NAVAL AVIATION

NEWS

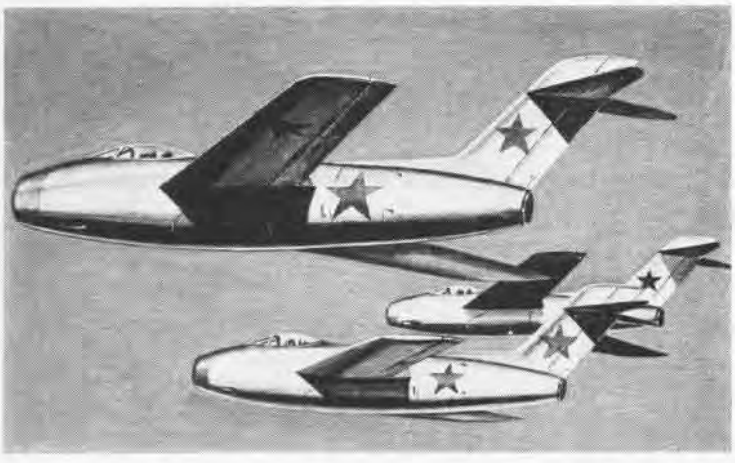
Airship Training

Warfare in Korea

NavAer 00-75-R3

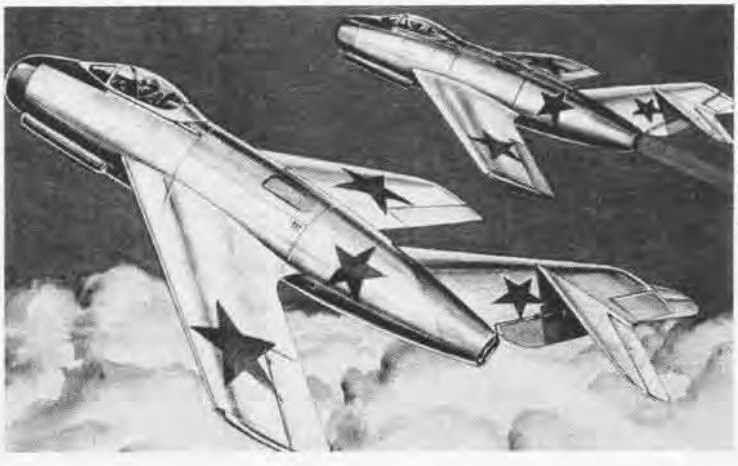
NOVEMBER 1950

RUSSIAN RECOGNITION



Lavochkin single-jet interceptor

Mikoyan jet fighter



Lavochkin twin-jet fighter

Lavochkin twin-jet night fighter

ACCENT ON AIRSHIPS

HTA Crewmen Learn About Blimps

A QUIET REVOLUTION has taken place in naval aviation. There were formerly two kinds of naval aviators—airship and heavier-than-air. They remained strange birds to each other.

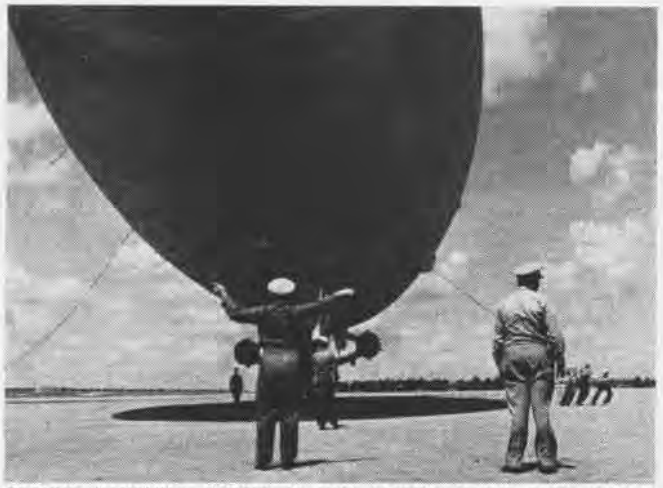
Two years ago, however, it was apparent that to maintain a well balanced team to wage battle against any future threat of submarines, it would be a good idea to have all crewmen in the air side of the battle understand what their teammates were up to.

Consequently, pilots and crewmen in lighter-than-air and heavier-than-air started changing places. Officers and men long in airships moved to pilot training at Pensacola and aviation rate schools of the Naval Air Technical Training Command. Experienced aviators traipsed to Lakehurst to learn pilotage of airships. Aviation rated men attended non-pilot school, there to learn about rigging blimps and the principles of airmanship. They acquired new ideas and new skills.

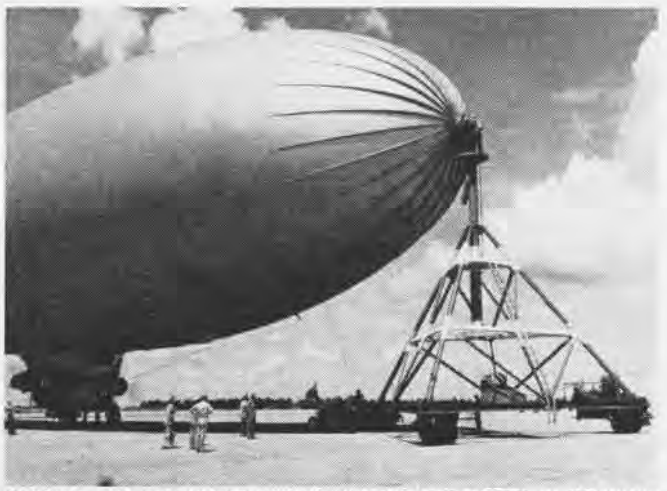
Advantages accruing from this exchange are already apparent. Many crews already wise to the ways of navigation and radar are now in the blimp squadrons, while former LTA crews are operating in an exciting new medium where they have found that their skills in ASW can be put to use in carrier and patrol squadrons whose primary mission is submarine hunting. LTA men now have a wider field of endeavor.

LTA men admit that for many years they were a group apart. Because their activities were not understood they were the butt of many jokes of a low order. Uncomplimentary names were long standard fare for the LTA people, and as a result there was a tendency to draw further away.

Now the effects of an integrated training program are being felt. The unfunny names have gone to the discard pile along with "Black Shoe," "Airedale," "Gyrene," and "Dogface," in the cause of military unity.



GROUND HANDLING OFFICER IS LIKE CARRIER FLIGHT DECK OFFICER



MASTING AND UNMASTING PROCEDURES ARE EMPHASIZED IN TRAINING

Blimps New Sensation For HTA Plane Jockeys

EVERYBODY WHO flies realizes that air is a fluid and behaves in known patterns. The heavier-than-air pilot knows it as a flowing medium, while the lighter-than-air man considers it as resembling water in which a lighter body can float.

Both HTA and LTA require certain types of piloting skills. In this story on LTA training up-to-date for both pilots and crewmen only one side of the picture will be presented—what the HTA officers and men think of the airship, the way it flies, what keeps it flying, and how it can fight. All the students now in training have come from HTA.

Pilot-wise there is a terrific shift in speed of reaction, but there is increased emphasis on accurate navigation and the handling of electronics gear. The blimp approaches the surface ship in crew training and coordination.

As in patrol planes, crew members learn specialized jobs. Each man has his flight station. There is little fuss in flight. The usual all-day jaunt necessitates a relaxed atmosphere, and every crew has one good cook.

The blimp is an important member of the sea-air anti-submarine team. Likewise, there is teamwork within the structure of each blimp squadron. The air crews are tactical teams, with the skippers calling the signals, while the ground crews keep the gas filled bags in trim, nurse them in and out of the hangars, launch and retrieve them.

The naval air station at Lakehurst, New Jersey has long been well known in naval aviation. It is the traditional home base for lighter-than-air activities. At present, as it has been for many years, it is the home of the command with a mouth filling name—the Naval Airship Training and Experimental Command.

Lakehurst is ideally suited for airship operation. It is on flat land 15 miles inland, far enough to escape many days of bay-engendered fogs, yet close enough to the ocean to save time in overwater operations.

As new students approach Lakehurst their first impression is one of massiveness, for there are four huge hangars which house the airships. One was originally built large enough to take care of rigid airships whose sizes ranged up to over 700 feet. Others were built during the war.

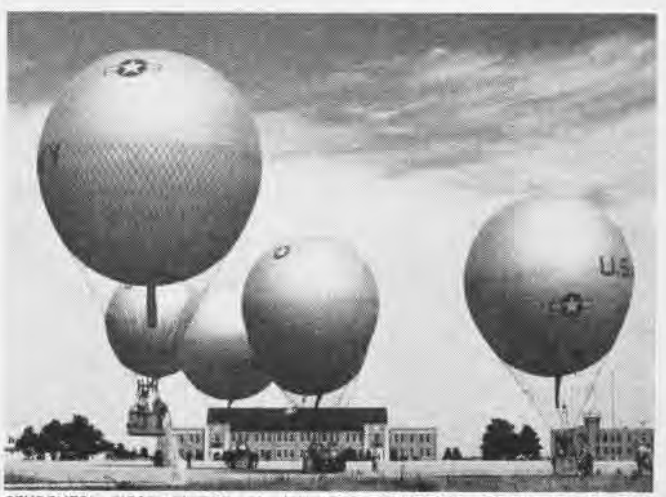
CHECK-IN at the training command is a quickly accomplished chore. Classes at both the pilot and non-pilot schools are small enough to make individual attention possible.

Interest in this training program is so great that there is a big backlog of applicants for the pilot and non-pilot schools at Lakehurst. This has resulted in high quality graduates.

The shift to training pilots already qualified in HTA caused the biggest change in the pilot school. Instead of a course lasting eight months or longer, it now has been shortened to three months.

Reviews only are necessary for such subjects as electronics

STUDENTS IN GROUND SCHOOL STUDY PRINCIPLES OF AIRSHIP RIGGING



STUDENTS' FIRST FLIGHT IS IN FREE BALLOON: CLAIM IT IS FUN

CDR. BOLAM, TRAINING DEPT. HEAD, GIVES STUDENTS FLIGHT DOPE

PILOTS FLYING LIGHTER-THAN-AIR CAN KEEP HAND IN PLANE FLYING

ma'erial and operation, aerodynamics, power plants and instruments. Plenty of emphasis is placed on navigation, however, because of the greater drift angles encountered in airships.

Subjects devoted to the LTA medum are given the full treatment, of course. All ground school and primary and advanced flight training is done at Lakehurst. On completion of that course the pilot receives his LA designation and goes to a fleet squadron where he receives his operational training, much in the same fashion as in HTA.

Ground courses in both the pilot and non-pilot schools is bound to go into the history of LTA. It is the medium by which man first imitated the birds. The idea was that of Roger Bacon and many others, but it remained for the Montgolfier brothers of France to make the first actual flights with hot air balloons.

It is no wonder that LTA remained an entity in itself for a long period of time. It predated the airplane by a century and a quarter. Its background makes fascinating reading, and it's in this lore that the sailors and pilots of the LTA schools are steeped. The reaction among the present students is a pleasant one and each one feels that his aviation background has been widened immeasurably.

For the students, history of the airship and free balloons covers modern developments thoroughly. It goes into the controversial subject of rigid airships (dirigibles) in a straight-forward manner.

Each week of the course is divided into two days of flying and three days of ground school until the ground school is completed. After that, it is all flying. Usual practice is to get the flying done the first two good days of the week.

A vital *must* subject to understand before going into LTA is the general one of aerostatics. This is the study of gravitation and the way it affects the equilibrium of a body which is suspended freely in the atmosphere.

Plainly stated, it is the study of vertical forces on any LTA ship as influenced by its weight, the temperature and pressure of the air, the type and quantity of the lifting gas.

IN PRESENT day LTA operations only the free balloon and the blimp are studied in relation to aerostatics. A thorough study must be made of the earth's atmosphere, its composition and the way it acts. It is the weight of the blanket of air above the surface of the earth which influences the ships which the LTA crews operate.

This subject of aerostatics can become involved, mathematically speaking, and the students have to do a little brain cudgeling to figure the properties of gases. It's a necessary evil, however, because it is those gases and the way they act that will allow them to float through the air.

Perhaps the most important one property of gases that an airship pilot must understand is that of superheat. Any time a gas expands, it becomes lighter per unit of volume. Whenever a balloon or blimp is heated by the sun, this business of superheat is one to reckon with. The heat increases the lift.

JORDAN, ADC, WATCHES ENGINEERING PANEL

LT. (JG) W. HURST TAKES TURN AT RUDDER

ELEVATOR IS OPERATED BY LT. (JG) POWELL

TO TAKE PICTURE INSIDE BAG, PHOTOGRAPHER WEARS OXYGEN MASK

AIRSHIP CAR IS SUSPENDED FROM CURTAINS INSIDE AIRSHIP ENVELOPE

Floating Through Air Puts Teamwork First

AFTER LEARNING what keeps him in the air, the LTA student progresses to airship hulls and related subjects. One interesting difference between conventional HTA aircraft and airships is in the realm of trim. Tabs on control surfaces do the job in an airplane. In the airship, however, this is done by shifting part of the lifting gas within the envelope. This is accomplished by having balloons within a balloon, so to speak. They are called ballonets.

