 100% availability can be maintained during daytime flight operations.

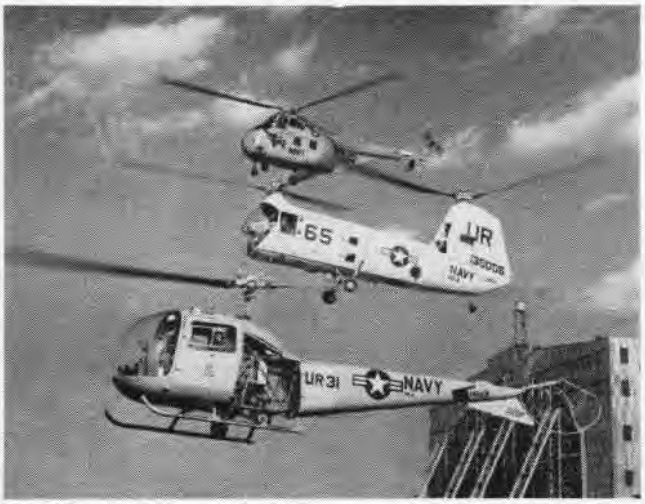
To support the far flung detachments and meet the many requirements of an HU squadron, the parent organization must be large. For example, HU-2, has in round figures, 500 men and 74 pilots. Most of these are seagoing types, who average 50% of their time at sea, a figure not too different from that of a fixed-wing squadron.

People "back at the ranch" keep busy taking care of the complex administrative problems created by the squadron's "here today, gone tomorrow" life. They also work at the never-ending job of conducting operational training and re-training of pilots, crewmen and supporting personnel. Since the squadron is designated as self-supporting, it carries a heavy maintenance load to revive fleet-weary copters, back from cruises, and to maintain the undeployed craft in readiness for training use and for deployment. HU-2 claims that it has never failed to meet a scheduled commitment.

When able, without affecting operational readiness, the squadron renders assistance to other agencies in missions such as searches for lost persons, and flood or other disaster relief, where the rescue, supply and search capabilities of the helicopter are invaluable. One chore that is particularly enjoyable is adding another name to the list of those who have joined the Pelican Club by rescuing a man from the water. To date, HU-2's figure stands at close to 400 such rescues.

Most helicopter pilots are experienced fixed-wing pilots who, after one or two tours in helicopters, will return to fixed-wing flying. Their backgrounds are varied. An average sample of HU-2 pilots will include jet pilots, big-boat pilots, patrol plane and transport pilots, plus a few other assorted types. The pilots are all alike in certain respects though—they enjoy flying the whirlybird. It is a unique and challenging machine. They are a respected group in the Fleet, for they and their crewmen have proven themselves to be competent, ready, and willing.

Whether he's flying a Vertol HUP, a Sikorsky HRS or HO4S, or a Bell HTL or HUL, the utility helo pilot has but one thing in mind: to do his job well. These pilots daily prove that "U" stands for ubiquitous, undaunted, usually unappreciated, unselfish, united, and, of course, Utility.



THE HUL, *the HUP, and the HRS, among others, are the tools of this versatile outfit. Each is used on a wide variety of unusual tasks.*

THE UNUSUAL *is commonplace to a helicopter utility pilot. Every conceivable type of cargo is lifted, carried and lowered by them.*

FROM DAWN *to dusk, the utility helicopters are airborne, standing by for rescue, search, and rapid transport, supporting our Fleets.*

HANCOCK REFUELING CREW IS READY

YOU ASKED FOR IT

LEYTE REFUELS AIRSHIP DURING ASW OP

AVIATION STORE SHIP REFUELS THE 'BONNIE DICK'

CARRIER REFUELING IS PART OF LOGISTIC PROBLEM

YOU ASKED for it! You got it. Back of fast, efficient logistics is the post-war integrated Navy Supply System. Ten years old in February, its motto is maximum supply support with maximum economy.

With today's Navy meeting fast-changing operational requirements all over the world, its supply system must be readily adaptable to current logistic needs. Forces that include jets, guided missiles, and nuclear power demand a flexible, effective method of logistic supply. And the Navy has the answer.

The Navy supply plan that brought the system into being was approved by former Secretary of the Navy, the Honorable James Forrestal, on 14 February 1947. The plan provided that the Navy's Bureau of Supplies and Accounts would administer supply functions centrally throughout the Navy with the advice of the technical bureaus. This would avoid logistic duplications within the bureaus and facilities of the Navy Department.

Purpose of this integrated supply system is to coordinate the plans and programs of the Fleet to insure necessary military support with minimum inventories and cost of operation.

The system emphasizes the technical bureaus' responsibility for design, engineering, and control of the final use of material. However, BuSandA manages the supply tasks—procurement, storage, and issue—in providing material to the Navy.

The Navy supply system of 1957 is responsible for supplies and repair parts of all the Navy's operating equipment. These include, for example, parts for

over 270 types of Naval aircraft and 8000 kinds of electronic equipment.

In order to deal with the tremendous details involved in getting material where needed, when needed, the system depends on its Supply Demand Control Points. These inventory control commands are the heart of the integrated Navy supply system.

The forerunner for these "intelligence centers" is the Aviation Supply Office, Philadelphia. Just prior to and during WW II, ASO became the prototype SDCP organization. Under this organizational concept of integrated supply, BuSandA and BuAer worked together to unite and coordinate supply and management of aviation material. To do this BuSandA relied heavily upon the advice and assistance of BuAer engineers and technicians.

This ASO-developed logistic method was made an integral part of the postwar Navy supply plan. It has now been extended until there are a total of 15 SDCP's that cover all types of material from aspirin pills to jet engine parts, ready for Fleet distribution.

Major function of the system inventory control points is to predict future quantities of material required to meet Fleet operational needs. To do this the Navy's business managers at the control office must know the exact location of each item of inventory. Based on this information, the material is bought or redistributed to meet the future need.

Economy dictates whether material will be bought or redistributed. If it is too expensive to redistribute to the point of need, the inventory manager buys material directly from industry. It is the responsibility of the intelligence points to purchase directly from industry, or to obtain from one of the other services, items which are required, depending upon which course is the least expensive.

The specialized nature of the various centers does not mean that the customer or ship must search out separate supply sources for each type of material. The skipper of a ship obtains his goods from a consolidated supply depot, which carries all types of material and equipment.

These local supply points maintain a constant flow of information about their stocks to the various specialized inventory managers. It is from this detailed flow of stock status reports that operational requirements are matched with usage information.

In order to avoid the development of autonomous and separate supply systems at the specialized inventory control points, the operations of these intelligence centers, the stocking points, and the supply operations aboard ship are coordinated and reviewed by the Bureau of Supplies and Accounts.

Stock coordination, at the management level, is one of the most effective management tools that has been developed under the system. Stock items, controlled by the several supply demand control points have been assigned so that any one item is controlled by only one point. For example, electronic tubes, whether used in airplanes, submarines, or surface ships, are controlled by the Electronic Supply Office.

As a result of the stock coordination and standardization program, 114,000 items have been eliminated. Also, 84,000 items have been realigned among the technical bureaus and control points, and 32,000 item duplications have been eliminated.

Supplying the Fleet with such items as aircraft, fuel, medical supplies is a tremendous undertaking. Units of the Fleet span the globe in their role of guardians of freedom. Getting supplies to these far-flung units is a major logistic problem in itself. The Navy's main supply support comes from the surface fleet. Delivering supplies involves tankers, ammunition ships, refrigerated ships, cargo ships, an aviation supply ship, and seaplane tenders. However, in an emergency, critical material can be, and is, flown by transport or helicopter to the Fleet.

RAdm. R. J. Arnold, SC, USN, is Chief, Bureau of Supplies and Accounts. His bureau administers and coordinates the Navy supply system. It is BuSandA's responsibility that the Fleet be so equipped that it can be maintained in top battle-readiness at all times. The Korean conflict proved the smoothness with which the supply system works during mobilization.

Through the Navy Supply System, every ship, station, air base, and facility receives all those materials which make it operational. The methods are quick and efficient. Important ingredients during peacetime, they are absolutely essential in an emergency.

SC OFFICERS INSPECT AVIATION STOREROOM AT LAJES, AZORES

ASO IS 'PARENT' OF NAVY'S SUPPLY DEMAND CONTROL POINTS

F8U STARS IN FIP PROGRAM

WITH ITS FIP *trials successfully completed, the F8U-1 Crusader now is on its way to Fleet units. The introduction program was conducted at the Naval Air Test Center, Patuxent River.*

THE SIGHT of an F8U *Crusader* making touch-and-go landings, with its afterburner glowing in the twilight, is enough to delight an aviator's eye. But to be able to pilot this modern jet fighter is the real thrill. "It's tremendous," says Cdr. G. C. Buhrer, VF-32 skipper.

Pilots from VF-32, based at Cecil Field, and VF(AW)-3, from Moffett Field, recently had a chance to get behind the controls of the *Crusader* during the F8U Fleet Introduction Program at NATC PATUXENT RIVER.

The mission of the FIP is two-fold. It is an accelerated eight-week test program to see what the plane can do. It tests the ability of Navy pilots and enlisted men to step in and operate the aircraft as squadrons will have to do. Secondly, the program trains pilots and men so that they can return to their home bases and act as instructors for their squadron mates.

Fighter Squadron 32 sent 11 pilots and ground officers, plus about 80 enlisted technicians to Pax River. They were joined at Service Test Division, headed by Capt. Donald Gay, Jr., by six pilots and 40 men from VF(AW)-3. The two units merged into one "squadron" with Cdr. Ried Stone, VF(AW)-3 skipper, as commanding officer. Cdr. Buhrer was operations officer.

As the program progressed, the squadron took over flying and maintaining the six *Crusaders*. Chance Vought mechanics performed some maintenance work in the early stages, but as the Navy crews learned the ropes, they gradually undertook all such work and proved very expert.

The pilots spent several days in the classroom. They were briefed on spin recovery techniques, and the over-all "personality" of the F8U. All of the FIP pilots were graduates of the Vought F8U ground school in Dallas, but none had flown the aircraft.

After the classroom session came a cockpit checkout in the plane. Because the *Crusader* uses new-type oxygen equipment, the pilots donned their masks and went for "flights" to 35,000 feet in the low pressure oxygen chamber. This way they got used to breathing with the new gear.

During pilot classes, Navy technicians were going over the six F8U's parked inside the Service Test hangar. They performed acceptance checks on the planes and examined all parts of

F8U'S FROM *FIP program line up on Service Test hangar apron. The two round objects in foreground are searchlights for night flying.*

CAPT. GAY *discusses F8U model held by LCdr. Jeff Davis, project officer for FIP. Don Russell, Vought representative, looks on.*

ENLISTED *technicians from VF-32 and VF(AW)-3 swarm over the Crusader cockpit to learn the locations of engine and other controls.*

FIP PILOTS *make "flight" to 35,000 feet in the low pressure chamber in a checkout of new-type Navy oxygen masks used in the F8U.*

the plane closely. Most of them had gone through the Dallas ground school previously, or had checked out in the mobile F8U maintenance trainer at Cecil Field.

During their weeks at Patuxent, *Crusader* pilots went through a crowded syllabus of flight training. This included engine operation, fuel system, electrical system, hydraulics, radio and navigation, pilot's equipment and ejection seat, pressurization, emergency procedures, flight characteristics, course rules, basic tactics, night flying, instrument flying, flight planning, field carrier landing practice, high speed performance, gunnery, advanced tactics, and pressure suit flying.

Pilots from VF-32 who participated in the Fleet Introduction Program at Patuxent were: Cdr. Buhrer, LCdr. Ray Johnson, Lt. Howard Rutledge, Ltjgs. D. D. Davison, James Brown, Robert Nork, J. P. Allen, M. G. McCanna, Jr., Ens. W. J. Stephens, maintenance officer. Cdr. M. E. Barnett, Commander, Air Group Three, of which the squadron is a part, and Ens. William Harkness, CVG ordnance officer, also took part in the program.

From VF(AW)-3, besides Cdr. Stone, were LCdrs. George Blease, D. C. Bennett, A. R. McCandless, Lts. T. B. Hayward, E. G. Clayton.

The men who "kept them flying" included W. A. Webster, ADC, day maintenance chief, VF-32; M. C. Young, ADC, night chief, VF(AW)-3. Aiding them were A. L. Harris, leading chief, I. C. Luther, W. A. Murray and R. J. Till, all ADC's who were crew chiefs during the operation.

When VF-32 pilots left Patuxent, they took home with them several of the planes assigned to the FIP program. The Moffett unit also took some back to the West Coast. They will set up a transitional training unit to check out pilots of squadrons destined to fly the F8U-1.

The *Crusader* is the ninth Navy combat plane put through FIP since the plan was initiated in 1954. The S2F *Tracker* was the first, followed by the F7U-3 *Cutlass*. Other planes tested were the F3H-2N *Demon*, A3D *Skywarrior*, A4D *Skyhawk*, F4D *Skyray*, FJ-3 and the FJ-4 *Fury*.

Final lap of the F8U *Crusader's* march from drawing board to fleet squadrons has been completed. Progress through the experimental testing program, from fleet introduction to active duty with operational squadrons, has been swift. The plane was mocked up only a little over three years before it reached the FIP phase. Only 21 months intervened between the first flight on 25 March 1955 and FIP.

JUNIOR OFFICERS *discuss Crusader, awaiting to fly the supersonic fighter, while senior officers take their turns behind the stick.*

CDR. BARNETT *describes the thrill of his first flight in the F8U to LCdr. Davis and J. W. Lankford, a test pilot for Chance Vought.*

DDG-712 Has the Terrier

First Guided Missile Destroyer

The USS *Gyatt* (DDG-712), the U. S. Navy's first guided missile destroyer, was commissioned in December at the Boston Naval Shipyard.

Equipped with the most modern antisubmarine ordnance and twin *Terrier* guided missile launchers, the *Gyatt* is capable of destroying an enemy attack whether by supersonic airplane or modern submarine.

USS GYATT HEADS SEAWARD FROM BOSTON

With a stabilization system added to the hull, much of the rolling, characteristic of small ships, has been eliminated. The unit consists of two retractable fins 45-foot square, which extend out from midships well below the waterline.

The DDG-712 is the first of 16 destroyer-type vessels scheduled for the Navy's guided missile fleet.

'Fighting Lady' Reunion

200 Association Members Present

On January 25, the founders of the great traditions of the USS *Yorktown* joined the members of the present crew on the ship for a series of activities. The occasion was the tenth annual reunion of the Yorktown Association. Approximately 200 members of the Association, an organization composed of men who served on board the "Fighting Lady" during WW II, were present. Wives of 60 of the men also attended the functions at Alameda.

Shown in the picture, from left to right, are VAdm. Ralph Jennings (Ret.), the ship's second commanding officer; VAdm. Thomas S. Combs, present DCNO (Fleet Operations and Readiness), her third CO; Capt. E. E. Colestock, present CO; and Adm. J. J. Clark (Ret.), the *Yorktown's* first CO. Also present at the reunion (not in picture) was VAdm. R. R. Waller (Ret.), CVA-10's first Exec. Officer.

COMMANDING OFFICERS OF USS YORKTOWN

One of the highlights of the Association's visit was the presentation of a memorial program in honor of Lt. E. T. "Smokey" Stover, who served on the *Yorktown* in both the air group and the ship's company. He was killed during a raid on Truk in 1944. Lt. Stover was selected by the Association to symbolize all the men who have fought and died on the "Fighting Lady." During the solemn ceremonies, a memorial wreath was cast from a helicopter to the waters below by Capt. James Condit, a contemporary of Stover on the *Yorktown*.

A bronze plaque commemorating Stover was presented to the ship by the Association. It will be mounted in a prominent place near the quarterdeck.

Business Man Honored

Gave Assistance in an Emergency

G. Clifford Hardy, local Beeville, Texas, business man, received the "Good Neighbor Award" in NAAS CHASE FIELD for an act of good neighborliness last December.

Mr. Hardy, while driving toward Corpus Christi, Texas, saw an ambulance from the Chase Field Medical Dispensary at the side of the highway. He offered his assistance to the driver, Raymond Newman, HM3.

When Mr. Hardy discovered one of the battery cables had burned through, he made a makeshift cable from some wire and soon had the ambulance in working order.

Inside the ambulance at the time was K. E. Karland, AA, who was in a state of shock as a result of a compound fracture. Mr. Hardy's prompt action helped to speed the patient on his way to the hospital at NAS CORPUS CHRISTI.

CAPT. SWEET CONGRATULATES MR. HARDY

Capt. A. B. Sweet, Chase Field CO, presented the award and thanked Mr. Hardy for the help he had given.

NAF Gets Six New JG's

Total 97 Plus Years Active Service

The U.S. Naval Air Facility at Naples, Italy, has acquired six "new" lieutenants junior grade. The six represent more than 97 years total active service, and more than 20,000 hours flying time, for the five who are aviators.

The recently promoted officers are: Ltjgs. R. W. Pugh, G. E. Lamm, M. W. Davis, K. L. Gormley, W. H. Crawford, F. L. Powell.

Capt. K. E. Hanson is Facility CO.

VAH-9, BASED *at NAS Sanford, Fla., has received its first A3D Skywarrior, the Navy's largest carrier-based plane. The twin-jet attack bomber is equipped with two radar controlled cannon. It was flown from West Coast by VAH-9 pilots, Cdr. Ernie Horrell, LCdr. "Chuck" McBratnie.*

Talking Beacon Developed

Modern Lorelei Gives Headings

A siren voice, beckoning not toward disaster, but to safety, will soon be heard by pilots. The Talking Beacon, developed by Air Associates, Inc., will electronically steer aircraft to an airport.

The voice gives headings to a field for planes located at any point on the compass. All planes need are a standard VHF receiver and a compass.

The Talking Beacon looks like a huge box with a revolving fan overhead. The "box" is an enclosed metal body of the type used on commercial trucks. It contains electronic equipment and supports an 18 foot mast, transmitters and antennae.

As the antennae revolve, a feminine voice gives the direction to the beacon at 15-second intervals, or every 20 degrees. A pilot tuned in on it can judge his direction to the station within three degrees, according to Air Associates. Using simple mathematics, he can tune in on two stations and, using their bisecting beams, find his exact position. The beam can be received up to 50 miles away. On location, the beacon can be put into operation within an hour without a land survey or complicated procedure.

A demonstration of the Talking Beacon will take place from April 1 to 15 at the Teterboro, N. J., airport.

VMF(AW)-115 and Skyray

Records Made at MCAAS Mojave

VMF(AW)-115 returned to MCAS EL TORO after making new records with the F4D-1 *Skyray*.

Led by LCol. Ralph H. "Smokey" Spanjer, the self-christened *Desert Rats* flew a total of 1028.8 hours during 22 days flying at Mojave. This record was made without incident—no accidents, not even a blown-out tire. Much of the credit goes to Capt. James Cole, squadron maintenance officer, and MSgt. Jerry Bellsmith, engineering chief, and their ground crews.

Other records entered in the books at the end of the training period included: 215.9 instrument hours in simulated ground approach; 304 simulated flame-out approaches; and 288 instrument approaches.

VMF(AW)-115 was the first Marine squadron to receive the batwing *Skyray*.