These ballonets within the envelope contain outside air. By controlling their size relative to each other by means of valves, the lifting gas is shifted. Also, as altitude is increased, the helium is expanded so the balloners decrease in size by forcing out the air they contain. To get air back in a ballonet, either slipstream air is used or a blower does the job.

Pilotage is itself a job of teamwork. One pilot operates the elevator. At his position on the port side of the control cabin, he also controls the trim valves. On the starboard side, the other pilot operates the rudder. HTA pilots, at home in the air, still have many adjustments to make. First of all, there is the slow speed, then there is the only relatively straight course. Steered by hand, "steering small" is quite a job. All fleet airships have automatic pilots.

Another feature crewmen like is the absence of safety belts. Vertical accelerations are of insufficient force to cause embarrassment.

The ship captain, a mechanic, sits at a position about half way aft in the car. *(See picture, page 3.)* In the training command, the non-pilot students go aloft with other enlisted instructors. The mech starts the engines, controls mixtures, and makes fine adjustments of the throttle and prop controls. Radio and radar operators have separate positions. One junior crew member has a chore to perform twice a flight or more. That is raising and lowering the single wheel landing gear by hand. *(See picture, page 5.)*

Training flights start out with familiarization. One of the most difficult transitions for HTA pilots to make is to approach for a landing slow enough. There's always that feeling that there is a stalling speed, and there should be a little more speed for safety's sake.

Approaches are made at 23 mph. If they are made any faster, the landing will have to be done over again. Instructors have a standard treatment for new students. An approach is made, heading for the landing area nose down. The throttles are cut and the airspeed drops off. About that time, the HTA boys assume a wild look and hold tight to the first thing they can grab. Helicopter instructors like to do the same thing.

Practice landings are made on a sand-covered circular field about a mile from the main station. Navigation flights are made over water. It is this phase where HTA crewmen have to pay close attention because at the slow cruising

ART, WELT, KRICK, BOB AND BUD SHOOT BREEZE AFTER BLIMP FLIGHT

KEELE GETS DIPLOMA FROM LT. PATZIG, CAPT. WATSON, CDR. BOLAM

GEAR IS RAISED BY HAND BY E. C. JAMES, AO3

CARRIER LANDINGS ARE NOW STANDARD; THIS WAS MADE ABOARD THE USS PHILIPPINE SEA

speeds of blimps. Wind has a much greater effect. Allowance must be made for beating back home if the flight starts out downwind. Crosswind courses have great drift angles—sometimes 45 degrees.

Most fascinating phase of the flight course by the unanimous opinion of the students is the free balloon flight. Every pilot gets at least one of these. It is given because a blimp without power is a free balloon.

BALLOON FLIGHTS start about two hours before sunset. At that time of day, the air is relatively calm. For Lakehurst the wind must have an easterly component to take the craft inland. The exhilarating effect comes from the complete absence of sound. Flights stay just above the trees. Altitude is controlled by either valving gas to descend or throwing over a handful of sand to rise. Farmers within 30 miles of Lakehurst are accustomed to having stray conversations come from the air.

Under the naval air station is the LTA training department headed by Cdr. C. A. Bolam. Until recently the non-pilot school of this department was headed by an oldtimer, Lt. D. F. Patzig. He has now retired after 30 years service. Chief of the entire LTA command is Capt. G. F. Watson, while Capt. B. May is C.O. of the station.

Crew responsibilities in relation to teamwork form a big part of LTA training. From the time the crew enters the ship in the hangar, this teamwork is a must. The airship commander takes his directions from the ground handling officer, who in some respects resembles the hangar and flight deck officers of an aircraft carrier. All pilots are indoctrinated in the duties of the GHO. Masting and unmasting require the same degree of coordination.

Students start in the Love and George ships, 125 and 150 feet long respectively, which are of relatively ancient vintage. Most of the training time is spent in the fleet-type K ship, however. They are 250 feet long and have a maximum envelope width of 70 feet. Also seen at Lakehurst, but not in training are several "M" ships. Soon to be flying will be the biggest of all, the "N" ship, illustrated on pages six and seven .

Oldtimers in LTA are pleased with the results obtained in training HTA pilots. The reaction is that they have a more professional approach and have more basic knowledge of electronics and navigation. There is practically no attrition in the pilot school.

The Class C non-pilot school syllabus includes indoctrination, ground handling (keeps the men in condition!), nomenclature, free ballooning, airship hulls, engineering installations, aerostatics, aerodynamics, airmanship, navigation, communications, and watchstanding.

Here are some typical pilot students: Lt. (jg) A. E. Powell, a former pilot of VC-11 in San Diego, flew TBM-3W's and AD-3W's; Lt. (jg) V. R. Krick, flew P2V's in VP-6, thinks he can learn more about ASW in blimps; Lt. (jg) R. G. Baker, was an instructor in BTU-2 at Corry field, Pensacola; LCdr. F. Hewitt, flew PBY's and PB4Y's, likes the idea of more ASW knowledge; Lt. (jg) W. Hurst, flew PB4Y's and served aboard the USS *Leyte*. By now these pilots have joined the fleet squadrons. A new squadron, ZP-3, was commissioned at Lakehurst 28 Sept. by RAdm. R. F. Whitehead, ComFairWingsLant.

Integration of LTA is now an accomplished fact. Crews, after joining squadrons, operate with the fleet. All pilots have to check out on carrier landings now. Crews are relieved and fuel replenished at sea. As an airlift for modern antisubmarine detection gear, the airship takes its place with the rest of the team, operated by personnel who are no strangers to the other air components.

ASW TEAM IDEA IS ILLUSTRATED BY THIS PICTURE OF THREE MEMBERS

THIS IS THE LATEST PHOTO OF THE NAVY'S NEW 'NAN' TYPE NON-RIGID AIRSHIP BEING BUILT BY THE GOODYEAR CO. IN ITS AKRON HANGAR

NEW 'NAN' AIRSHIP READIED

A NEW BABY is about to be born. It is the "N," or "Nan" type nonrigid airship being built by the Goodyear Aircraft Corporation at Akron, Ohio. It is destined to take its place alongside the well known "K" type which saw wide service in World War II in the allied drive against submarines. It is expected to fly soon.

Vital statistics for the big baby are: 324 feet long, compared with the 253 feet of the "K" type; 92 feet high; 71 feet wide; car length 87 feet; bag gas capacity, 875,000 cubic feet. It will carry the latest submarine detection gear. Emphasis on comfort will allow crews to stay with the ship for long periods of time and travel great distances.

CAVERN-LIKE is the interior of the partially air filled *Nan*-type airship as workmen make finishing touches; Car hangs from curtain.

FRANK CRONIN, Chief Rigger for the Goodyear Aircraft Corporation, is almost lost in the sea of fabric that makes up the "N" airship.

CONTROL CAR for the ship looks almost like a boat in construction ways. In the foreground is the nose cone for the huge nonrigid.

ERECTING and rigging an airship is a tremendous job. Here crewmen at NAS LAKEHURST, spread the fabric bag for rigging a K-type ship.

PROPELLER and nacelle for the *Nan* ship are tested on stand at Goodyear engine test shop.

HARRY WEIGAND and Claude Weigand install fittings in the gloom inside the gas bag.

O. KARKER and L. W. Beck check installation of control surface attached to one of fins.

HERE workmen apply bow line hatches from which handling lines are released. Making installation are Myrl Leidy and R. C. Reed.

DR. KARL ARNSTEIN, Goodyear Engineering VP, LCdr. V. E. Teig, BUAER representative, and T. A. Knowles, VP General Manager,

GRAMPAW PETTIBONE

Jet Safety Record

From VF-11 comes word that this squadron flew 1024 hours in *Banshees* during August 1950 without an accident. This is the best monthly record reported to date for a jet squadron.

Aircraft accident rates over the last 20 years indicate that accidents occur with greater frequency in squadrons equipped with the newest type planes. For example, in fiscal 1950 the accident rates for jets were approximately twice as high as those for conventional fighters.

As pilots become more familiar with jet operations, and as some of the "bugs" that show up in any new model are eliminated, there should be a marked improvement in the jet accident rates during the coming months.

Perhaps by the time this issue of N.A. News is distributed, VF-11's record will be bettered . . . we hope so. In any event, congratulations to VF-11.

No Time To Whisper

Case #1

Pilot was making refresher carrier landings in an F8F-1B. On his down wind leg he went over the check-off list but neglected to lower his hook. The hook spotter at the LSO platform was not using binoculars and called out "no hook" just as the plane reached the cut position. The LSO did not hear this warning and gave a cut. The plane touched down in a three point attitude near the #3 deck pendant, continued up the center of the deck, and crashed into the barriers.

Case #2

Pilot was making his second carrier landing in a TBM-3S. On this approach, he neglected to lower his landing hook. The hook spotter did not call out "No hook" until the plane was in the groove and then spoke so softly that the LSO did not hear the warning.

A cut was given and the TBM crashed into number 2, 3, and 4 barriers, and then nosed up.

Grampaw Pettibone Says:

Maybe our hook spotters ought to imitate Demosthenes, the Athenian orator, who practiced talking with pebbles in his mouth to develop his voice.

When a hook spotter sees a plane coming in with the hook up, that's certainly no time to whisper. He should shout loud enough to be heard clear up at the island and then turn to see that the LSO is giving a wave-off. If the LSO doesn't give a prompt wave-off, then grab his trouser leg, and repeat the warning.

By using binoculars a smart hook spotter can often detect the fact that a plane is making a no hook approach while the aircraft is still way out on the down wind leg.

In the last year we have had 10 of these unnecessary accidents. Each one puts a plane out of commission and in some instances the damage has been very severe. Three of these planes flipped over on their backs after engaging the barriers and suffered strike damage; another required a major overhaul. The other six all had major damage.

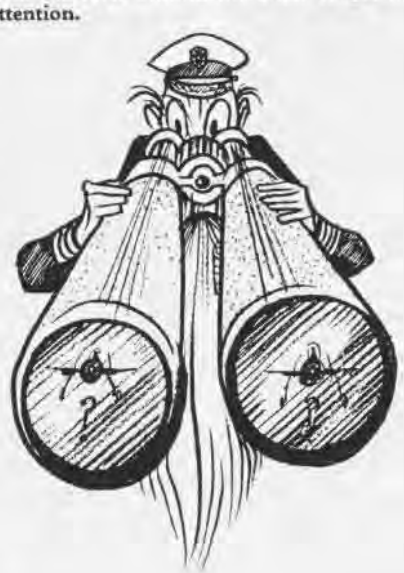
Let's follow these rules and see if we can't eliminate this type of accident:

1. Explain to the hook spotters the importance of their assignment. Tell them the exact terminology that is to be used. Explain that the LSO is too busy to watch for the hook.

2. Require the use of binoculars by hook-spotters.

3. Require the LSO to acknowledge each signal given by the hook spotter by repeating it back.

4. In the event the warning is not heard by the LSO, instruct the hook spotter to grab the LSO around the ankle to get his attention.



CO_2 Knockout?

Returning from a tactical hop in an F4U-4, an ensign discovered that his plane had a hydraulic failure and he was unable to get his wheels down. Accompanied by his wingman he climbed to 6000 feet where he attempted to pump them down manually. When this failed, he decided to use the emergency CO_2 system. He slowed down to 85 knots and actuated the emergency system, only to have the line leading from the CO_2 bottle burst in the cockpit.

At this time the pilot notified the tower of his predicament and stated that he would try to get his wheels down with dives and pull-outs. He was then advised by a factory representative who had come to the tower to try a snap roll.

At 8,000 feet he performed a snap roll to the right but was unsuccessful in lowering the gear. He called his wingman to say that he would try another snap roll in a minute. A second snap roll was attempted at 8,000 feet and this was followed by a spin to the right. The aircraft continued to spin until striking the ground. In the opinion of the wingman and other witnesses, the pilot made no apparent effort either to recover from the spin or to bail-out.

He was wearing a protective helmet which makes it appear unlikely that he was accidently knocked out by striking his head during the snap roll. The canopy remained closed during his efforts to lower the gear.

Grampaw Pettibone Says:

The causes of this accident will probably never be solved to everybody's satisfaction, but here's a theory which seems quite plausible and yet was not mentioned by the Accident Board.

The pilot reported that the CO_2 line burst in the cockpit when he tried to use his emergency system. He had his canopy closed and was not on oxygen. Isn't it possible that he was incapacitated by the high concentration of CO_2 in the cockpit? Years ago, CO_2 in concentrations of 9% was used experimentally as an anesthetic in surgical operations.

In 1948 a major airline crash occurred when the pilot and co-pilot of a transport were rendered unconscious after using the CO_2 fire extinguishing system in a forward baggage compartment.