SEAPLANE GOES PIGGY-BACK

A PRACTICAL LOGISTIC *demonstration of mobile seaplane striking forces took place when an LSD (Landing Ship Dock) took aboard a Martin Marlin from VP-56, NAS Norfolk. Piloted by Ltjg. Ed Carney, the plane rendezvoused in Chesapeake Bay with the USS Ashland, commanded by Capt. F. W. Brown, Jr. The maneuver took only about 26 minutes. Ballasted down to a depth of 13 feet, the ship had some four feet of free board. After guide lines were passed to the bow and tail of the plane and beaching gear floated into position, the Marlin was hauled aboard.*

RESERVES TRAIN FOR READINESS

A NORFOLK F2H *Banshee gets its "tummy" filled from an AJ Savage during Operation Gashose. Deployed to NAS Sanford for a weekend. VF-861 qualified its members in the "probe and drogue" method of in-flight refueling. The training exercise was flown with VAH-5.*

When Weekend Warriors get together for training, theirs is not a social gathering. Of course, there is the satisfaction of being part of a worthwhile organization, and the fun of working side by side with friends, but each Naval Air Reservist knows he has a vital responsibility to his country, his family, and to himself. Reserve training keeps the *Warriors* on their toes and readies them to join the Fleet at any time, anywhere, in case there should arise an emergency mobilization.

Operation 'Gashose'

Reservists of VF-861, from NAS Norfolk, merited a laurel wreath in January. During a weekend drill, the squadron qualified its members in the techniques of refueling during flight.

Flying to NAS Sanford, the squadron deployed 71 officers and men with their F2H *Banshees*. The training exercise, coordinated with HAW-1, was flown with VAH-5, commanded by Cdr. J. M. Tully. Two AJ-2 tankers were used in the operation.

Twenty-two pilots qualified. The operation consisted of two dry and one wet hookup. Maintenance crews kept the planes in top-notch condition. As each plane returned to the line, chocks and engine screens were positioned, and pilots were exchanged without cutting engines and refueling. Aircraft had a turn-around time of from five to eight minutes. Logistic support was furnished by FASRon-51 and NAS Sanford personnel.

VF-861, led by Cdr. W. H. Alford, claims to be the first Reserve outfit to qualify in in-flight refueling.

Boys Tour NAS Denver

Billy Wiles and Mickey Skurich were given a VIP tour of the Denver Air Station. What the boys enjoyed most was the chance to get behind the controls of the Link trainer.

Young Billy wrote a letter to the CO, requesting an interview. Both he and Mickey were working on ninth grade term papers; subject: the career of their choice—the U.S. Navy.

They got their interview, and more! They lunched with Capt. T. W. McKnight, station CO, had a taxi-ride in an SNJ, and were given a guided tour of the entire facility.

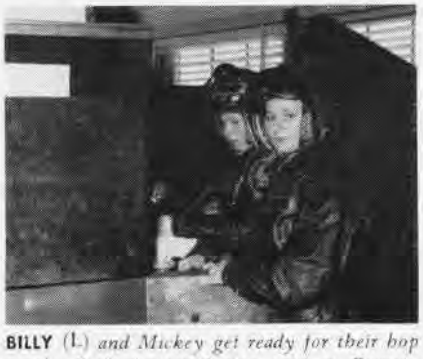
The two 14-year olds want to be Naval Aviators. They are familiar with the latest type Navy aircraft, and are avid fans of the *Blue Angels*.

New CPO's at Oakland

Two enlisted men of VP-876 got their "hard hats" in an informal ceremony (see picture) at NAS Oakland.

Maurice Hammes and Edgar Cox, ADC's, have both spent ten years in the Naval Air Reserves. Each is a plane captain at Oakland.

Further duplicating their careers, the boot CPO's are employed as civilians by O&R department at Alameda.



BILLY (L) *and Mickey get ready for their hop in the Link trainer during tour at Denver.*

"TRY THESE *on for size," says Cdr. Emmett F. Evans, skipper of VP-876 at NAS Oakland.*

F. H. McGUIRE, *PHMC(Ret.) shows his Congressional Medal, won in 1911 Philippine Insurrection, to R. E. Hubbard, PN2, at NAS St. Louis.*

MAUREEN O'HARA *was proclaimed "Miss Naval Aviation of 1957," during Long Beach conference, by Cdr. Cates (L) and LCdr. Hathaway.*

Grosse Ile Rescue

A Canadian Naval Reserve pilot and his enlisted observer, on a training flight from Cleveland to Toronto, Can., were rescued from the icy waters of Lake Erie by a NAS GROSSE ILE helicopter.

The crash site was 115 miles east of the station, and 20 miles offshore. Lt. Louis Helms and Morris Bertsch, AD1, took off ten minutes after the radioed call for help.

The airmen were not injured, but they were suffering from exposure after two hours on a small rubber raft.

One half hour after pick-up, the Canadian *Weekend Warriors* were safe and sound in a London, Ont. hospital.

VR-831 Training Cruise

Members of VR-831, NAS FLOYD BENNETT FIELD, covered a lot of territory during their active duty tour. Skippered by Cdr. H. G. Law, Jr., the squadron deployed to NAS PATUXENT RIVER to handle fleet logistic flights.

A total of nine logistic flights were made, as far north as Argentia, west to Moffett Field, south to Coco Solo, C.Z. Extended over-water navigational training flights were also made successfully.

Capt. D. E. Hendricks, Jr., Air Wing Staff-83, also on the cruise, had high praise for squadron performance.

Miss Naval Aviation, 1957

Cdr. Tom Cates and LCdr. C. G. Hathaway, both of NAS ATLANTA, had the distinctive pleasure of crowning cinema star, Miss Maureen O'Hara, as "Miss Naval Aviation, 1957."

Miss O'Hara, co-starring with John Wayne in the film, "The Wings of Eagles," officiated at the annual conference of NavCad procurement and command liaison officers. The meeting was held at Long Beach in February.

After the crowning ceremony, Miss O'Hara presented the NavCad Victory Cup to Cdr. Cates for outstanding cadet procurement during fiscal 1956.

The cup was originally presented to the Navy by the Chance Vought Aircraft Corp., to be awarded to the top NavCad procurement team in America.

Miniature Plane for Mayor

Three Chance Vought employees, on a 14-day active training cruise at MCAS MIAMI, presented the Mayor of that city with a model of the Mach 1-plus F8U-1 *Crusader*. The Reservists are attached to NAS DALLAS.

Presentation of the model airplane broke a tradition of long standing. Formerly, a miniature bale of cotton or an oilwell rig was given VIP's.

The switch was made to emphasize the importance of the aviation industry in the Dallas-Fort Worth area, deep in the heart of you-know-where!

NAS DALLAS *sailors carefully check oxygen masks in station's new oxygen issue room.*

M. FURR, *Lt. L. Anderson, S. Cook present F8U model to Miami Mayor, R. N. Christmas.*

NARTU JAX *Country Music Band does recruiting stints at high schools in local area.*

WEEKEND WARRIOR HIGHLIGHTS

THESE RESERVE *officers from NAS Atlanta spent a day at Key West where they toured weapons development activities. They also inspected some submarines and a lighter-than-air squadron.*

Atlanta Unit Tours

As part of their regular weekend training program, 26 Reserve air intelligence officers from AGU(M)-671 (A1) and AWS-67, NAS ATLANTA, toured weapons development activities at Key West Naval Base and Air Station.

The first stop on the tour was with VX-1. The officers were briefed on the squadron's mission and current activities in the field of air-antisubmarine weapons systems development.

After a visit at the Naval Ordnance Unit, the center of the Navy's torpedo development and testing activity, the group toured submarines attached to Submarine Squadron One at Key West.

Before returning to Atlanta, the AIO'S took time out to visit the facilities and aircraft of the lighter-than-air squadron attached to Key West.

NAS Columbus CO Cited

Capt. L. L. Koepke, skipper of NAS COLUMBUS, was chosen by the editorial staff of the *Columbus Citizen*, daily newspaper, as one of the ten top men of the area for 1956.

The reasons for Capt. Koepke being placed among his distinguished fellow citizens stood up well against the plaudits accorded the other gentlemen. The *Citizen* stated:

"As commanding officer of the Naval Air Station here, Capt. Koepke was not content to allow the installation to remain apart from community life. He has aided in many civic activities. . . . While fostering a better relationship between the military and the city, the former Navy football great brought his base . . . near the top in recruiting, safety, training, and other endeavors."

Reservists to CONAD

Navy deputies to air divisions within Air Defense Command will be augmented by Naval Air Reserve officers who are assigned to Reserve Air Wing Staffs throughout CONUS.

This Naval Staff will be available for recall throughout the country in case of national emergency.

"These officers will be a great help to Joint Air Defense Commanders in deciding the tactical use of Naval air augmentation forces," according to Cdr. J. L. Evans, Naval Deputy, Joint Central Air Defense Force.

Evans conducted the first two-week initial indoctrination course in CONAD at Headquarters, Central Air Defense Force, Grandview Air Force Base, Mo.

'Cougar' at Jacksonville

Gerald S. Walsh, AO3, stationkeeper at NARTU JACKSONVILLE, doesn't get enough of aviation during his working hours, so he "flies" as a hobby.

A model airplane enthusiast, Walsh has built an F9F-8 *Cougar*. Over a year in the making, the model was constructed in off-hours. The plans were drawn from the F9F-8 maintenance manual. Wing span is 43 inches and the overall length is 45.5 inches.

Made of balsa wood and weighing about four pounds, the model has been flown twice using a duct-fan engine.

BASED AT *Atlanta, Collett, AD1 (L) and Hamrick, AM3, fly their own WW II trainers.*

CAPT. N. O. *Anderson, CO of NARTU Jacksonville, admires Walsh's F9F-8 Cougar model.*

CDR. J. J. *Werbke, VR-671, Atlanta, commends Clonts, AD1, for heroism in flight emergency.*

AND THERE I WAS ...

Joins Navy, Sees World

LOREN L. NEFF, BM1, of the USS *Corregidor* (CVU-58), claims that his ship boasts a most unusual canine, affectionately called "Geisha."

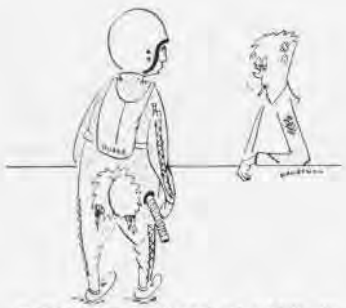
Picked up three years ago in Japan, Geisha became the carrier's mascot. Now back at Yokosuka, her home port, the dog has 36 months of sea duty under her collar. She has visited many ports in the Mediterranean, Atlantic and Pacific areas. A real salt, she drinks black coffee and an occasional coke. A dish of ice cream is a real treat for this sailor.

Geisha loves the Navy life; but when in port, she is strictly a liberty hound.

Who Hates Me Down There?

THE NAVY is looking for someone with a "Do It Yourself Anti-Aircraft Kit" near Moffett Field. It seems that a low-flying Beechcraft, searching for a missing aircraft over nearby Los Gatos hills, was too tempting a target for some local sharpshooter.

After the plane returned to Moffett, a 22 caliber "long rifle" slug was found in the plane's fuel tank just three feet from the pilot's seat.



'REPORTING A WHEELS-UP LANDING'

This is the Berreys

IT IS NOT AT ALL uncommon in this man's Navy to find two, three, or even four, men serving aboard one ship with the same name, but when two officers with the same last name relieve each other in the same job—that's a horse of a different color. What is even more startling is the fact that they are brothers.

The USS *Hornet*'s air boss, Cdr. David L. Berrey was recently relieved by brother Boyd S. Berrey. Before assuming his job aboard the *Hornet*, David was CO of VA-95, relieving—you're right—brother Boyd.

Boyd S. reported to the *Hornet* from NAS GLENVIEW where he served as aircraft maintenance officer.

Mrs. David Berrey lives in Alameda with the little Berreys, Carol, Joan, Holly, David and Janet, while across the Bay in San Francisco, Mrs. Boyd Berrey resides with sons Charles and James.

Word from on High

ON 1 OCTOBER 1919, the U. S. *Navy Daily Aviation News Bulletin* contained special intelligence of general interest: "The following inquiry has been addressed to the Secretary of the Navy—'Can you put me in touch with some one who can give me some information in regard to the balloons formerly used by the Government? I am planning to preach the Gospel from one by use of a megaphone.'"

'Lucky Three' for Marine

CHARLES E. Newell is a three stripe buck sergeant at MCAS EL TORO.

He serves with Headquarters and Maintenance Squadron-33, a unit of Marine Aircraft Group-33, which in turn is a subordinate of the 3rd Marine Aircraft Wing.

Sgt. Newell, who enlisted in 1954, for a three-year hitch in the triple-threat Marine Corps—air, land and sea, was busy one afternoon giving out three boxes of cigars.

His wife, Monica, gave birth to three babies in November, at Corona Naval Hospital, two girls, three pounds each, and a 5 pound 8 ounce boy. The first one arrived at 10:30 a.m., the other two at 30 minute intervals.

What's in a Name?

PAPERWORK can be pretty dull stuff at times, but even that field has its lighter moments. Recently established at Sherman Field, NAS PENSACOLA, to train student naval aviators in jet gunnery and tactics, ATU-206 has been the recipient of some "nice tries" in mail addresses.

In the first six months of existence, ATU-206 has received mail addressed to: CO, ATU-206 Crash Crew; Heavy Attack Training Unit 206; Acceptance Transfer Unit 206; Air Task Unit 206; C-in-C, ATU-206; Chief of Naval Air Advanced Training Unit 206; Chief of Naval Air Advanced Training Detachment; Commander U.S. Navy ATU-206; CO, ATU-2; Air Training Unit 201; Sherman Field Jet Base; ATU-206 Sherman Field, Capt. Sherman, NAS PENSACOLA; Sherman Field, ATU-206 ELERFRANICZNAS Pensacola.

All the mail was intended for ATU-206, however, and that's what counts. As for the last address, the Unit is still trying to figure that one out.

Same Name, Different Job

HERBERT Hoover, Ty Cobb, Henry Ford and "Rocky" Marciano have temporarily forsaken their civilian occupations for the seagoing life of a sailor aboard the attack aircraft carrier USS *Randolph*.

In addition, Phil Harris, Wayne Morris, George Murphy and Robert Ryan will be wielding swabs and standing seaman watches aboard the *Randolph* this year, instead of starring in some new Hollywood motion picture.

What's the reason for this sudden influx of "big names" to the *Randolph*?

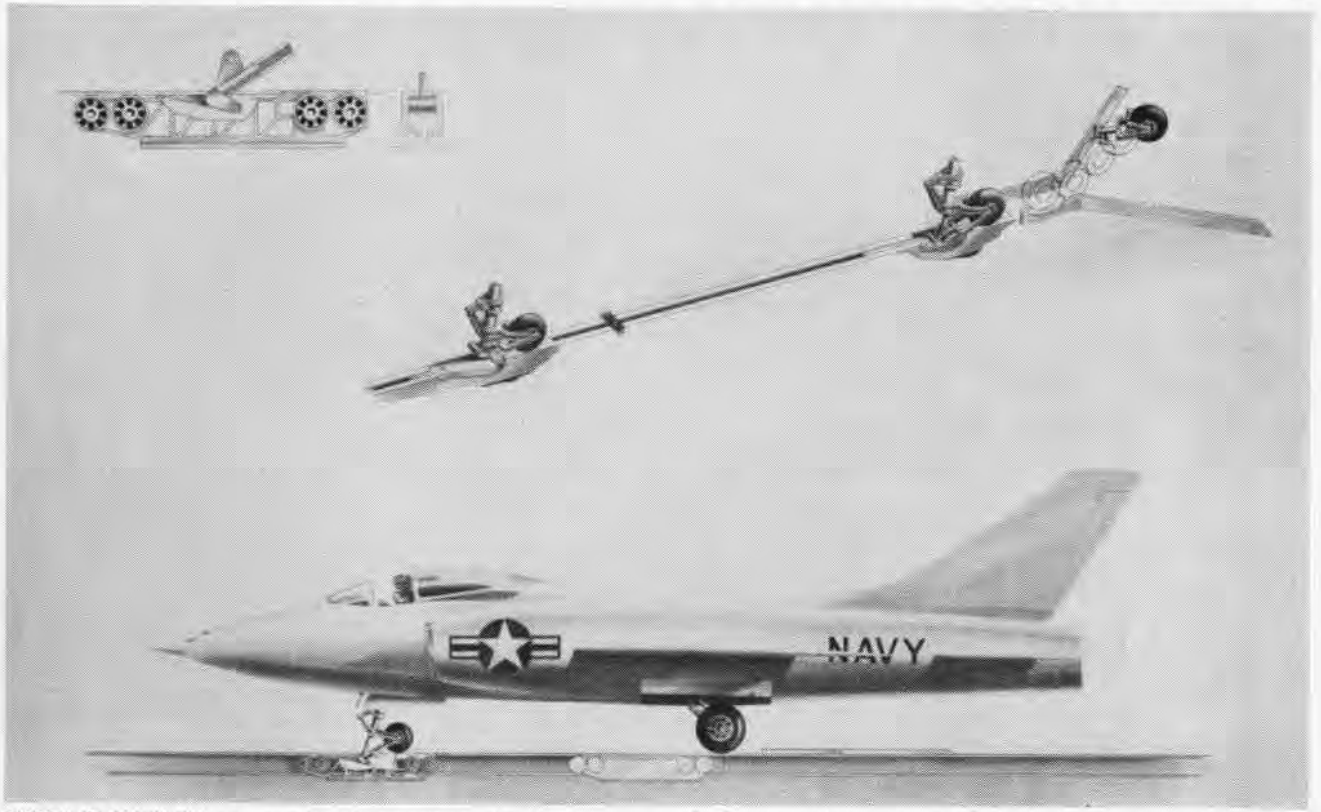
None at all. All of the people mentioned are sailors with names the same as those of the more famous personalities from civilian life.

Scratch One Gooney!

BUAER is sponsoring a program to investigate and find means to circumvent bird hazard to aircraft at Midway Island (page 30, NANEWS, June 1956). A team of specialists from Interior Department's Fish and Wildlife Service was sent to Midway to conduct this research. Upon arrival, their plane—yes, you guessed it—struck a "gooney bird." The result? Class D damage to the plane; class A damage to the bird!

'HOW'S THAT FOR G'S?'

JUST FOLLOW YOUR NOSE (WHEEL)



SKETCH OF PROPOSED *nose gear launching system under development at Naval Air Engineering Facility (Ship Installations) shows positioner rails (upper right), nose wheel hook locked in catapult shuttle (upper left), and side view of aircraft in position for launching.*

A PEEK at launching operations of future carriers could be an unbelievable sight to flight deck crews of the present. They may be out of a job! It is possible that nobody will be on deck except the pilots in the cockpits of their planes. A significant improvement in launching methods is now under development at the Naval Air Engineering Facility (Ship Installations), Philadelphia.

It's a far cry from the early and unsuccessful catapulting experiments at Annapolis, where the plane became airborne, but spun into the water. And it's just as far from the "cat" on the USS *North Carolina*, which required a hoist attached to a boom inserted in one of the big guns. Each launch necessitated hoisting the plane onto a cart on the catapult.

The present method of launching an airplane requires the directing of an airplane to the catapult; spotting on the catapult, often by the "tug and pull" method; hook-up of the bridle or pendant; attachment of the holdback, release and breaking element; and tensioning of the catapult. During the shot, the breaking element yields at a predetermined tension, and the plane becomes airborne, leaving the bridle or pendant behind.

At the end of the shot, the bridle is usually caught by an elaborate catching device so that it may be re-used. Although this involved routine is our most successful at this time, it requires time, manpower, and logistic support. Ears of the flight deck crew are blasted by the piercing screams of jet engines and the explosions of afterburners cutting in.

The method being developed at NAEF (SI) may eliminate such troublesome delays and dangerous annoyances. It offers the advantage of automatic positioning and automatic hook-up. The airplane is attached to the catapult by a launching hook, an integral part of the nose wheel assembly. The hook, hydraulically controlled by the pilot, drops into a flush catapult shuttle, and is locked in position for engine run-up. At the end of the firing stroke, the nose wheel hook is released from the shuttle, and as the shuttle decelerates, the hook travels out of the slot along the surface of a sloping cam.