The effects of a high concentration of CO_2 are insidious. It takes time before it incapacitates the victim. In this case, since

CO_2 is heavier than air, the highest concentration of CO_2 was probably in the lower area of the cockpit until the pilot tried the snap rolls.

The pilot would normally have had some warning in that he would have noticed that he was breathing much more rapidly than usual, however, in his circumstances he may have felt that this was due to nervousness or excitement over the impending wheels-up landing.

This is an isloated case and it may be a long time before another aviator is confronted with the same set of circumstances. But if you ever have reason to suspect that a CO_2 line has broken in the cockpit, get the canopy open quickly, and use 100% oxygen if you have it.

Dear Grampaw Pettibone:

The "Navy Pilots' Information File" in the section discussing Visual Flight Rules, states, "When clearing on VFR, you must remain at least 500 feet below the cloud base and 500 feet above the ground at all times except when taking off or landing."

However, the CAA "Flight Information Manual" states in the chapter on Air Traffic Control Procedures, Section 1, VFR Procedures, "Aircraft may be operated in accordance with VFR above a well-defined cloud or other formation provided, climb to and descent from such 'on top' flight can also be made in accordance with VFR weather minimums."

Is "on top" flight permissible on a VFR clearance? At this station we contend that a VFR flight must have enroute minimums of a 1000-foot ceiling and three miles visibility on Airways or 1000-foot ceiling and one mile visibility off airways.

This interpretation leads to considerable dissension between pilots and clearing authorities. Which definition is correct?

LCDR. USN.

Grampaw Pettibone Says:

There is a definite conflict between the instructions in these two publications and your station is by no means unique in its interpretation which requires VFR conditions over the entire route.

At the present time the two Aircraft Circular Letters which deal with Navy Flight Operations under VFR and IFR conditions are being revised. I believe that the new letters will clear up this ambiguity and that "on top" flights will be allowed on VFR plans, provided that climb to and descent from such "on top" flight can be made VFR.

Grampaw's Pome

They fetched me here
With a broken neck,
After getting a cut,
I dove for the deck.

● ● ●

Drop In For Lunch

HELICOPTER stops are pretty well controlled by regulation now, but in the earlier days—a couple of years ago—the boys who flew the eggbeaters were not too fussy about where they sat down for the night.

One eggbeater operator set off cross country with a crewman from Lakehurst. As they proceeded south in New Jersey, the weather became soupy and rain was heavy. Soon there was only straight down visibility so he landed near an old barn standing by itself in a field. The two waited out the downpour there.

They were on their way again when the rain once more threatened an interruption in the journey. This time the pilot looked more closely and soon spotted a large home with two convertibles and a limousine sitting outside. As he approached the spacious front lawn in the rain, two girls came dashing out, ignoring the dampness, waving madly for him to land, which he did pronto.

Soon the two Navy adventurers were enjoying a warm glow inside and out as they sat before a roaring fire. Without looking, they knew that the weather was too bad for them to continue before the next morning.

Don't Kill Your Friends

Nothing is more likely to give a pilot gray hair than the sound of somebody else's propeller chewing up the tail and fuselage of his airplane.

The pilot of the F6F pictured here came mighty close to getting a free neck trim from the prop of another F6F which was turning up right behind him. Both planes were parked in take-off position and the pilot in the aft plane was concerned because his engine was somewhat rough during the mag check.

He decided to give his plane a full power turn-up and was watching the instruments closely. He suddenly became aware of the fact that his plane was moving forward and to port, but not in time to avoid hitting the plane ahead.

Grampaw Pettibone Says:

I'd like to have a dollar for every accident of this type that has occurred during the last ten years. I could retire and let someone else spend his time reading accident reports.

Don't kill your friends! Whenever you give a plane a full power turn-up, aim one eye outside the cockpit. In time this may make you a little cross-eyed, but that's a lot better than carving up a friend.

Too Proud For a Wave-off

An ensign with 217 hours of flight time was returning to Corry Field after completing his first FCLP hop at an outlying field. He started his approach to Corry Field from a position very close abeam and in a nose high attitude.

In the final stages of his approach, he continued to tighten the turn in an effort to align himself with the runway. Witnesses state that he put the *Corsair* into a nearly vertical bank just before he crashed on his left wing tip and landing gear some fifty feet short of the runway.

The initial impact sheared off his left landing gear and right wheel. The right landing gear strut then dug into the runway and flipped the F4U-4 over on its back. On this impact the canopy was smashed and the engine torn from the plane. The F4U-4 then bounced back in the air and landed in an upright position. The final impact broke the fuselage just aft of the cockpit.

The pilot suffered a compound fracture of the skull, compound fractures of both legs, and multiple lacerations about the face. He died shortly afterwards.

Grampaw Pettibone says:

The tragic thing about this accident is that it could have been prevented so easily. As soon as the pilot discovered that he was going to overshoot the groove, all he had to do was level his wings and go around again.

A Basic Training Command directive specifies that all approaches except FCLP and actual carrier approaches will be planned so as to have a minimum straightaway of 800 feet. In this instance the pilot was still in a turn when within fifty feet of the runway. He had no LSO to wave him off when he got into a dangerous attitude.

Remember stalling speed increases greatly in a steep turn. Don't be too proud to take a wave-off. The life at stake is your own.

FAMOUS LAST WORDS

"Let's go down and see where we are!"

THIS LIGHT JET BOMBER OF THE SOVIET AIR FORCE IS THE RUSSIAN COUNTERPART OF THE U. S. AIR FORCE'S B-45 OR ENGLISH CANBERRA

SOVIET AIR POWER

LIEUTENANT General Vassili Stalin, son of the Marshal and commander of the Air Force of the Moscow military district, recently stated that none of the world's air forces has experienced such a "glorious history" as that of the USSR, which is both the mother and the cradle of the airplane and the rocket.

To the Soviet citizen this statement was an undeniable fact, for what more proof was needed than the exhibition held earlier in Moscow, which credited Alexander Mozhaisky with not only designing a steam-driven aircraft but with flying it on 20 July, 1882 some 21 years before the Wright brothers first flight at Kill Devil Hill, N. C.

Among other first inventions self credited by the USSR are the rocket aircraft, aviation engines, the multi-engined aircraft, the helicopter, the autogiro, the hydroplane, the all-metal dirigible, the parachute and numerous others that are fabricated for propaganda purposes.

These claims and statements are characteristic of Soviet releases emphasizing the superiority and bigness of everything. To paraphrase a statement of Stalin's: "the Soviets fly the firstest, the fastest, the highest, the furtherest and the longest." We on the other side of the iron curtain are sometimes amused and deceived by these revelations, master minded by the leaders of the Soviet paradise.

But out of all this one thing prevails for a certainty and that is the bigness of the Soviet military air force. While it is but a relatively modern air force, it is one which the Soviet leaders constantly are trying to improve. Their air force includes a number of men who have distinguished themselves for daring and imagination in the operation and design of aircraft, whom, it is safe to assume are no less talented than the pilots and engineers of Russian birth who distinguished themselves in USA.

Organization

Clouded by censorship, propaganda and frequent reorganizations, the Soviet concept of air power has seemed contradictory. The fact remains, however, that the USSR is a land power, and it is likely that the primary purpose of their air power will be to back-up the army in a tactical capacity.

Under the reorganization of the Soviet armed forces, announced in February 1950, the air force after four years of relative autonomy, apparently has reverted to the position it occupied under the Soviet army during World War II. This recent change places the Army and Navy on the same plane, somewhat similar to the US defense set-up prior to unification. Within their Ministry of War, Soviet military aviation includes the army air force (for cooperation with ground troops), the fighter arm of the air defense system and the long range air component.

There is also a Civil Air Fleet which provides the air transport requirements of the USSR. These military components are organized into air armies, each composed usually of three corps, further subdivided into three divisions per corps.

IL-12 TRANSPORT LOOKS LIKE CONVAIR LINER, SHOWS TREND TOWARD TRICYCLE LANDING GEAR

TWIN-ENGINED PE-2, ONE OF WORLD WAR II'S BETTER SUPPORT PLANES

TU-2 BOMBER WAS BEST SOVIET LIGHT BOMBER AGAINST GERMAN TROOPS

Each air division is composed of three air regiments. An air regiment is made up of three squadrons with approximately 30 to 50 aircraft depending upon the regiments role.

The air component of the Soviet Navy is organized into fleet air forces, which are similar in organization to the air armies. Naval aviation is an integral element of the Soviet Navy and is administered separately from the components of military aviation.

The Soviet Union today is said to have an air force of upwards of 14,000 operational aircraft including some jet fighters, and TU-4 (B-29 type) medium bombers. Its strategic bombing force is relatively small, although this arm appears to have been stressed in the Soviet post-war program. Naval aviation is land based having no aircraft carriers from which to operate.

Aircraft Designations

Aircraft factories in the Soviet Union and its satellite countries are state controlled and all aircraft production is undertaken in State factories. The design of aircraft is carried out in these State factories by a small group of experts who have their own design staffs. It is not unusual for successful designers to be awarded high rank in the Engineering Service of the Soviet military air force which accounts for the military rank sometimes added to a designer's name.

On the other hand unsuccessful designs have led to prison terms which is by no means the end, for the Soviets have a practical outlook and have been known to allow the convicted designer to continue his work in prison. This has led to some prize-winning designs, thus liberating the convicted one.

Soviet aircraft and engines are designated by the initials or an abbreviation of the designer or the design team names, followed by a hyphen and a number which is not always in the correct order of sequence. The fact that an aircraft is the most recent design of a Soviet designer does not signify that the next highest number will be assigned; certain earlier numbers of experimental or preliminary designs have been adopted for a later design.

An obvious example is the YAK-3, which was developed from the YAK-9, both designed by Alexander S. Yakovlev. A more recent example is the TU-4 (USSR B-29); a TU-4 design, not similar to the present aircraft of that designation, was under way during World War II but was never placed in production. Nevertheless, it has been observed that the Soviets are adhering to a general application of odd and even numbers to specific categories. Odd numbers are generally fighters or fighter trainers (LA-7; MIG-9; YAK-15 etc.) while even numbers apply to all other types (PE-8, bomber; IL-12, transport; etc.).

A few Soviet aircraft have, from time to time, been given names, the widely publicized *Stormovik* and *Maxim Gorki* are instances. Others are the helicopter *Omega*, and the tail first *Utka* or *Duck*.

The following list shows the more important designers, abbreviated by name in alphabetical order.

ANT	Andreas Nickolaievitch Tupolev
BI	Berendjak and Issariev
Er	Ermolaev
Il	Ilyushin
La	Lavochkin
LAGG	Lavochkin, Gorjunov and Gudkov
Li	Lisitsin
Mi	Miassishchev
MIG	Mikoyan and Gurevich
Pe	Petlyakov
Po	Polikarpov
SHCHE	Shcherbakov
Su	Sukhoi
Tu	Tupolev
Yak	Yakovlev

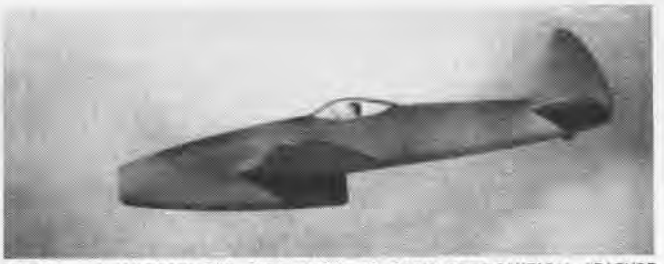
Fighters

One of the Soviets leading fighter designer's, Colonel General Alexander Sergeovich Yakovlev, stated that in a fighter everything should be sacrificed to weight reduction. This is apparent in all of his prop fighter series, ranging from YAK-1 to YAK-9, which are fast and maneuverable owing to the almost complete absence of armor. During the last war, pilots of the French "Escadrille Normandie" flew YAK fighters while

NEW SOVIET SWEPTBACK MIG JET FIGHTER RESEMBLES U. S. F-86 SABER

MIG JET FEATURES BLUNT NOSE AND JET EXHAUST AT TRAILING EDGE

LA-9 PROPELLERED FIGHTER INFERIOR IN PERFORMANCE TO U. S. F-51



YAK-15 JET CHOPPED-OFF SIDE VIEW IS EASY RECOGNITION FEATURE

operating on the Soviet front.

These plywood fabric covered low-wing monoplanes are the lightest fighters in the world; the YAK-1 weighing 5,800 pounds normal gross and the YAK-9 weighing 6,300 pounds normal gross. Powered by inline engines of a little more than 1,000 h.p. the later YAK models are capable of speeds up to 320 knots. Although technically inferior to the FW-190 or ME-109, the vast numbers which were available contributed largely to the USSR victory in World War II. Still operational are the YAK-7's and -9's which have been seen of late bearing North Korean colors.

Lt. Gen. Semyon A. Lavochkin, designer of a series of prop fighter planes, finished the war with the LA-7 model. This radial engine fighter, of mixed construction, has a maximum speed of over 300 knots. Although obsolescent, the LA-7 is still operational in the Soviet and satellite air forces. Post-war variants similar in appearance to this model are the speedier LA-9 and LA-11 all-metal fighters, which are believed to be slightly inferior in performance to the F-51 *Mustang* and British Hawker *Fury*.