But how, you airdales might ask, does the plane get into position on the catapult? That's easy, say the creators at Philadelphia. During the approach to the cat, the aircraft hook is guided by positioner rails, which may be retractable, leading the plane's nose wheel into the catapult shuttle. The pilot simply taxies to the launching area. Once there he drops his nose gear launching hook and continues to taxi. The hook strikes the positioner rails and is directed into the catapult. The plane follows its nose and can't help but be in position.

The launching hook drops into the catapult shuttle. The shuttle and aircraft are moved into firing position, and at the same time the shuttle locks

the nose gear hook ready for the launch.

After run-up and launching, the nose wheel assembly and hook are retracted into the nose wheel well. When the gear is lowered for an approach to a landing, the nose wheel goes down, but the hook remains retracted.

The goal, in respect to time intervals between launchings, is 30 seconds, but several problems remain to be solved before the goal is reached. One problem is that of jet blast deflection. The second plane to be launched would almost be in position when the first is fired. Who wants a blast furnace opened right in front of his nose?

Another thing blocking the path of the developers is the necessity of beefing up the nose section and the nose wheel to take the terrific strain of sudden acceleration. Commercial aircraft contractors are participating in the development program, so this will very likely be licked.

Work is progressing on catapult design studies, full scale mock-ups, and dead load firing programs. Many speculative eyes are on this work. The British have a semi-automatic positioning device which is not wholly satisfactory. They have installed a series of rollers, aligned across the deck, just aft of the firing position. A number of the rollers on each end of the system are powered to roll toward the center. When the main landing gear of a plane is taxied onto the rollers, the plane is centered by activating the rollers.

BuShips is taking a different tack to reach an automatic position. They are working on development of a sensing device, such as a photoelectric cell, which attached on or near the nose wheel gear of a plane, can detect deviations of light or color. It may be that they will use a device which can follow a magnetic field or a radio signal.

Whatever sensing device is used, the plan is to have it control the brakes on the plane. The brake which would turn the plane in the necessary direction, would automatically be actuated, with the proper degree of brake application, to guide the plane down the path to the catapult. When the proper position has been reached, the end of the painted line, magnetic field, or radio signal would cause the sensing device to lock the brakes. Scientists working on this scheme guestimate that it would cost, in additional plane weight, about three pounds.

The aims of this work are quite apparent and wholly desirable. When successfully concluded and operational, it will clear the deck of comparatively fragile humans, except for the pilots. They are protected from jet blast by being in the cockpit, and are out of the directional range of the deafening noise. BuMed has been working for a long time to solve the noise problem which can be so harmful to the men who must work in such close proximity to the planes on board carriers. The doctors have achieved some success with special helmets, ear plugs, etc., but flight deck crews are an independent lot, and to wear such contrivances can be irritating.

The operational aim is, of course, to speed up launching. The end result will be to take some elements of human error and danger out of launching.

THIS BUSY SCENE *of flight deck crewmen preparing to launch an F7U may take on a new look in the future. When the order is given, "Prepare to launch aircraft," the men would be engaged in other duties below this deck. Pilots would simply taxi to the firing position.*

THIS MAY BE NEWS TO YOU

YOU'VE BEEN cleared from NAF LOWER SLOBBOVIA, a contact flight to NAS GEDUNK. Your flight plan has gone to Military Flight Service, which has informed Gedunk of your estimated time of arrival, etc. Meticulously, you have made position reports to CAA Air Traffic Communications Stations (ATCS) while en route. They have logged your reports for future reference.

While approaching Chicago, you are reminded by a blazing fire in the stockyards of a cute and equally fiery redhead in Detroit. So, you decide to stop over at NAS GROSSE ILE for the night. Your mike is handy, you call Chicago Center and tell them of your intentions. They acknowledge your message, so blithely, but quivering with anticipation, you proceed to Grosse Ile.

The control tower clears you to land and, while taxiing to the visitor's line, you pick up your little mike again and ask the tower to close your flight plan. They "Roger," so you park your plane and head for Detroit.

Boy, if this is you, you're in trouble. About three hours later, the lads at Grosse Ile have been searching for some record of where you came from, but no soap. Meanwhile, Gedunk has become worried about you. They backtrack along your intended route, and the last place you have been heard from is the ATCS you called before approaching Chicago. Now the search commences!

Of course, you are a mythical and quite stupid character. Any pilot knows enough to have taken his flight plan into Grosse Ile Operations, told them where he came from and what his intended destination was, and make sure that they have notified both places. But you didn't because you felt confident the Chicago Center would take care of that little job of notifying all concerned of your change in destination.

BUT THEY DIDN'T! And they didn't even log it! CAA Air Route Traffic Control Centers are not required to take cognizance of VFR flights. Consequently they normally do not take care of them. Sometimes, when instrument traffic is not too heavy, they can help out in such cases as yours, but their primary job is handling instrument flights. On this day, the controller made a note of it, but he became very busy because of weather closing in just north of Chicago. Business was heavy up to and during the change in shifts of controllers. The note got lost.

If you had called Chicago Radio (ATCS), not the Center, and asked them to request Military Flight Service to advise Lower Slobbovia, Gedunk, and Grosse Ile of your change in plans, the message would have gotten through, via the Military Flight Service System.

This thing is important! Of course, every good Naval Aviator knows how CAA Airway Traffic Control works, but to play safe, the Director of CAA's Air Traffic Control recently explained the role of CAA in this field. He sent the explanation to all Regions to pass along to the uninitiated, to wit: An ARTC center is not considered an appropriate aeronautical facility for filing VFR position reports, changes en route, flight plans or arrival reports. In general and under normal conditions, radio communications with ARTC centers should be confined to enroute traffic control activities concerned with IFR operations. Communications concerning VFR operations should be conducted with Air Traffic Communications Stations.

Military pilots should not normally utilize center-to-pilot radio channels for filing flight plans, VFR position reports, arrival messages, or changes en route. And when changing from VFR to IFR, or cancelling IFR, the pilot should contact the nearest ATCS while maintaining VFR flight. The Director also stated that a change of destination or change in ETA in excess of 30 minutes shall be passed to Flight Service Center by the ARTC center when received directly from a military pilot on an IFR flight plan.

You, you mythical character, look alive! Keep out of trouble. You can help yourself by getting hold of, and studying, OPNAV Instruction 3710.7A, dated last New Year's Eve, 1956.

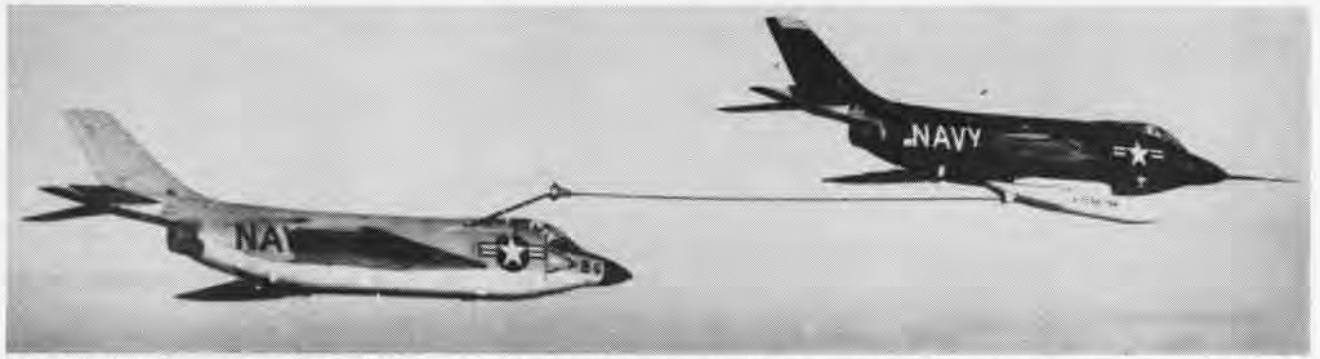
Guided Missile Program

Firestone to Build Launchers

The Firestone Engineering Laboratory, Guided Missile Division, at Monterey, is in charge of a program to design, build, test, and install a guided missile launching system for U. S. Navy submarines.

The launching system is for the *Regulus*, surface-to-surface, jet-powered missile which is capable of carrying an atomic warhead.

First to receive the system will be the subs *Grayback* and *Growler*.



TWO F3H-2N *Demons make in-flight refueling contact during experiments near St. Louis. Developed by Beech Aircraft for McDonnell, the system enables a fast jet fighter to draw fuel from a plane of comparable performance. The unit comprises an externally-mounted tank housing a hydraulic system capable of pumping fuel from the tanker plane's main fuel cells, and contains a flexible steel hose.*

Two Armament Contracts

Guided Missile Systems for Ships

Northern Ordnance, Incorporated, at Minneapolis, Minn., has been awarded two contracts for armament for guided missile ships.

One of the contracts is for the production of gun mounts to be used in new guided missile frigates and destroyers which were authorized in the Navy's 1957 shipbuilding program.

The other contract is for the production of a *Terrier* guided missile launching system to be installed on board the Navy's first nuclear-powered guided-missile cruiser, also a part of the 1957 program.

RAdm. F. S. Withington, Chief of the Bureau of Ordnance, states that Northern Ordnance participated in the design of both the gun mount and the *Terrier* guided missile launching system.

VQ-1 Develops 'Sniffer'

Detects Radiation in the P4M

Personnel of VQ-1, NAS IWAKUNI, have developed an ignition harness interference detector, called the "Sniffer," for maintenance use with P4M's.

The device was made by fabricating a pick-up loop for tracing electromagnetic radiations and connecting it to a receiver. The unit is mounted on a pole for reaching up to the engine harnesses.

"Sniffer" detects unwanted radiations as it is moved along spark plug leads. These radiations, if not found and corrected, cause excessive noise in the aircraft electronic equipment.

A job that once required hours, or even days, since each harness had to be removed and tested individually, now takes less than 45 minutes.

SOME OF THE MEN *in the Operations Maintenance Division at NAS Jax are shown with the tow-bar rack they designed and built. The new racks hold all sizes of tow bars.*

FLYNN IS CHECKED OUT BY GRUMMAN PILOT

F11F Tiger to VX-3

Incorporates 'Coke Bottle' Design

One of the Navy's newest jet fighters, the F11F-1 *Tiger* was delivered to VX-3, at NAS ATLANTIC CITY.

Cdr. David R. Flynn, squadron exec, flew in the initial plane from the Grumman facility at Peconic, Long Island.

Capable of Mach 1-plus speeds in level flight, production models of the *Tiger* carry the most modern armament, including air-to-air and air-to-ground missiles.

The F11F-1's fuselage is shaped like a coke bottle. This gives the plane optimum drag characteristics at transsonic speeds.

The *Tiger* is built around a J65 *Sapphire* axial-flow turbojet which is equipped with an afterburner.

SIDEREAL *equatorial mount, developed by Minneapolis-Honeywell, reportedly will use the stationary North Star as a reference point in guiding missiles and rockets to targets.*

TMB for Magnesium Fires

Standard Equipment on MB-5 Truck

BUAER has issued an Instruction 11320.12 on the use and recharging of trimethoxyboroxine (it's easier to say TMB) fire extinguishers. They are what the doctor ordered for fighting one of the hottest blazes known, magnesium. Since a large part of every helicopter is comprised of magnesium, these two and a half gallon extinguishers may come in handy.

TMB is a liquid, and strangely enough, is flammable itself. It burns quietly with a small, light green flame, and its flash point is approximately 55 degrees F., so it's nothing to fool with. Two TMB extinguishers are to be carried on the new type MB-5 crash fire and rescue trucks. They will be identified by a six-inch band of orange flourescent paint around the top of the extinguisher, with TMB in at least one inch letters painted in black.

If you should spill some of this TMB liquid on your foot, for example, wipe it off, don't wash it off, or you'll get a hot foot. It reacts with water to form a white precipitate of boric acid, and the reaction causes heat. Methyl or denatured ethyl alcohol or hot water is good to clean up both TMB and boric acid.

When the TMB liquid hits the hot magnesium, it will seethe and froth, quickly taking on the look of a molten, glassy scum over the burning surface. This scum seals off the magnesium from the air and prevents further combustion. Of course, underneath this layer, the magnesium will still be red hot so that any cooling agent, such as water or foam, must not penetrate the crust of TMB. Let it alone.

MEN OF NAS *Jacksonville Operations built this "Follow Me" sign which is black and has phosphorescent red letters which light up for either day or night-time operation.*

IN FOREIGN SKIES

Belgian Congo Air Force

The Belgian Congo, comprising 905,000 square miles of land in the heart of Africa, has its own air force. *Aviation de la Force Publique* is a squadron of aircraft under the control of the commander of the main army. Its purpose is to provide efficient liaison and communications for the widely scattered detachments of the Army.

Headquarters for the Congo Air Force are located at Leopoldville, but aircraft operate from small, rough airports which also facilitate successful forced landings, formerly impossible because of the country's rugged terrain. The fleet of aircraft consists of ten de Havilland *Doves*, one Douglas *Dakota* and one de Havilland *Heron*.

Aircraft are used on many missions: the evacuation to hospital from remote areas of urgent medical cases; the transportation of freight, including medicines, serum, dynamite, and—a frequent load—monkeys needed for poliomyelitis research; insect spraying, aerial photography, etc.

All commissioned officers are Belgians, who have volunteered for service in the Colony. Seven of them are pilots; 13, engineers; and five, wireless operators. Serving under these 25 Europeans are 75 Africans whose responsibilities include cleaning and dismantling the aircraft and engines prior to maintenance or repair, storekeeping, general shop duties, and handling aircraft on the ground.

Soviet Ground Attack Aircraft

The well known Soviet strafing plane, Il-2, has reportedly a two-jet successor which has been seen on the ground and in the air in service with active units.

Eyewitness reports indicate that the cabin is very long, high and armored. Jets have been built into the wing roots, and the wings are of a trapezoid shape with a straight leading edge.

The aircraft appears to be little larger than its predecessors. The span has been estimated at about 50 feet, the length at about 42 feet, six inches.

USSR Has Two New Helicopters

Photographs of two new Soviet helicopters, the Mil Mi-3 and the Kamov Ka-15, have recently shown up in the pages of the foreign press. The Mi-3 would appear to be an extensive modification of the three-bladed *Hare* (Mi-1) with a single four-bladed rotor, a wider fuselage seating three instead of two behind the pilot, and a more powerful engine. It can also be fitted with two enclosed stretcher cases outside the fuselage.

The Ka-15 is reported to be a development from the earlier Ka-10. It employs a co-axial layout of two three-bladed rotors and carries four or five persons. The Ka-15 is similar in appearance to the U. S. Kaman HTK-1.

Canberra Bombers for India

With the signing of the contract in February, India completed negotiations for the purchase of 68 aircraft from England, of which 54 are *Canberra* jet bombers. The rest include eight photo reconnaissance versions and six trainers. Delivery of the aircraft will begin later this year.

Flight crew training will be conducted in conjunction with the Royal Air Force crew training program.

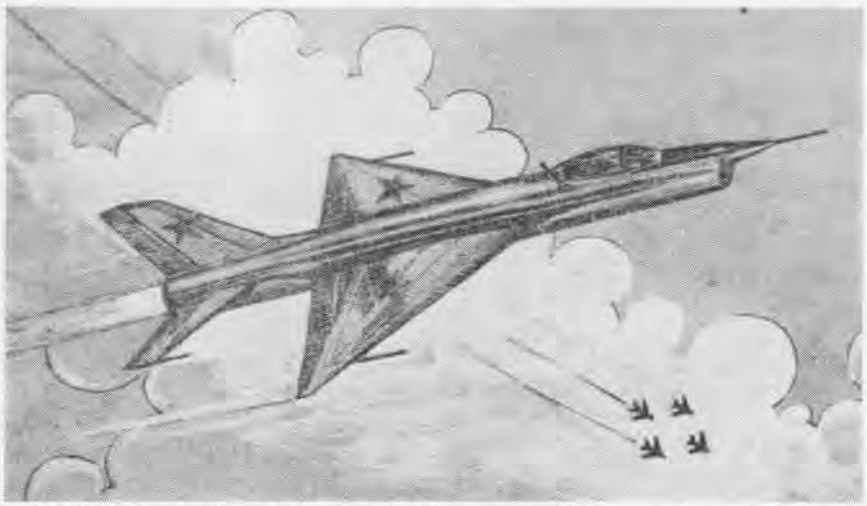
SECOND HERON TO BE DELIVERED LATER

D. H. Heron for Luftwaffe
Has Been Delivered for Service

The first British-made aircraft to enter service with the newly re-formed *Luftwaffe*, air force of the Federal Republic of Germany, is a de Havilland *Heron*.

The aircraft, a special eight-seat executive version, is to be used for service communications. It will also be the personal transport of Gen. Kammhuber, *Luftwaffe* chief of staff. A second *Heron* is to be delivered later this year.

The aircraft has an all-up weight of 13,500 pounds and cruises at 183 miles per hour at 8,000 feet. It is powered by four D. H. *Gypsy Queen* engines.



THIS DRAWING *appeared not long ago in a Polish magazine and represents the new Soviet prototype delta-wing jet fighter Fishpot seen last June during the annual Air Day Show. It displays an interesting combination of a conventional fuselage with a delta wing and pointed nose. Its configuration is somewhat similar to that of Fishbed A and B which appeared in the same show.*

BEAGLE IS USED BY USSR NAVY

MASCOT TRAINER (U-IL-28), STANDING IN FOREGROUND, IS USED TO INSTRUCT PILOTS IN FLYING THE BEAGLE LIGHT JET BOMBERS

CREWMAN IS READY TO ENTER BOMBER TAIL

THE UNION of Soviet Socialist Republics is counting more and more upon Naval aviation to play an important role in defense (NANEWS, February 1957, pp. 12-15). One of the aircraft which is used by the Navy is the *Beagle* light twin jet bomber.

Pictures on this page show naval personnel with the *Beagle*. In picture at right, note large radar bulge under the fuselage behind officers.

Suitably armed for its bombing mission, the capability of the Beagle has undoubtedly been enhanced by exploiting German designs of pattern-running and homing torpedoes as well as air-to-air surface missiles. The *Mascot* is not equipped with armament.

THREE NAVAL OFFICERS STUDY BEAGLE JET

BEAGLE BOMBER IS USED BY NAVAL AVIATION AND AIR FORCE OF SOVIET ARMY. IN ADDITION TO BOMBS IT CARRIES 23 MM CANNON

'LANDMARKS' AT CHASE FIELD

COMBINED TOTAL OF SAFE INSTRUCTION BY THESE PILOTS IS ALMOST 20,000 HOURS

AT NAAS CHASE FIELD, Beeville, Texas, 16 flight instructors have each completed over 1000 accident-free hours of instruction. Some are even close to the 2000 mark.

Chase is a part of the Advanced Training Command. It is the Navy's only all-jet air training station.

The safety record means that no aircraft received even the slightest damage. One thousand accident-free hours represents 20 months to two years of exceptionally conscientious work. The maintenance department has played a large part in the record.

It is also the result of intense safety-consciousness, sparked by the skippers of ATU-203, -213, -223, unit safety officers, and the vigilance of the instructors themselves.

Pictured above are the officers with more than 1000 accident-free hours to their credit: Kneeling (left to right) Lt. R. E. Roberts, Lt. B. D. Williard, Ltjg. C. M. Simmons, Capt. B. R. Wilkinson, USMC, Lt. T. B. Wood, Jr., Lt. G. D. Florence, Lt. W. C. Pierson; standing, left to right Lt. E. L. Wilkinson, Ltjg. H. L. Stickney, Lt. R. D. Dudzic, Capt. L. A. Gulling. USMC, LCdr. S. B. Murphey, Lt. J. K. Ashmore, Lt. J. T. Parks, Lt. J. E. Jones. (Lt. Robert Miller, not pictured, also logged over 1000 hours.)