A battered sample of the LA-11 was on view when a defecting Soviet pilot crash landed in Sweden in 1949. In line with the trend towards production of the faster jet aircraft, these may be the last of the series of Soviet reciprocating engine fighters.

Shortly after World War II ended, a tremendous potential in the form of aircraft factories and skilled personnel fell to the Soviets in their zone of Germany. With this boost serious work on jet propulsion was begun and by the end of 1946 their first operational jet aircraft the MIG-9, made its official appearance. A few months later the YAK-15 appeared and production of both these aircraft got underway.

The MIG-9 was a native design with an apparent German influence, which was evidenced by its two German axial-flow type jet engines located side by side below the forward half of the fuselage. This all-metal, mid-wing fighter fitted with tricycle landing gear is reported to be highly maneuverable with a maximum speed of around 500 knots. In keeping with the Soviet practice, armament is placed in the MIG-9 nose section. MIG-9.

Of similar configuration, the YAK-15 is equipped with a single jet engine and a tail wheel landing gear. Indications are that this was a hastily designed interim jet fighter hardly more than a modified YAK-9 prop fighter. Not as fast as the MIG-9, the YAK-15 has a top speed of around 450 knots. Both of these aircraft were produced in quantity and assigned to operational squadrons. A modified YAK-15, a tricycle version, incorporates a bulging chin protrusion which houses a nose wheel.

The performance of these jet fighters was comparable to U.S. F-80 *Shooting Star* and British *Vampire* jet fighters of that period. In making up for their late start Soviet designers produced in 1947 a number of new prototype jet fighters. Out of these designs there evolved a new jet sweptback wing fighter. This aircraft has been attributed to the Mikoyan-Gurevich design team and has been seen in quantity at recent Soviet air shows. Resembling the F-86 *Saber* in general configuration, the new MIG has sweptback wings and tail surfaces and is fitted with a tricycle landing gear. The single jet engine placed in the fuselage has a nose intake and a tail exhaust. In side view the sweptback wing jet presents a chopped off appearance. Armament of the new MIG fighter is located in the lower side of the nose.

Placed in operational squadrons the sweptback wing fighter, considering present trends, would serve as a first line fighter for a number of years. As these new jets appear it is probable that the MIG-9 and YAK-15 will be relegated to training duties and satellite air forces.

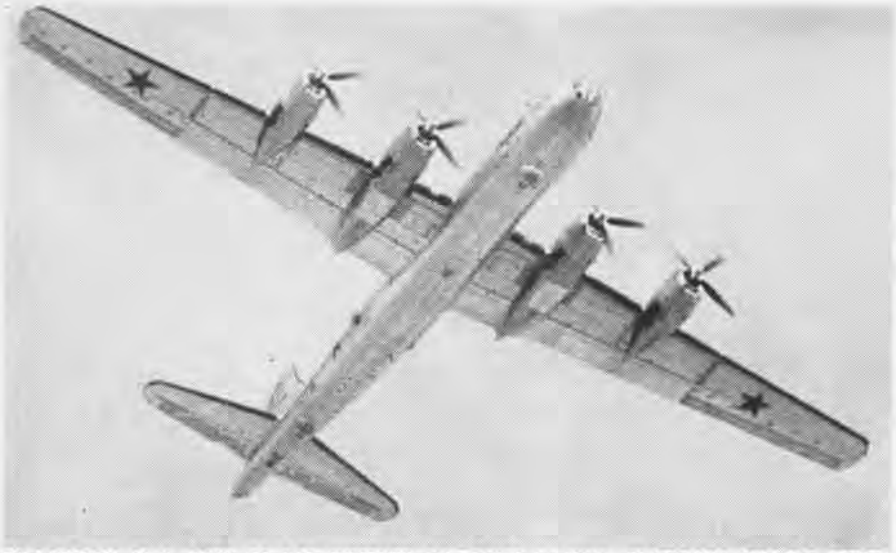
Bombers

Soviet operational squadrons are equipped with a number of World War II twin-engined light bomber types. These aircraft consist of TU-2's PE-2's, IL-4's, which in some cases have been modified to meet new requirements for more specialized needs. A-20 *Havocs* and B-25 Mitchells were supplied to the Soviets under Lend-Lease.

During the past few years the Soviets have been busily engaged in the development of a number of twin-engined jet bomber prototypes. At the last May Day show an air display of new twin-jet light bombers was reported in flight over Lenin's tomb. Needless to say it follows that these jet bombers or others of similar type eventually can be expected to be in Soviet operational units.

Tupolev received a Stalin award in 1943 for the TU-2 design, which is a conventional all-metal shoulder-wing monoplane with twin fins and rudders. It proved itself time and again as a close support plane. It is still widely distributed in operational squadrons. The underslung radial engine necelles house the main landing gear. Top speed has been estimated to be around 300 knots. Armament consists of two guns fixed in the wing roots and three flexible guns in the fuselage.

PLANES SIMILAR TO THESE YAK-9 FIGHTERS WERE FOUND IN KOREA, FIGHTING FOR COMMUNISTS



TU-4 BOMBER IS A COPY OF B-29 INTERNED BY SOVIET IN WAR: TRANSPORT VERSION FLYING

Petlyakov studied under Tupolev and later designed the all-metal light bomber, PE-2, his most notable contribution to Soviet aviation. Unfortunately for the Soviets Petlyakov's career was cut short when he met an untimely death in an air accident in 1944. His PE-2 design, fitted with two fixed noseguns and three other flexible guns about the fuselage, gave the Germans considerable trouble during the War. The two in-line engines of the PE-2 give the twin tail bomber a maximum speed of around 290 knots.

One of the older light bombers, the IL-4, previously the DB-3, was designed by Sergei Ilyushin and was first put into service in 1941 as a bomber and torpedo carrier. Its maximum speed of around 230 knots makes it relatively slow by today's standards. Nevertheless, the IL-4 is still assigned to Soviet military and naval operational squadrons.

Andrei Tupolev was not so original with his medium bomber, the TU-4, and it is to be doubted that he received a Stalin award for his Chinese copy of the B-29 *Superfortress*. During the war several B-29's were confiscated after they were forced to land in Soviet occupied territory. From the captured B-29's Tupolev also produced a 72-passenger transport version, designated the TU-70. The fuselage of the TU-70 is longer than the TU-4's and is mounted higher on the wing.

Soviet designers have been very conscious of the requirements of the ground support units and early in World War II brought into being the famous IL-2 *Stormovik* "tank buster." Production of the *Stormovik* was disrupted by the German offensive during the first stages of the war and it was not until the Stalingrad campaign that the *Stormovik* came into extensive use.

In 1944 a later and more powerful development, the IL-10, appeared as a replacement for the IL-2. The IL-10 has a maximum speed of around 260 knots and is some 30 knots faster than the IL-2. This later model today forms the backbone of air ground support in the Soviet and satellite air forces.

The engine cowlings on these single-engine tank busters have the same armored covering, which is composed of steel plates 6 to 8 mm. in thickness with less vulnerable parts of the fuselage protected by 4 mm. plates. In both the IL-2 and the IL-10 aramament consists of four fixed guns in the wings and one flexible gun in the dorsal gunner's compartment in back of the pilot.

Transports

Behind the iron curtain and about its fringes occasional glimpses are to be had of recent USSR types which are flown by *Aeroflot*, the Air Transport service of the Soviet Union, and other satellite airlines. During the last war a large number of DC-3 (C-47/R4D) *Skytrains* were supplied to the Soviet under Lend-Lease. The Soviets also built an identical version of this venerable workhorse and designated it the LI-2. As is the case with other air forces of the world the C-47/LI2 still continues in service with Soviet operational units.

A new Soviet transport seen flying European routes is the twin-engined low-wing IL-12 which bears a resemblance to the Convair liner. This 27-passenger transport is gradually replacing the smaller LI-2 on the Soviet International Airway System and flys the Moscow-Khabarovsk run of more than 4,000 miles in 28 hours with stops at around 160 knots cruising speed. In line with the present trend the Soviets new transport is fitted with a tricycle landing gear which consists of dual main wheels and a single-nose wheel. A variation of the IL-12 has appeared with a dorsal fairing on the single fin.

Ilyushin has designed a larger four-engined 66-passenger transport, which is designated IL-18. This low-wing, single tail transport is somewhat comparable to the DC-6.

THIS NORTH KOREAN IL-10 WAS CAPTURED IN THE FIGHTING; NOTE SMALL CANOPY AND TURRET

IL-4, MODELED SOMEWHAT AFTER DC-2, IS TWIN-ENGINE, LIGHT BOMBER AND TORPEDO CARRIER

NAVAL AVIATION AT WAR

NAVAL and Marine Corps aviation is playing a big part in helping the ground troops win their war against North Korean Communists. NAVAL AVIATION NEWS cannot give a blow-by-blow word picture of the fighting, but it can present behind-the-scenes sidelights of the aerial combat, gleaned from communiques, news correspondents' stories and squadron newsletters, with latest news photos.

Helicopters are making more aviator friends every day in Korean waters. Ens. James Brogan, a *Corsair* pilot, had to ditch after take-off in the Inchon close air support operation when his engine quit. His external gas tank exploded on hitting the water. The plane guard helicopter piloted by Lt. C. D. Haines had him out of the water in three minutes.

Helicopter pilot Lt. Gustave F. Lueddeke has picked three pilots out of the Pacific in recent weeks. First pilot to be saved was Capt. Vivian M. Moses, whose *Corsair* was hit by enemy ground fire and had to ditch in the water.

His second "save" was 2nd Lt. Doyle H. Cole who ditched when enemy AA knocked out his oil system. After being pulled into the hovering helicopter, Cole slapped a helpful "sergeant" on the back, saying, "Thanks, Mac," only to discover that it was BGen. Edward A. Craig, commanding general of the First Marine Brigade, who had hauled him in.

Third member of the "Lueddeke fan club" is Capt. James K. Johnson, picked up by the helicopter 15 minutes after his engined failed soon after takeoff from an aircraft carrier 70 miles at sea.

Another instance of nervy flying by a helicopter pilot was reported from the land front. A *Corsair* was shot down south of Pyongyang and the pilot, Ens. C. E. Dorris, made a belly-landing. He was rescued by a Marine helicopter that zipped (for a helicopter, it's fast) in at 85 mph at low altitude, landed in enemy terrain and picked up the pilot, who was in good condition. The pinwheel pilot was Lt. William B. Evans.

Canyon Capers

Throwing bombs into caves at the end of a box canyon and then zooming up over a cliff at the canyon's end was the type of precision close air support work done by Marine fliers of the *Blacksheep* squadron.

The original target assigned the fliers was a large band of enemy troops hiding in rows of trees near the canyon. When the four Marine fliers began strafing and rocketing these trees, the enemy troops ran into the canyon and entered semi-concealed caves at the canyon's end.

Strike leader, Maj. Kenneth Ruesser saw the Communists disappearing in the caves. He asked permission from the ground control officer to fly down into the canyon and drop napalm into the caves.

Permission was granted and Maj. Ruesser and Capt. Charles Graber went into the canyon. Their planes were so low the napalm bomb would not explode on hitting the ground, so Ruesser dropped his bomb and Graber ignited it by strafing. Then Lt. George Dodenhoff made a perfect drop, followed by Lt. William Andy Androsko.

Later, Marine ground troops reported another entire enemy concentration in the caves near the town of Chidoyon was wiped out by close support aircraft using napalm.

Like Watermelon Stealing

Pilots flying jet fighters and attack planes can't say too much in praise of their equipment. LCdr. Dave Pollock's *Pollock's Panthers* were having a turkey shoot on a double-header train until it blew up in their faces.

They all got back to the ship all right, but the hard-working metalsmiths stayed up most of the night patching planes.

Some Fancy Shooting

Jet *Panthers* sweeping the Korean country side under leadership of Cdr. Harvey P. Lanham searching for targets around Inchon, climaxed a day by exploding a locomotive in a tunnel near Hwangju. Jets scouted neighboring airfields in a 150-mile radius for possible enemy opposition while *Corsairs* and *Skyraiders* plastered the Reds.

LOADING *5" HVAR rockets on a Corsair preparing for Korean strike are R. V. White, aviation ordnanceman, airman, and K. K. Lannin, airman; Navy pilots used rockets to clear out tunnels*

CAPT. JOHN A. THACH *discusses carrier close air support tactics on the bridge of a carrier with Lt. R. B. Heilman and Major R. P. Keller, Marine fighter pilots flying from her deck*

ACI OFFICER *Baker, left, gets battle reports from Hamill, Crist, Dittmar, Casey and Thomson after Task Force 77 air strike*

SKYRAIDERS ARE *carrying a full load of bombs to smash Red Korean positions; here W. R. Brundette, G. E. Spangler and Jon W. Ramsey inspect fuses of a wingload of lethal missiles*

Legalized Flat-hatters

Just about the only pilots in the Navy who can flat-hat legally might be the dive bomber boys in attack squadrons like VA-55 in Korea. With 12 rockets and two 1000-pound bombs, their AD-4's are the load carriers of the war, operating from a flattop close off the Korean coast.