Most of the flight instructors are veterans of Korean action, with six or seven years service. Training tomorrow's Fleet jet pilots is their mission.

Recommissioned in 1954, Chase Field celebrated its 70,000th ground controlled approach in December. The event occurred when two ATU-213 officers landed their TV-2 under the direction of GCA Unit-19.

Pilots on the flight were Lt. D. C. Hamilton and 1st Lt. D. W. Cody, USMC. The GCA team included W. Brandau, AC1; J. Searcy, AC1; W. J. Warren, AC1; D. L. Wynant, ET1. LCdr. C. Poole is O-in-C of GCA-19.

Capt. A. B. Sweet is Chase Field CO.

IFR-IQ?

When a pilot on an IFR flight on airways reaches a clearance fix other than at the destination airport and has not been given further clearance or holding instructions, what does he do?

Answer on page 40.

New Marine Rotation Plan

Air Squadrons to Move as a Unit

A policy of rotating entire Marine operational aircraft squadrons from stations in the United States to overseas stations has been approved by Marine Corps Headquarters.

Successfully passing its practical test when VMF-334 from MCAS CHERRY POINT, N. C. replaced VMF-235 at Atsugi, Japan, this new policy will involve four squadron exchanges each year.

Under the new system, Marines of tactical squadrons will be rotated overseas with their squadrons rather than on individual orders, as previously was the practice. Pilots and crewmen will stay together as a stabilized team. New aircraft and the latest equipment will be continually phased overseas by squadrons which were equipped and trained at U.S. stations.

YOU KNOW WHAT *they say about the old grey mare, she just "ain't what she used to be." This picture, sent in by NAS Columbus, proves it. What with nuclear powered ships, giant carriers, and jet aircraft, the poor ole boss has taken a back seat in modern transportation.*

LET'S LOOK AT THE RECORD

HUL-1 Passes its Tests

Completes its FIP in Record Time

Four Bell HUL-1 copters have completed fleet introduction program tests at NATC PATUXENT RIVER. Eight Navy pilots and 16 mechanics from HU-1 and HU-2 conducted the tests. The successful program earned a letter of commendation of BUAER Chief, RAdm. J. S. Russell.

In 18 flying days, the new utility

HUL-1'S ARE NOW GOING TO FLEET UNITS

models piled up 501.2 hours of flight time. Maintenance performance was tops. Availability of the four-place helicopters was set at 94 percent.

Primary mission of these whirlybirds is ice breaker patrol and support in the Arctic area.

Since the completion of the FIP, Bell has delivered several HUL's to both Atlantic and Pacific Fleet units.

Marine Officer Cited

Awarded DFC for Heroic Rescue

An air-sea rescue pilot, 1st Lt. R. F. Patton, HMR-361, MCAF SANTA ANA, has been awarded the Distinguished Flying Cross. MGen. C. C. Jerome, Commanding General, Aircraft, Fleet Marine Force, Pacific, presented the medal during ceremonies at MCAS EL TORO.

The award was in recognition of a daring helicopter rescue of two Marines and 22 Korean Nationals in December 1955. The men were trapped aboard a sinking Korean crane barge off the southeastern coast of Korea. Despite extremely hazardous weather conditions, Patton successfully completed the rescue operation, although it took 10 flights and almost two days.

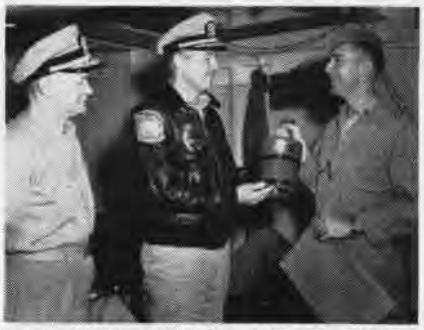
The citation read in part: "By his excellent airmanship and inspiring devotion to duty throughout, 1st Lt. Patton upheld the highest traditions of the United States Naval Service."

Rocket Firing Skill

Three Bullseyes in Four Runs

Ltjg. Joseph A. Cattuso, assigned with ATU-206 at NAS PENSACOLA, made an outstanding student record when he fired four rockets from his F9F-2 *Panther* on four successive runs. He hit three bullseyes and one 50-foot near miss, for an average of 12½ feet. This tops the previous ATU-206 student rocket record average of 16 feet set in December 1956.

Ground rocket firing flights are conducted at a target on Santa Rosa Island south of NAS PENSACOLA. The target measures 200 feet in diameter.



CDRS. HELSEL, WORLEY, AND LT. PHILLIPS

Anti-Sub Trophy Awarded

Honeybucket Idea Used by VS-23

To the pilot racking up the most simulated "kills" of a submarine during a WestPac deployment by VS-23 goes the squadron's "Honeybucket" trophy. Two pilots tied for the honor during the squadron's most recent deployment. Cdr. K. D. Helsel, executive officer, and Lt. A. R. Phillips, administrative officer, each scored seven confirmed "kills."

Cdr. C. C. Worley, squadron CO, made the awards on the homeward cruise the day before arriving in San Diego.

Again, Again and Again

Petty Officers Repeat 'E' Awards

When VP-44 was awarded the Battle Efficiency "E" by RAdm. W. O. Burch last December, it was a case of history repeating itself for nine of the squadron's petty officers.

In the case of Chief Aviation Machinist's Mates V. R. Hayes, W. C. O'Daniels; H. E. Wheless, and Chief Aviation Ordnanceman J. T. Boatwright, it is becoming almost habitual. Three-time winners with VP-49, they repeated in 1956 with VP-44.

The double winners included J. W. Ingham, ADC, J. A. Johnson, ADC, P. Chesser, AD1, and E. L. Snively, AD1. Chief Johnson was an "E" recipient with VP-45, while Ingham, Snively and Chesser were with VP-49 before repeating their accomplishment with VP-44, the Norfolk-based P5M squadron commanded by Cdr. R. D. Macklin.

10 VR-3 Men Ship Over

Total Reenlistment Years Equal 56

A total of 10 men of VR-3, NAS MOFFETT FIELD, re-enlisted during December, assuring the Navy of 56 years of career service.

G. W. Strach, ADC, shipped for four years; R. F. Cain, ADC, "reupped" for six years; H. E. Olson, ADE1, for four years; W. H. Cooper, AD1; E. C. Strictland, AM1; R. J. Riedell, PN1; J. A. Ashcraft, ADR3; R. A. Clary, AT1; W. D. Crews, AB3; and J. A. Spencer, AD3; re-enlisted for six years.

Men like these assure themselves of a comfortable future. At the very same time, they have the satisfaction of belonging to a top-notch team.

CDR. T. A. HOLL, *O-in-C of ATU-604, Hutchinson, Kan., congratulates Ens. F. K. Conover. Latter was first student pilot at the station to complete the S2F Tracker syllabus.*

DOUGLAS, NAVY REPRESENTATIVES CONFER

A4D Provisioning Meeting

Skyhawk Disassembled for Teams

A new twist was added to a provisioning conference at NAS ALAMEDA.

Members of the A4D *Skyhawk* jet fighter conference said the project is the first of its type at Alameda and only the fourth time the Navy has completely disassembled an aircraft for a provisioning conference.

At Alameda, an A4D was completely taken apart and displayed on tables covering a large hangar area. Nearby, members of the conference went directly to any specific part of the fighter to solve problems.

Teams included representatives from BUAER, O&R personnel from Alameda and Quonset Point, fleet squadrons, Douglas Aircraft and their sub-contractors.

Looking over an aircraft part (above) are: W. W. Dunn, Douglas representative; Capt. M. W. Mason, ASO Philadelphia; J. S. Farra, Douglas; Capt. J. L. Ewing, Alameda O&R officer; and W. S. Fryer, Douglas.

O&R representatives claim a provisioning conference of this type has many advantages which help greatly to keep aircraft at peak performance.

HUS Copter to Santa Ana

Used in Marine Assault Operations

Four king-sized HUS Marine transport copters arrived at MCAF SANTA ANA. Marine pilots, led by LCol. W. P. Mitchell, flew the craft from the Sikorsky plant to the facility.

The new helicopters will be used by

HUS COPTERS ARRIVE AT MCAF SANTA ANA

HMR-363 to fly First Marine Division troops from Camp Pendleton in vertical assault operations.

Carrying a crew of two and 12 fully equipped combat Marines, the HUS can also be used as an ambulance helicopter, accommodating eight litter cases.

Sixteen more HUS's are slated to join HMR-363 sometime in the future.

Two More Missile Ships

Navy Awards Conversion Contracts

The Navy has awarded contracts to convert the USS *Springfield* and USS *Oklahoma City* to guided missile light cruisers.

Converted to CLG-66, the *Springfield* will be equipped with the *Terrier* missile. The *Oklahoma City* (CLG-91) will be equipped with the *Talos*.

Both ships are light cruisers of the *Cleveland* class, 610 feet long.

Headed for Navy Wings

Princeton Seniors Take Exams

Mike Bowman, captain of the 1956 Princeton football team, contemplates change in hard hats, surrounded by NROTC Midshipmen, who also took the examinations for Navy Flight Training. These men, all seniors, will begin training at Pensacola within a few weeks of June graduation.

Shown below are Mdn. J. C. Tappan, M. M. Murphy, LCdr. Samuel Selfridge, NROTC staff aviation instructor at Princeton, Mdn. M. E. Bowman, Dr. R. F. Bone, examining physician, Mdn. W. E. Tangney, and D. Almgran.

HEADED FOR THEIR NAVY WINGS OF GOLD

VF-13 Wins AirLant 'E'

Now Stationed at NAS Cecil Field

Winner of AirLant's Battle Efficiency "E" for day-fighters during fiscal 1956 was VF-13. Commanded by Cdr. L. B. McCuddin, the squadron piled up 35 individual "E's" during 1956, with Ltjg. Harold Barnes becoming a triple winner.

During a six-month WestPac cruise aboard the *Bennington*, VF-13 logged 1120 carrier landings and 1950 hours. The squadron was chosen to participate in a naval airpower demonstration for President Magsaysay of the Philippines some months ago.