They have the real lowdown on progress of the war by virtue of their flat-hatting since a recent Op Order stated, "Window peeking is hereby authorized."

Under skipper LCdr. Doug Hodson, the "chief peeker" is Lt. Bud Gallagher, who makes a point of checking the contents of warehouses before blasting them off the landscape. For successful blasting, Gallagher and his squadron mates, Lt. (jg) Bill Jackson, Ens. Jim Pavelle, Atomic Aldrich, Mac McClain, Bubbles O'Connell, Jerry Covington and Buddy Hughes were awarded Air Medals by VAdm. A. D. Struble.

Although many of their closest friends are jet jockeys, they won't stand still for any business of "selling props down the river." Aldridge was "propping down" a Korean railroad track one day when he noticed two trees moving closer together. Just for luck, he gave one of them a short burst. One handcar with eight Red soldiers embarked was scratched.

On another occasion, McClain caught a truckload of Commies on the road. Sensing trouble, the "liberators" took to the ditch. Unfortunately for them, Mac's aim was bad. He completely missed the truck—but hit the ditch.

Eager Beaver

One VF-111 pilot over Korea got so interested in seeing where his rockets hit that he forgot something. He flew along behind them, arriving at the impact area about the same time as the rockets. The aircraft was a Grumman factory overhaul job; an O&R could not have decided where to begin, when he landed aboard.

However, there were many parts intact which were cannibalized and put to good use on other F9F repair jobs, and the skipper, LCdr. W. T. Amen, was able to quit tearing his already-thinning hair.

Short Tempers

Marine artillery spotters flying over battlefields in their little observation planes often get pretty mad without any armament, with enemy Koreans peppering at them from the ground.

Not a man to take this lying down is Capt. Francis A. McCaleb. He started carrying hand grenades along with him to toss at Reds when they get too active in shooting at him. He found his dive-bombing tactics were effective against small groups of enemy forces.

The idea of carrying weapons in unarmed planes is not new. Marines during World War II tried tossing out hand grenades and later on tied bazookas to the *Grasshoppers'* wing struts to blast ground targets.

Caveman Tactics

Aircraft machinist mates aboard the *Valley Forge* were perturbed and as Chief Aviation Machinist's Mate Staley K. Perich said, "The Korea war is getting on a personal basis".

Another mechanic with his face covered with grease, remarked that they expected to repair an occasional shrapnel hole in a wing or a bullet hole in a fuselage—that is war—but when North Koreans throw a rock into the intake duct of a jet aircraft, that is unethical.

But as Lt. Wayne R. Cheal will tell you, that is apparently what happened to him for as he strafed a truck convoy at "steering wheel level", he felt the object hit the plane. He was amazed to learn on landing that it was a rock, not a bullet which damaged his F9F *Panther*.

SHOT DOWN *two miles off North Korean coast port of Wonsan, Lt. (jg) Nathan E. Curry was badly burned before he parachuted down to safety. William A. Vogel of rescue destroyer tows him toward ship where others help pull him out. Korean plane was chased off*

PANTHER JET *gets belt of 20 mm ammunition loaded by Leonard H. Dalton and Gene A. Russan aboard a Task Force 77 carrier*

SIGNAL CORPS *photographer aboard a Navy carrier caught an F4U catapulted from carrier to support ground troops with rockets*

Teeter Totter

One of the serious drawbacks about using carrier jets off Korea has been light surface winds encountered in the area. Catapults can put out only so much boost, and flights often had to be cancelled. One jet squadron was able to fly only 60% of its scheduled hops.

Marginal conditions under which they were launched also influence the loading, and there were few flights on which it was possible to carry rockets. Between VF-111 and VF-112, jet squadrons aboard one carrier, there were three instances of catapult bridles breaking at the start of a shot.

In each case the pilot stopped the F9F before it went over the bow—*but in one case not before the nose wheel slid over the ramp.*

Luck, All Bad

Who wouldn't be bitter about his changing luck, if it was like that of Lt. Marion R. Gallagher, a *Skyraider* pilot. One day he was ditched in the Yellow sea when the motor of a helicopter in which he was riding failed. The next day he brought his *Skyraider* back with 14 bullet holes in it and had to sit out the next day's strike.

Operations demanding the utmost speed found Gallagher's plane boxed in on the flight deck by grounded aircraft. By the time he was cleared for takeoff, the operations officer of the carrier ordered his plane to stay aboard rather than delay the flight.

Packhorse of Fleet

Another first was set by the Douglas *Skyraider* in the Korean war when three of them flew from a carrier against Seoul with three 2,000-pound bombs plus a full load of 20 mm cannon ammunition. It was the first time the workhorse plane had been launched with three blockbusters.

After dropping their bombs, the three AD's piloted by LCdr. Winston Chick, Lt. (jg) Robert N. Krause and Ens. William C. Bailey strafed their target at speeds better than 350 knots, which is somewhat faster than the old TBM *Turkeys* used by Navy pilots in World War II would go.

Line Up For Medals

Thirty-four pilots and aircrewmen from Fast Carrier Task Force 77 in Korean waters were lined up on the deck before their carrier left port. They were to receive awards from VAdm. A. D. Struble, Commander 7th Fleet.

Most of the ensigns were proud as punch but one supergrade lieutenant receiving his 16th Air Medal since 1943 was heard to remark, "I thought this was the Navy Cross line!"

Plenty of Targets

Marine fighter bombers out hunting Communist artillery and vehicles northeast of Inchon found such good shooting it did not know which to attack first. Capt. Warren Nichols reported when it was over the *Corsairs* had destroyed five heavy artillery pieces and damaged 93 trucks. T/Sgt. Leo Ihlt got six trucks with one napalm bomb.

LCol. Walter Lisheid's napalm bomb failed to ignite so Capt. Howard Finn set it off by strafing after he had dropped his own on a Red gun emplacement which was proving bothersome.

Planes Level an Island

Rearranging the contours of strategic Wolmi island, studded with Korean Red gun emplacements before the Inchon invasion, was a task assigned Navy carrier pilots.

Skyraiders and *Corsairs* plastered the green island until it resembled a pile of dirt, using 1,000-pound bombs, antipersonnel bombs and rockets. Reported Lt. (jg) Edward H. Albright, a *Corsair* pilot: "There was a green grassy slope on the island yesterday. When I went back today every bit of grass was gone and only a few trees remained." Another pilot said he thought the island would "roll over and sink" from the steel load.

RIPPERS KEEP JETS HOT

VF-11, ATLANTIC—The *Red Rippers* squadron, one of the Navy's most famous names in aviation, claims a new record for utilization of jet planes, flying 1024.5 accident-free hours in 24 working days during August.

This figure is 214% of ComAirLant's desired utilization. To make the record even more remarkable, three of the working days were used for hurricane evacuation.

During the short time VF-11 has had jets, utilization has improved steadily. Four planes flew 55 hours in May, June saw 13 planes fly 620 hours, the standard was raised to 701 in July and topped by August. During this period the squadron was in a transitional training status, and checked out 51 pilots in the Banshee.

With only 16 planes on hand and none of the F2H-1's capable of carrying tip tanks, some improvised methods were used to increase operating efficiency. Such ideas included a portable line shack, a squadron intercom system and ready room radio, all constructed from salvage material. The ready room radio can be used to talk down jets in emergencies and has saved planes from damage in three occasions. With the aid of such improvisations, the squadron pulled 36 A and B checks plus 13 engine changes in August.

Fighting Eleven has a background full of famous naval aviation names, including O. B. Hardison, W. Switzer and A. K. Morehouse, now all rear admirals, Captains James Flatly, D. Day, Joe Clifton, C. T. Booth, and Commanders H. P. Vosseller, David McCampbell, W. J. Widhelm and D. Smith.

The squadron started out in F6C-4's as VB-1. Down through the years, it changed its planes and its squadron designations but it always remained the *Red Rippers*. Flying *Wildcats* in the African invasion, its pilots won three Navy Crosses, 10 Silver Stars and one Distinguished Flying Cross.

It grew to 72 planes and 95 pilots during the Pacific campaign and fought at Iwo Jima, Tinian, Saipan, Leyte and Okinawa, winning the Presidential Unit Citation. At various times in its career, the *Red Ripper* squadron was VF-4, VF-41, VF-1A and finally VF-11, but always the boar's head and bolt of lightning insigne heralded its pilots as the *Rippers*.

Airsick Student Is Checked

Whiting Keeps Records On Pilot Woes

NAAS WHITING FIELD — A new policy for students who become airsick while on "A" stage hops has been instituted by BTU-1 here, so that accurate record of his flight capabilities can be kept.

Any student becoming sick picks up a chit from the unit duty officer and reports to sick bay. The student returns the chit to the duty officer, who sends it to the unit training officer for filing.

The system was inaugurated so more complete record of students' flight troubles would be available if board action should result.

Swimming is *always a much-loved and important recreational pastime for sailers, in peace or war, and the ones pictured above took advantage of the "swim call" when their ship, the big aircraft carrier U.S.S. Midway was anchored off Cannes, France, recently. Their oversized swimming hole is the salty, warm Mediterranean, where the Midway is operating.*

They say that all you gotta do to sell a tractor or a bulldozer is to put a pretty girl in a bathing suit on them. This Dallas miss isn't in swimming attire, but she does lend a little glamor to a shiny new F4U-5 night fighter at Chance Vought.

Caroline Mars Engine Fire

Big Seaplane to Overhaul After Blaze

Gremlins aboard the big *Caroline Mars* seaplane continue to get in their good licks. After she flew 400 miles in to San Francisco on two engines, the *Caroline* thought she had had her share of trouble but on 21 August, another mishap struck.

While taxiing out of the sea lane after a two-hour test flight, the plane's No. 1 engine quit. On restarting a loud explosion occurred in the wing, then fire broke out around the nacelle.

Methyl bromide was discharged and the fire died out after burning a hole in the lower side of the wing and partially burning the landing flap. The plane was towed to the "U" dock and later ramped. Lt. Earl Turner was plane commander and LCdr. R. E. Fulwider copilot.

The Aircraft Accident Board found the probable cause of the fire was failure of the packing gland in the accelerating pump on the carburetor. It is anticipated that the *Caroline* will undergo a major overhaul instead of major repairs to the port wing. This biggest of the *Mars* seaplanes has been flying regularly for the Navy since 1947.

• NAS PENSACOLA—Show-offs who like to flat-hat or do unauthorized flight maneuvers took a beating the past year. Fifty naval aviators lost their flight orders for failure to curb this urge.

• NAAS WHITING FIELD—If you don't like the chow at your base, try this: Lt. J. H. Robcke member of the *Blue Angels*, had breakfast in Niagara Falls, N. Y., lunch at Whiting Field, Fla., and dinner that night in Columbus, Ohio. All he needed was an F9F *Panther* jet to get him to distant places.

GODFREY WEARS 'EM OUT

NEVER HAD Pensacola seen such a display of energy. From the Chief of Naval Air Training on down, tongues were hanging out.

The whirlwind of activity which accompanied Cdr. Arthur Godfrey during his two weeks of active duty in September will not soon be forgotten.

Climax of his flight training duty was the presentation of Navy wings to him at a ceremony Saturday 23 September by VAdm. J. D. Price. At the ceremony

CDR. GODFREY'S WIFE PINS ON GOLDEN WINGS

was VAdm. J. H. Cassady, Deputy Chief of Naval Operations (Air), and Mrs. Godfrey.

As the wings were pinned on Cdr. Godfrey received a kiss (from Mrs. Godfrey). His designation is No. T920.

Take it from LCdr. Pierre Charbonnet, Godfrey is a flying fool. By going out for three and four hops a day, he finished the entire Instructors Basic Training Unit course with distinction.

His tour of duty included a trip to sea aboard the training carrier U.S.S. *Wright*. He was a passenger on a carrier landing. Already his millions of radio listeners have been checked out on carrier operations, but thoroughly.

Here is a *partial* list of the freckle-faced one's activities besides his flight training:

Appearances at various meetings in Pensacola.

Handshakes with patients at the Naval hospital.

Purchased air conditioning system for EM Club.

Lifted check for dinner for about 150 people at presentation ceremony.

Went fishing in the Gulf.

And he called it a vacation!

In a toast to Cdr. Godfrey, Adm. Cassady said, "We all know that Arthur Godfrey is the world's best ukelele player, but I had to come all the way to Pensacola to find out he is one of the world's best naval aviators.

"I was one of the few people in Washington that initially opposed and questioned this thing of designating Cdr. Godfrey a naval aviator because if he starts giving flying lessons over the

GODFREY, JACOBY, WRIGHT'S EXEC, IN CONFAB

air like he did on ukelele playing, there will be no future in Pensacola."

Chief of Naval Air Training, Adm. Price stated, "This is no gratuitous gesture on our part in giving you your wings. You have earned them through sincere, hard work."

In accepting, Godfrey replied, "I've had a great many honors bestowed upon me in the past 21 years, but I've never received anything that I accepted with such pride and gratitude as I do these wings."

VAdm. Cassady and party returned with Cdr. and Mrs. Godfrey in Godfrey's own plush DC-3, presented him by the aviation industry for the way in which he has popularized flying. Godfrey, a former Navy enlisted man, recently "made" commander.

Godfrey left with this parting shot, his aerobatics including inverted spins, still fresh in his mind, "How do you guys keep the planes up and the lunches down?"

THE MARINES' *Hells Angels squadron, Reservists from NAS Anacostia, are on active duty now at MCAS El Toro, but before they went they took time out to see what the situation was in feminine pulchritude. A couple of VMF-321 pilots gaze at Miss Washington, D. C., Sandra Stahl, tastefully attired in what all pilots would like to see their women wear.*

BECAUSE OF THE *widespread interest in the new official Bureau of Aeronautics flag which Naval Aviation News pictured in a recent issue, we are reproducing here a closeup of the colorful insigne which appears in the middle of the Navy blue flag. The aviators' wings are gold, the inner "bullseye" ring blue, the next ring moving outward is red, then blue and the outside ring with the wording is white. The lines between the rings are in gold.*

ORGANIZED NAVAL AIR RESERVE FIGHTER PILOTS FROM NAS NEW YORK FLY THEIR PHANTOMS HIGH OVER THE OUTER REACHES OF MANHATTAN

JETS OVER GOTHAM

THE RESERVES at NAS NEW YORK have taken to jets like fliers to honey (blondes). In the time that they have had their eight *Phantoms,* more than 275 Reserve pilots have flown the speedy "firecans."

So familiar has the "swish" of the jets become, that stationkeepers no longer look up when the planes zoom by. But, when the first FH-1 landed at Floyd Bennett Field on 6 August 1949, everybody but the station band was on hand to greet it—and the only reason the band wasn't there was that it hadn't been formed at that time.

The commanding officer of the NAS accepted delivery before a crowd of jubilant Reservists while a battery of television cameras recorded the event for the public. New York was the first of the five stations in the Naval Air Reserve Training Command slated to gets jets actually to receive one.

The station had already geared itself to carry out CNART's VF jet familiarization syllabus. Classrooms had been equipped with J-30 turbo-jet engine cutaways, exploded views of accessories, and schematic diagrams of the fuel and oil systems. And key personnel had been crammed with jet know-how.

Chiefs Jake Schmuger, Charlie Amato, "Flaps" Flaherty and Frank Kucija had just returned from TAD at the Westinghouse plant, willing and able to tackle problems of jet maintenance.

Chief Pat Pecorina, Joe Von Brochel AD1 and Frank Bocchiaro AD2 has been fully indoctrinated on jet line operation and servicing during their recent TAD at MCAS CHERRY POINT.

Lt. (jg) John P. Murray, jet training officer at the station, who piloted this first *Phantom* to its new home, was fresh from jet flight training with VX-3 at NAS ATLANTIC CITY.

RESERVE JET FIGHTERS SKIM OVER THE HARBOR

The plane's engine had hardly cooled off, when the first Organized Reserve pilots began lining up to fly it. And the rush has been going on ever since.

To turn its fighter pilots into jet jockeys with a minimum of effort and a maximum of safety, NAS NEW YORK first puts them through an intensive three-day ground school. Here, they get the word on all phases of jet design and operation. To be specific, they learn about turbo-jet engines, the hydraulic, fuel, flight control, electrical and lubrication systems of jet aircraft, cruise concontrol and navigation of jets and the safety requirements of high altitude and high speed flying.

What makes the course click is its definite slanting to the pilot's viewpoint. At every stage of the instruction, the pilot not only sees how jets work, but he gets a play-by-play account of how to operate the FH-1 from the time he steps into the cockpit to take off on a flight to the time he cuts the engine after he has landed.

The "do's and dont's" of flying *Phantoms* are drummed into his head until he is "automatic" on such matters as never letting a tank run dry before switching to a full one to prevent flame-

outs, or putting speed brakes in the "in" position again after flaps and wheels are down for landing to insure safe acceleration in case of wave-off.

LT. (JG) MURRAY and his two assistant instructors, Lt. (jg) "Tex" Collins and Marine Capt. Dave John, being pilots themselves, talk pilot lingo to make the course come alive.

They get frequent "assists" from Reservists in their classes, who are specialists in research and development. Lt. George Wisnyi, for example, described his attempts to utilize ceramic coatings to protect turbine blades from the ter-

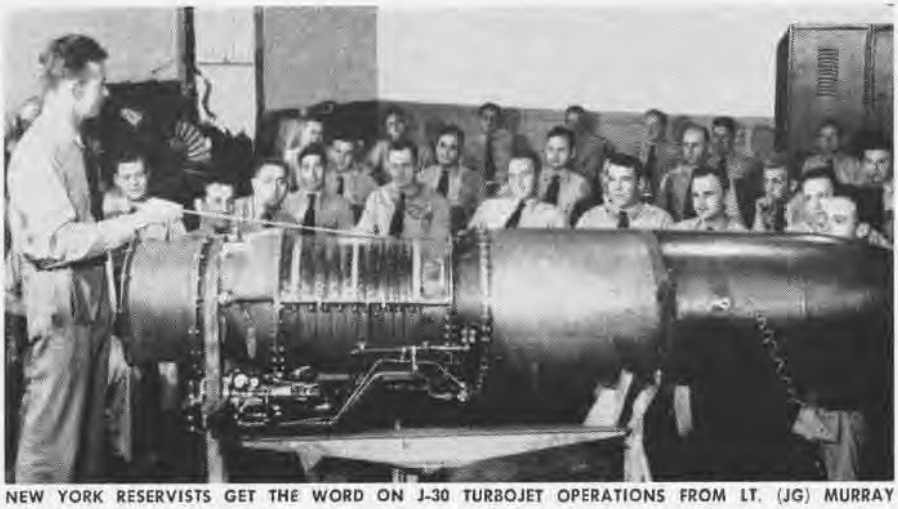
MURRAY GIVES CHRISTOPHER AN 'UP' FOR JETS

rific heat of the combustion gases. And Lt. (jg) Irving Hall told of various experiments regarding the effects of aeroembolism and anoxia he had observed during his study of aviation medicine.

This pilot-to-pilot talk carries over outside the classroom. When the Reservists get a break after a stiff two-hour class, Murray goes outside with them for a smoke. Soon an informal question-and-answer routine is underway, during which students who might shy away from asking "dumb questions" in class get doubtful points ironed out.

Then comes a cockpit and "live start" check-out in one of the *Phantoms,* followed by a "close observation" session on the field during which the pilots watch jet landings and takeoffs while the instructor spells out the rights and wrongs of the operation.

Finally each pilot takes a two-hour examination to turn up any points he may have missed or misunderstood. Passing this, he is ready to fly the jet.



NEW YORK RESERVISTS GET THE WORD ON J-30 TURBOJET OPERATIONS FROM LT. (JG) MURRAY

During his first two flights, the instructor accompanies the new jet pilot in another plane, maintaining constant communication with him and offering any needed coaching. From then on, the Reservist follows the regular CNART jet training flight syllabus.

FIRST ORGANIZED Reserve pilot to fly the *Phantom* at New York was LCdr. Tim Donahue, who flies the international routes for a commercial airline in civilian life. Lt. Connie Nooey, a veteran of carrier warfare with 19 "kills" to his credit, was the second pilot to fly the FH-1.

Then came the avalanche of check-outs with Herb Childs, Wally West, Dick Bransen and Bill Graham leading the way. LCdr. Ray Myers, CO of VF-833, and one of the few naval aviators to fly one of the early German jets at Patuxent, came back after his first flight in the FH-1 amazed at the advance in turbo-jet development.

As soon as a Reservist flies one of the *Phantoms* at NAS NEW YORK, he automatically becomes a member of the "Crapehanger Club", whose credo seems to be "jets are easier and more comfortable to fly than conventional fighters." The group takes its name, *Crapehanger,* from the radio call for Floyd Bennett's jets.

Various visiting firemen, who have flown jets for the first time at New York, also hold membership cards in the *Crapehangers.* Topping the list is RAdm. Luis de Flores UNSR, who started flying in 1912 and has been a leading figure in aviation ever since.

Another prominent *Crapehanger* is Congressman Peter Mack of Illinois. A Reserve naval aviator, he has the honor of being the first member of Congress to fly a Naval Air Reserve jet.

The Navy Department is represented on the rolls by LCdr. "Chris" Christopher of the aviation training branch in DCNO(Air). Going to New York to try out the course at first-hand, he gave it an "up" check and added his name to the list of fighter pilots "sold on jets."

WHILE TURNING out a horde of qualified Reserve jet pilots, New York has also managed to chalk up an excellent safety record.

LCdr. John Schwartz and CWO "Marty" Nardi make sure that FH-1 maintenance is A-1 and their department devises such ingenious safety items as a small wooden block which can be placed over the starter toggle to prevent tripping when not in use.

All in all, the record of accomplishment at NAS NEW YORK shows that the Navy's policy of equipping its Reserves with the most modern weapons available is indeed paying off.

NAVAL RESERVE JET JOCKEYS CATCH A QUICK GLIMPSE OF THE STATUE OF LIBERTY AS THEY ZOOM BY IN THEIR SPEEDY McDONNELL FH-1'S

Oakland's VPP-876 In Focus

LCdr. Colwell of VPP-876 at NAS OAKLAND talks with squadron pilots about the need for making several practice flight runs in their planes for aerial mapping prior to the 'live' run

IF YOU WANT to see a squadron that really clicks, drop over to VPP-876 at NAS OAKLAND. This unit has chalked up a positive record of accomplishment in a negative way—film negative that is.

One of two Organized Reserve photo squadrons in the entire country—the other is at NAS WILLOW GROVE—it is carving out a streamlined pattern for Reserve photo-training. Sparked by an outstanding group of photography experts, who cut their combat-teeth in the Pacific, African and European theatres, its agenda is action-packed.

Theory plus practice is the one-two order for weekend drills. Personal ingenuity gets full play when it comes to carrying out the syllabus which is tailored after that for Fleet squadrons.

Lectures on basic photography, mathematics in aerial missions, photo-flying techniques and project planning are only the warm-up for regular aerial photo-missions.

Men are briefed before each training flight by squadron instructors and have their errors pointed out to them by the same instructors minutes after prints of the photos they have taken leave the darkroom—a sure-fire way to improve.

New methods of taking photos, uncovered during flight runs, are soon perfected and put to squadron use.

Main syllabus focus is on making oblique coast-line strips, and pin-point vertical and vertical strip maps.

But Reservists get in plenty of extra-curricular activity by special request of government agencies in the area.

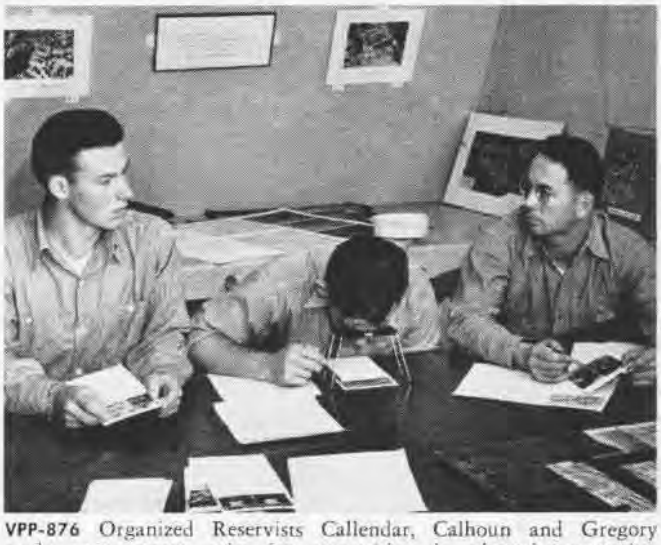
SEVERAL large California cities were mapped from the air for the Army Mapping Service. The Naval Maritime Shipyards in the Bay area were photographed at the request of CNO. The U. S. Forest Service requested aerial coverage of a burned 10,000-acre area for more accurate assessment of damage. A complete aerial map of Oakland was "flown" as the basis for a traffic survey.

Five non-combatant aircraft, the SNB(P) type, are used by the squadron for aerial work. A reconnaisance laboratory and interpretation room, set up in a Quonset hut, provide excellent facilities for both this squadron and the Organized Reserve fighter-type photo-reconnaisance squadron at Oakland. Station personnel give support.

The squadron makes full use of graphic teaching aids. Members of the photo-interpretation unit of VPP-876, for example, have developed stereo-view cards, examinations and displays to bring this phase alive for officers and men.

Copies of some of the training material, prepared by the squadron, have rated being forwarded to the Naval Photographic Interpretation Center, Washington, D. C. for use in training.