On 8 June 1956, under the command of Cdr. C. D. Winner, VF-13 received a "very high excellent" in its administration inspection. Shortly after, it began a training cycle at Cecil Field where the squadron is currently based.

EARL WILLIAMS, *AD2, attached to the Tokyo detachment of VR-7, builds, flies, and maintains Lockheed Super Constellations. He helps maintain squadron Connies, and he built this 12-pound model. Powered by four gas engines, the plane flies for several minutes, maximum speed, 50 mph.*

● More than half (51.25%) of the gas turbine airliners on order in the world are British. There are ten such types, five turbojet and five turboprop, being manufactured in four countries and orders for these aircraft stand at present at 880: of this total, 451 are British, and the remaining 429 are foreign.

Gift to War College

Portrait of RAdm. W. A. Moffett

A portrait of RAdm. W. A. Moffett has been presented to the Naval War College Museum by Cdr. C. S. Moffett, son of the late admiral.

RAdm. T. H. Robbins, Jr., President of the Naval War College, accepted the gift in behalf of the staff and student body. He said the portrait would be a treasured addition to the growing collection of naval historic mementos in the museum.

RAdm. Moffett was the first Chief of the Bureau of Aeronautics and served from its founding in 1921 to his death in a dirigible crash in 1933. He is credited with developing the equipment and weapons which made the Navy's mobile air arm an integral part of the Fleet. This far-sighted leader directed Naval Aviation through one of its most difficult times.

He was a graduate of the Academy in 1890, the Naval War College in 1896.

CDR. R. G. ALBRIGHT *(L) receives a commendation from MGen. B. E. Allen, Commander Continental Division, MATS, at Kelly AFB. The award was for his outstanding service while attached to the MATS division headquarters.*

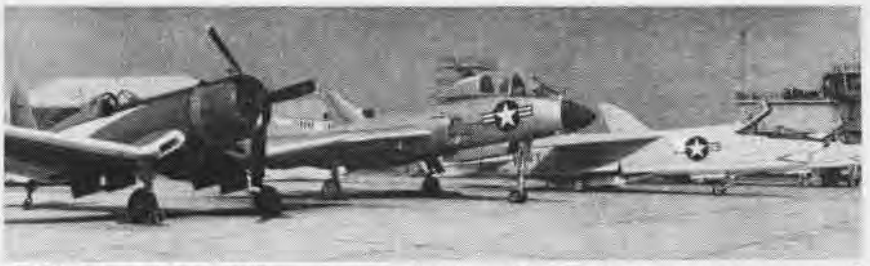
Kaman Awarded Contract

Will Build New Utility Copter

As a result of winning a Navy helicopter design competition, Kaman aircraft has received a research and development contract for a new utility helicopter.

Entering both twin-rotor and single rotor designs in this industry-wide competition, Kaman won with its single-rotor design to be known as the HU2K-1. It will be powered by a General Electric T-58 gas turbine.

● Wind tunnel testing time for a modern jet bomber amounted to 8,000 hours—33 times more than the tunnel hours required for the design of a World War II bomber.



LAST OF THE FAMOUS *F4U Corsairs to leave the Chance Vought plant poses for its picture with two modern counterparts, the F7U-3 and the F8U-1 Crusader. In recent years, the red-painted Corsair has been used by a CVA vice president for business flights. It has now been turned over to Paul Mantz, Hollywood stunt man, for use in producing movies of the WW II Pacific theater.*

Award to IBTG at Corry

Tops in Accident-Free Flight-Time

Instructors Basic Training Group, stationed at NAAS CORRY FIELD, has been awarded the Naval Air Basic Training Command Accident - Free Hours Championship Plaque. The group ranked highest in aviation safety.

The plaque came into being in 1955. Each year the award goes to the unit within the Command which has the best safety record.

IBTG topped the mark of flying 33,317 accident-free hours. Capt. R. B. Jacoby, Corry Field skipper, accepted the award from Captain P. E. Hartmann, Basic Training Chief of Staff.

Naval Officer-Diplomats

In Rome, Their Duties are Varied

RADM. EKSTROM TALKS WITH TWO AIDES

Every time a U.S. Navy aircraft flies over or lands on Italian territory, one or more of these Naval Aviators is directly involved.

RAdm. C. E. Ekstrom, ComFAirELM, is based at Naples. Capt. W. M. McCormick, Naval Attache and Naval Attache for Air, Rome, is responsible for diplomatic clearances of all Navy ships and aircraft entering Italy. Lt. R. M. Netherland is the Assistant Attache who handles naval air matters.

The three officers are shown at the American Embassy prior to meeting with the Chiefs of Staff of the Italian Navy and Air Force concerning naval aviation problems in Italy.

VMAT(AW)-20 Inventor

Marine Builds Test Equipment

During his off-duty hours, SSgt. J. D. Meyers, of Marine Attack Training Squadron (AW)-20, MCAS CHERRY POINT, has built test equipment which will save time in hydraulic maintenance. The device was fashioned from scrapped aircraft parts.

Basic value of "Meyers' Meter Miser" is its ability to detect internal hydraulic leaks in equipment. Without such a tester, only external leaks could be readily spotted. Internal leaks were only discovered by placing hydraulic equipment on an aircraft and testing it under flight conditions.

Now with Meyers' device, set up in the VMAT-20 engineering shop, it is possible to test the equipment under simulated flight conditions and thus eliminate the time used in making repeated replacements of plane gear.

FAWTUPac *pilots discuss 1929 Gypsy Moth bi-plane, used in the filming of movie, "Pylon." Ltjgs. D. R. Ashby, C. N. Lallathin, J. F. Bell talk about the "good old days" with actors, Rock Hudson and Robert Stack.*

LETTERS

SIRS:

In your article, "A Day at Home with the Angels," in the January issue of your excellent magazine it is stated: "Of course, this is the only flight exhibition team in the world to land four planes at one time."

With all due respect to a second-to-none aerobatic team, I would like to point out that most front-line fighter squadrons in the Royal Navy have an aerobatic team, the members of which are average squadron pilots, and the most usual method of terminating a display at an airfield is to carry out a "box landing."

as shown by the aerobatic team of 802 Squadron, led by myself, in the enclosed photograph.

With all best wishes for the continued success of your first-class publication—

LCDR. D. T. MCKEOWN, R.N.

802 Royal Naval Air Squadron

¶ We should have stipulated "U. S. flight exhibition team." Our sincere apologies to our friends in the Royal Navy.

SIRS:

With the advent of jet aircraft came a new problem for air stations — that of having meticulously clean ramps and taxi areas. One small pebble, nut or bolt can ruin a jet engine turning over at the high RPM at which it runs. Indeed, a small piece of safety wire can put a jet engine out of commission.

Here are some astounding figures: In Fiscal Year 1956, there were four major aircraft accidents attributed directly to foreign body damage.

In one year, 2620 engines were received at O&R at NAS NORFOLK for overhaul and repair. Of these, 592 of them were foreign-body damaged—that's an average of 22.5%! In dollars and cents spent for such overhaul this amounts to about $4,800,000!

What are we to do about it? We have big sweepers and magnetic pickups which do a fine job of picking up the pebbles and metal particles from our ramps and taxiways, but they cannot get under the parked planes. Soon as an aircraft turns up, his jet exhaust or propellor blows all the small bits of "engine-poison" onto other aircraft and into jet intakes.

We of VA-86 believe we have found a solution to this grave problem—if not a 100% solution, certainly one which will cut down the number of jet engine foreign body damages occurring here at Oceana. We propose that we will take our entire squadron one morning each week, line them up at double arm's interval at one end of the parking ramp and police from there to the other end, picking up every piece of "engine-poison" that we find enroute.

We have offered a solution and have put it into effect here. We believe that if a similar move is made by squadrons throughout the Navy we can have much cleaner ramps—less foreign body damage. How about it? Is the fifteen minutes required not worth it?

G. BOICE, CDR.

CO, VA-86

NATIONAL WAVES REUNION

The Fifteenth Anniversary of the founding of the WAVES will be celebrated during a reunion in Boston on July 26-28. Toastmistress at the anniversary banquet will be Mildred McAfee Horton, wartime director of the WAVES. For further information about the reunion, address inquiries to:

National WAVES Reunion Committee
495 Summer Street
Boston 10, Massachusetts

IFR-IQ?

He should immediately request further clearance and hold at the clearance limit, maintaining the last assigned altitude, until further clearance is received. The pilot will be expected to begin holding in a standard pattern on the course on which he approaches the fix. He should not utilize a holding pattern shown in publications because he has not been given a clearance to do so.

Ref: SFID, p. 157, Para. C1

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● COVER

"Mirror, mirror, on the wall, who's the fairest of them all?" It's an AD-5 reflected in the concave mirror of a mirror landing system. Carrier is Randolph.

● PICTURE CREDIT

Picture on opposite page is from original painting by D. G. Lewis, AN, Air Navigation Office, ComFAirWhidbey Island.

● SUBSCRIPTIONS

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ROAD SIGNS OF THE SKIES

This bald eagle is lost. Don't be a careless 'bird' and get yourself in his predicament. Make sure that your information is correct. The bi-weekly 'Notice to Aviators' corrects and supplements aeronautical charts and publications of the Hydrographic Office. The index of Hydrographic Office publication 1-V(R) is revised and published bi-monthly. Use these sources to check the up-to-dateness of your navigational aids. Consult the 1-V(R) catalog to order current material by mail, or visit the Air Navigation Office in your vicinity. These offices are located at San Diego, Ford Island, Atsugi, Agana, Alameda, Whidbey, Norfolk, Quonset Point, and Port Lyautey.

NAVAL AVIATION NEWS

Guided by the "meat ball" or blob of light in the concave mirror of a mirror landing system, this A3D approaches a carrier deck. Let NANews be your guide to the fascinating and ever-changing world of Naval Aviation. Follow advances in air technology the world over. Get your personal copy each month for a year by sending a $2.25 ($3.00 foreign) check or money order to the

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