Chief aviation photographer Stone explains mosaic map-laying from flight lines flown to a group of interested squadron photo trainees



VPP-876 Organized Reservists Callendar, Calhoun and Gregory study some stereo pairs for recognition in photo-interpretation

'Here's how you define shore lines and coal reefs' says photo-interpreter Ken Bradshaw (r) to Lt. (jg) Mason and Lt. Thomas

Ray Barbera AF2 (2nd from r.) shows Triggs, Mahar and Austen how to analyze aerial negative for proper contrast and exposure

The roster of officer and men in VPP-876 reads like a "Who's Who" of professional photographers.

SKIPPER is LCdr. David H. Crosse, a graduate of the NATTU PENSACOLA photography school and later a member of wartime Photography Squadron Two.

Dr. Robert Colwell, assistant professor of forestry and photogrammetry at the University of California, heads the photographic interpretation unit in the outfit. During the war, LCdr. Colwell served as photo-intelligence officer with the Marine Corps, Navy and Army.

His number one assistant is Lt. Ken Bradshaw, who is also at the University of California as forester for the California Forest and Range Experiment Station.

Then there is Lt. Eugene Thomas, a former photo-interpreter on the staff of ComSoPac and later an instructor of map-reading and photo-interpretation, who is with the Soil Conservation Service of the Department of Agriculture.

During the war, these three officers utilized their wide knowledge of photography to help in the drive to victory; now they are using some of their war-acquired techniques in the perennial fight for soil and forest conservation.

Aerial photography in the forestry service, of course, is indispensable. The camera eye that once picked out camouflaged enemy airfields now traces the progress of soil erosion and points out strategic places to plant new forest belts. In winter-time, forestry service photographers help prevent floods by giving advance warning of the amount of melting snow and the direction in which it will flow.

Photography also gets the call in civilian life from three other photographic officers in the squadron. LCdr. Glenn Newhouse, vocational counselor and industrial educator for the San Francisco school district, is a free lance photographer on the side. Lt. B. Pasqualetti is head of the San Francisco College of Photography and Lt. George Bishop operates his own portrait studio.

Raymond Barbera AF2, a photography instructor in civilian life, Chief Robert Stone, former VD-3'er who saw action at Okinawa, and Chief Arthur Mellier, Fleet cameraman and staff photographer with ComServRon during the war, are other valuable members of the squadron instructional department.

To get recruits Stone (now CPO) and Chief Mellier use beauty and photography as lure

Photo-pilot Lt. Ed Marks shows crew member L. Luna AFAN how to operate an F-8 camera

PILOTS IN VPP-876 logged plenty of time during the war and shortly thereafter with Regular photo squadrons. Lt. Jack Segurson, now a student at Stanford University, served as photographic officer with three photo-patrol squadrons. Lt. Ray Stott, an electrical engineer with four years in the Organized Reserve, served as patrol commander of VD-1 and then of VD-4. He later saw action at Okinawa with VD-3. Lt. (jg) Hans H. Larsen, civil engineer, went a-mapping right after the war with the Coast Guard Geodetic Survey.

Then there is the former CO of the squadron, LCdr. Harvey Paige. He left to work with the Samoan government for one year. Back in California again, he has rejoined the squadron as an Associated Volunteer on a non-pay basis and is always ready to lend a hand.

These, of course, are only a few of the Reservists in VPP-876, who are helping to keep operations in high gear, but in their willingness to share their know-how with their shipmates and to do their jobs 100%, they are typical of the whole forward-driving VPP-876 team.

Jumpers Use NAS Lakehurst

Army Paratroopers Keep Proficiency

Paratroopers from the Army recently made use of the four thousand foot jump circle at NAS LAKEHURST.

Four recruiters from the Eighty-Second Airborne Division and 16 troopers from the Eleventh at the Signal Corps Photography School at Fort Monmouth, N. J., made the proficiency jumps from an Air Force C-82 *Packet*.

The jump area at Lakehurst is considered one of the best because of its sand surface and its size which enables a jumpmaster to get his men down without having tree or powerline hazards.

VP-34 Ready for Atom Bombs

VP-34, NORFOLK — A radiological safety defense bill for the squadron has been drawn up, to go into operation in the event of an atom bomb attack.

The bill has four parts. The first outlines duties of all personnel. A radiological defense officer was appointed to maintain a plot of "fall out," to designate the personnel decontamination center, to distribute detection equipment, and to advise the commanding officer on the radioactivity level.

The first lieutenant will supervise all fire fighting and material decontamination. He will be responsible for training and equipping four decontamination teams to consist of four men each. The maintenance officer will provide for the evacuation of any essential shop equipment to an assigned area.

The electronics officer will provide two electronics technicians for maintenance of Radiac equipment. The operations officer will be responsible for redeployment of squadron aircraft. The squadron duty officer will accomplish the following should warning time permit: 1. Degassing of all planes in a non-flyaway status. 2. Removal of all pyro from non-flyable planes. 3. Muster all squadron personnel and march them to a designated shelter.

Second part of the bill sets up a warning system and establishes three atomic conditions, with Atomic Condition I designated when an attack is imminent. The third part of the bill provides for evacuation of personnel and material following an atomic blast, while the fourth part provides an organization that will keep a check on the radiation level for purposes of command division.

In compliance with the bill, the First Lieutenant has designated four 4-man teams from the beaching crew to receive training in decontamination. Since no Radiac equipment is available, the only means of instruction is by familiarization lectures.

VR-8 Sets Pacific Record

Berlin Leader Marks Up Another First

The Navy's VR-8 squadron, assigned to MATS Pacific division, has done it again. This squadron, which established enviable tonnage and utilization records and was in first place much of the time among Berlin Airlift squadrons, is now doing the same in the Pacific Airlift.

Figures released on the Airlift at Hickam Air Force Base, Hawaii, reveal that an R5D of VR-8 set the base high with a total of 274.9 hours in the air during August.

Under command of RAdm. William G. Tomlinson, Navy and Air Force planes in MATS have played an important role in vital air support of United Nations Forces in Korea. Four-engine MATS transports maintain an around-the-clock shuttle, rushing critical cargo and personnel to the Far East and returning GI wounded to U. S. hospitals.

Squadron commander of VR-8 is Capt. Joseph Clifton.

GCA BOX SCORE

Total August Approaches	12,581
August Instrument Approaches	599
Grand Total Approaches	398,106
Grand Total IFR	16,590

SOME OF THE prime "flat hatters" of the Korean war are these dive-bomber pilots from VA-55, operating from an Essex-class carrier in AD-4's. Beating up targets along supply lines of the North Koreans is a favorite sport of this hardy crew, headed by LCdr. Douglas Hodson. Left to right, front row: C. R. Shearer, AL1; LCdr. M. L. Ramsey, exec.; Ens. W. L. Hughes and W. R. O'Connell, Hodson, Ens. D. A. Blalock, Lt. (jg) B. G. Jackson, R. A. Clifford, AL2; second row, C. A. Mader, ALC; Ens. E. R. Wagner, D. R. Stephens, M. C. Cook, W. R. Wood, R. W. McLain, J. R. Pavelle and B. Parnell, ALC; back row, Ens. John Harris, Ens. R. G. Aldrich, Lt. (jg) R. W. West, Lt. R. C. Logan, Ens. G. E. Covington, Ens. L. L. Montague, Lt. M. R. Gallagher. Read more about VA-55 deeds on page 20.

Waves Chalk Up a 'First'

Take 2-Day Cruise Aboard Navy Ships

Six Wave stationkeepers from NAS LOS ALAMITOS were among a group of 360 WAVES from the 11th Naval District who recently went aboard the *Uhlmann* and the *Twining* for a weekend cruise. This was the first time WAVES had taken a weekend cruise aboard a Navy ship.

Purpose of the cruise was to acquaint WAVES with tactical maneuvers of the Fleet. One of the WAVES fired a 40 mm gun and scored a near miss on the target; others helped the galley crew prepare chow. Christine Langseth HA from Los Alamitos got to steer the *Uhlmann* for 30 minutes and later told about her experience on the Al Jarvis television show over KLAC.

Navy Gets New Transports

R6D-1, R70-1 Planes Will Haul Cargo

The Navy is procuring 11 of the new *Super Constellation* transport planes built by Lockheed, to be used as long-range cargo planes convertible for transporting troops, personnel and litters.

The plane will be called the R70-1. Engines which will power it will be the Wright R-3350 *Turbo-Cyclone*. Compared to the old-type *Constellation*, the new *Super* will have the same wingspan but

PO-1W ABOVE IS 18' SHORTER THAN THE R70-1

will be 18' 4" longer to give more cargo space.

Design landing gross weight will be 110,000 pounds, with a 130,000-pound CAA certification weight. Total personnel the plane could carry if converted to a troop transport probably would be 116, compared to from 52 to 55 for commercial airlines using the old-type *Constellations*.

The Navy also is to get 11 R6D-1's, also known as the DC-6A cargo transport. This plane, deliveries on which will begin next summer, will carry 79 troops or 60 litter cases. It has a design gross landing weight of 88,200 pounds. Its span is 117'. Four P&W R-2800-52 engines give it a speed of more than 300 mph.

In addition to the R70's, the Navy also will purchase six PO-2W's, newer *Super Constellation* versions of the high-flying airborne early warning PO-1W, illustrated here at NATC PATUXENT.

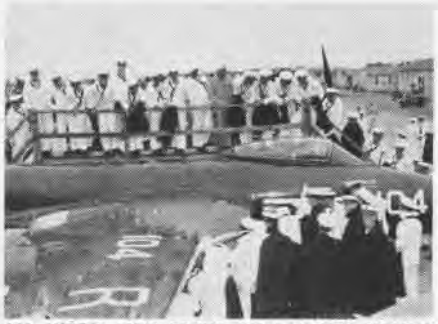
Middies See Carrier Planes

800 Visit Oceana, See Aerial Display

NAAS OCEANA—Eight hundred midshipmen, based at Little Creek, Va., for Camid V, learned a little about carrier aviation while spending a day at this station recently.

Missions of carrier air groups were described by Cdr. H. S. Bottomly, CAG-6, those of attack squadrons by Cdr. A. M. Ershler, skipper of VA-25, and of fighter squadrons by Cdr. J. G. Smith of VF-61.

Following an inspection of survival gear and planes, the midshipmen saw a simulated group attack by CVG-6, followed by a carrier breakup and landing on paddles.



ALL MIDDIE EYES FOCUS ON BANSHEE FIGHTER

VF-172 Night Owls In F2H-2's

First To Catapult With Full Tip Tanks

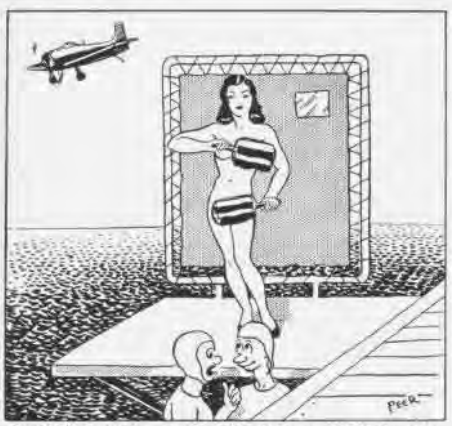
Honor of being the first to be catapulted aboard ship in F2H-2 *Banshees* with full wing tip tanks went to pilots of Fighting Squadron One Seventy Two.

The landings were made during carrier qualification exercises aboard the USS *Coral Sea.*

The squadron now has a complement of 18 of this latest version of the *Banshee.*

Another "first" was established on the cruise. Eleven pilots qualified in the planes in night carrier landings with two apiece.

Operations have been aimed at preparing the squadron for a cruise in the Mediterranean.



SKIPPER'S IDEA—THEY TRY FOR A 'ROGER' ALL THE WAY

NOTE NEW ISLAND STRUCTURE, RADIO MAST ON ORISKANY AS SHE AWAITS HER COMMISSIONING

New CV Joins Active Fleet

Oriskany Is Built Bigger, Stronger

The Navy today had a new *Essex*-class carrier to bolster its expanding fleet of aircraft carriers, the U.S.S. *Oriskany,* commissioned at Brooklyn Navy Yard on 25 September.

The flattop is the first to join the fleet since 1946 and brings the total CV's in the active fleets to five, compared to 22 during the war. Skipper of the new 37,000-ton ship is Capt. P. H. Lyon.

A number of modifications, based on changing naval aviation tactics, set the new carrier apart from other *Essex*-class ships. The *Oriskany's* flight deck has been built stronger to accommodate heavier aircraft. It has larger planes, catapults and elevators, reduced island structure and new radar and radio equipment. It will be the first carrier to use escalators running to the flight deck.

The 888-foot *Oriskany* will carry a crew of 85 ship's officer and 1700 enlisted men, in addition to the air group stationed aboard. Name of the carrier came from the Revolutionary War battle of *Oriskany,* fought in New York's Mohawk valley on the present site of the City of Rome.

Children of Mohawk valley presented the carrier with a Hammond organ and a painting of General Herkimer.

British Trainers Tried Out

Balliol, Chipmunk To Receive Testing

Two Canadian and British training planes have been added to the four American-built planes which are being tested in the Air Force-Navy primary-basic training aircraft evaluation. The tests started at Randolph AFB, San Antonio, Texas on 20 September and will continue at Pensacola.

The evaluation is a step toward future standardization of pilot training procedures for the three nations by training student pilots in aircraft with similar characteristics.

The British government is furnishing two *Balliol T,* Mk II trainers, made by Boulton Paul Aircraft Ltd., while the Canadians are furnishing two DHC-1 *Chipmunks,* product of de Havilland.

American trainers being put through the mill are the Fairchild T-31 (Navy designation SNQ), the Temco T-35, the Beechcraft T-34 and North American SNJ.

The *Chipmunk* is a two seater with a 140-hp four-cylinder engine and weighs 1930 pounds. It is the successor to the de Havilland *Tiger Moth* used by the British for training in World War II. *Chipmunk* top speed is 140 mph.

A Rolls Royce 12-cylinder engine rated at 1280 hp powers the *Balliol T.* It is a side-by-side two seater, with 305 mph top speed, folding wings and pneumatic system for wheels, flaps and brakes.

The Navy and Air Force will train about five students in each of the six planes being tested. The Air Force will train its men for six months in the planes, then turn them over to the Navy for tests at Pensacola.

CHIPMUNK AND BALLIOL (TOP) TO GET TEST

Reserves Get 145 More F8F's

RESERVES *Bentley, Hill, Myers, Forman, Sullivan, Rimel, Estes and Baker and Harris, now on active duty with VP-661, have been with squadron since its 1946 commissioning*

WITH 145 additional *Bearcats* being turned over to the Naval Air Reserve Training Command, Reserve fighter pilots at six more stations will now get to fly these sturdy Fleet-type aircraft.

Reports from NAS OLATHE and NAS GLENVIEW, which have had a total of 100 F8F's aboard for more than a year, indicate that Reserves consider the *Bearcats* top performers.

Stations and units in the Reserve chain receiving the F8F's are NARTU ANACOSTIA, 35; NAS BIRMINGHAM, 17; NAS DENVER, 30; NARTU NORFOLK, 21; NAS ST. LOUIS, 30; and NAS SPOKANE, 12.

Several pilots from Anacostia's VF-665 have already beaten the gun by completing their F8F check-outs during their cruise at NAS QUONSET POINT.

Oakland Reserves Train at San Diego

Receiving orders to active duty immediately after its July annual training cruise at NAAS EL CENTRO, VF-874, an NAS OAKLAND contingent of weekend warriors, is now in training as part of CVG-102 at NAS SAN DIEGO.

Composed almost entirely of former F6F pilots, the squadron is steadily adapting itself to its new baby, the F4U-4 *Corsair*. All pilots are now checked out, but Lts. (jg) V. H. Hider and W. J. Davis, who were transferred into 874 to fill its complement, are still considered the squadron's *Corsair* experts because of their long-time experience in that aircraft.

VF-874 is now getting its quota of planes and is readying itself for the extensive ordnance syllabus. They were slated to return to NAAS EL CENTRO on 1 October to polish up their air-to-air gunnery, rocket firing, bombing and strafing.

The squadron, together for several years at Oakland, has been under the command of LCdr. Don L. Watts with LCdr. Frank Bennett as exec.

VR-891 Aids Mobilization Airlift

During its two weeks cruise, NARTU SEATTLE'S VR-891 packed in some fast mobilization-assist work along with its plain-garden-variety syllabus flying.

The Reservists planned and executed a mass briefing and clearing of the crews of 12 heavily loaded R4D's slated to depart en masse for San Diego.

Individual clip boards for each aircraft were prepared, providing each pilot with a weather cross-section and forecast, a point-to-point flight plan, several completed passenger manifests, several completed weight and balance sheets and a completed flight clearance form. The IFR clearance, as furnished by Airway Traffic Control the preceding day, was also distributed at this time.

All 12 aircraft left the chocks as scheduled and were airborne within 33 minutes, a record-breaking performance for IFR departures in a control area.

When it wasn't providing airlift assistance, VR-891 maintained a daily scheduled flight to San Diego and return. Individual pilots flew an average of 63 hours during the cruise, about 35% of which were racked up at night or under actual instrument conditions.

Atlanta's Air Marines Go On Cruise

Atlanta's Marine Air Reserves went to town during their two-weeks cruise. VMF-351 kept plane availability at 95.3% and pilots flew more than 1100 hours. The radar squadron, MGCIS-15, which has since taken off for active duty with the Fleet, ran ground-control-intercept problems with the VMF *Corsairs* and with the Air National Guard's *Thunderjets*.

The fighter squadron conducted tactical and operational maneuvers at NAS ATLANTA and spent one week at NAS JACKSONVILLE sharpening up its gunnery, bombing and rocket firing. Capt. Richard Webster, Capt. F. M. Keenan and Lt. N. C. New were the high scorers in gunnery.

Marine-Air National Guard lingo got unified during the joint operation with the *Thunderjets*, when Lt. R. C. Pitsinger of the Marine unit ordered the Lt. Joe Cox, leader of the ANG flight, to turn to "starboard" and Lt. Cox answered with "Now hear this."

Sports Champs Adopt Reserve Champs

Champs on the baseball and football fronts, the "Fighting Phillies" and the "Eagles", got together with two champ squadrons at NAS WILLOW GROVE, VMF-451 and VP-931 and "adopted" them for their fighting spirit.

The "Phillies" had the entire Marine Air Reserve fighter squadron as their guests at a night game for the ceremony. Before a crowd of 33,000 rooters, they presented the Marine pilots with "P" baseball caps and the men with insignia to wear on their jackets to show that they are now members of the "Fighting Phillies" squadron.

Reservists in VP-931 had their sea bags all packed and were ready to take off for active duty with the Fleet, when Al Wistert, captain of the "Eagles" gave them the football his team won when it defeated the "Rams" for the world's championship last season. Reservists in VP-931 will now be known as the "Flying Eagles" and will carry the ball in their usual hard-hitting style wherever their duty takes them while with the Fleet.

First Marine Air Reserve In Korea

Capt. Gus Lancaster, 36, of Dallas, Texas, has the distinction of being the first Marine Air Reserve officer to enter Korea.

Exactly one month to the day after he was called to active duty, Capt. Lancaster arrived in Korea and joined a Marine observation squadron as an engineering officer. His particular squadron uses helicopters for artillery observation, intelligence observation and evacuating wounded personnel.

During World War II, Capt. Lancaster served 16 months overseas with the Marines and was in the Marine Air Reserve for two years prior to his recall on 1 August.

In civilian life Capt. Lancaster was a petroleum engineer with the Sun Oil Company. He is married and has two children.

Station Round-Up

• NAS MIAMI — Organized Reservists, James C. Hay and his three sons, James C. Jr., Larry and William, took their two weeks training cruise at NAS QUONSET POINT with their squadron. This proved a good preview, for Dad Hay and son Larry have since been ordered to active duty.

• NAS DALLAS—Quick thinking on the part of George C. Lazich AC1 saved a $64,000 plane from serious damage and its pilot from possible injury or death, when he prevented the plane from landing with one wheel in the up position. Although Lazich and the tower crew tried to warn the pilot over the radio, the radio was not working properly and the pilot also failed to see the Aldis light warning. When the plane was making its final approach, Lazich fired a red flare from the pyrotechnic pistol, ordinarily used at night. This called the pilot's attention to the fouled wheel and he was able to get it down and make a normal landing.

• NAS SQUANTUM—Nine members of AVUA-2 at New Bedford and five members of AVUA-3 at Westfield have received their orders to active duty. These enlisted men are the first Volunteer personnel to be recalled from this station's AVUA's.

'WE'RE *in the Navy now', VP-661's Klem McRoberts, McClanahan, Mann are AAF vets*

• MCAS CHERRY POINT—For the first time in four years, *Lady Leathernecks* are again serving aboard this station. Capt. Helen Wilson was the first to report. She is to act as liaison officer for the 250 women Marine Reservists who are now being assigned here.

• NAS SPOKANE—All Reserve squadrons completed their training cruise successfully. Highlight was a ten-day period at NAAS EL CENTRO devoted primarily to gunnery, bombing and rocket firing.

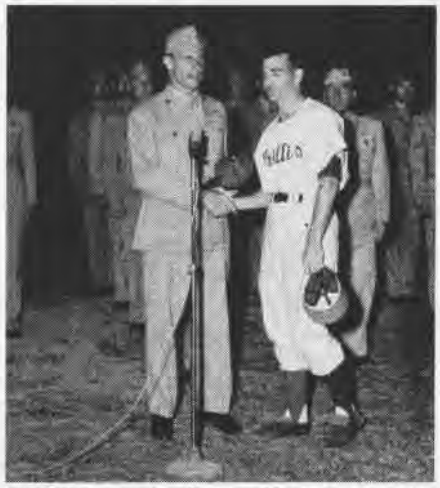
• NAS MINNEAPOLIS—Thirty pilots from Northwest Airlines, who are now participating in the Korean airlift, made GCA approaches and received trailer check-outs at this station at the request of the airlines.

• NAS BIRMINGHAM—The Blood Bank of the Birmingham Hillman Hospital was the scene of much feverish activity when 48 officers and men of this station (approximately one-third of its personnel) each contributed one pint of blood. The group answered the *SOS* of 3½-year-old Irene Waters who suffers from the affliction of "hard bone".

• NAS SQUANTUM—During their cruise, VS-911, VS-912 and VS-913 operated with Reserve submarines from Boston. One VS squadron and one VF squadron also engaged in a CIC composite exercise.

• NARTU JACKSONVILLE — Jax's Noel Davis Trophy winner, VP-741, took its two weeks cruise at NAS NORFOLK, where VP-49, winner of the Fleet's famed "Meat-Ball", was its host. Regulars and Reserves flew side by side in extensive hunter-killer, anti-submarine maneuvers. VP-741 was supported by FASRON-745.

• NARTU LAKEHURST—ZP-752 participated in ASW exercises off the Virginia Capes during its two weeks cruise. Fleet Airship Squadron Two, designated as host squadron for the Reserves, made ZP2K type airships available for indoctrination flights. Commander Fleet Airship Wing One later made this comment about ZP-752, "This squadron conducted its assigned missions in a most effective manner due to its excellent understanding of the tactical problems involved and due to its familiarity with the doctrine employed by all participating units . . ."



'PHILLIES' *captain Granny Hamner gives cap to Maj. Miller, CO of VMF-451 'Whiz Kids'*

• NAS LINCOLN—Marine Air Reservists in VMF-113 worked out a simulated combat problem involving close-air-support for U. S. troops pinned down in a given area on the Fort Riley gunnery range. A bombing target of old tanks was the focus for strafing and bombing attacks of Marine F6F's under control of a tactical air coordinator. For the operation, the Marine squadron furnished Fort Riley with a detail of six range guards, two radio operators and a pilot to act as ground controller for the mock attacks.

• NARTU MEMPHIS—A CV Task Group from this unit recently introduced a unique method to solve some of the logistic supply problems encountered by Reserve squadrons training away from their home stations. This was in the form of a mobile aviation shop store set up in a trailer truck in which all conceivable parts that might be needed during the cruise were stocked by the home unit. The practicality and efficiency of the unit was thoroughly proved as 95% of all supplies, when needed, were readily available on the operations line.

• NAS MINNEAPOLIS—Reservists completed another mercy mission recently when they flew a civilian who was seriously ill from Bemidji to the University Hospital to receive medical assistance that could only be obtained there.

• NAS ATLANTA—Making 219 GCA approaches in a single month, VMF-351 now holds the squadron record in this line.

JUST BEFORE *taking off for active duty, VP-931 CO, LCdr. Hess receives football from Eagles' captain Wistert as NAS Willow Grove CO Howell and VP Reserves look on*

AS STORM CLOUDS BLOW AWAY, CIVILIAN PLANE DEPARTS NAS KEY WEST WHERE IT WAS BASED

Pilots Busy—Storm Flyaways

350 SNJ's Descend On NAS Memphis

Hurricane season provided plenty of hard work for crews at many Navy and Marine Corps Air Stations in August and September.

First station to batten down was Miami. Next came Jacksonville and then Pensacola. Both Atlantic and Gulf tropical storms kept the crews hopping.

When Pensacola has to fly its planes away, the result is similar to the activity around a beehive. BTU-2 at Corry Field set a record by having 68 aircraft out of 68 aboard ready for evacuation.

In one instance 350 SNJ's had to head for NAS MEMPHIS in soupy weather. On arrival there, the first plane to land ground looped. On top of that tower transmissions failed and the weather lowered. Tight flight discipline paid dividends until an emergency radio rig was placed in operation.

All the planes landed without further incident.

Reversing the procedure on the east coast, planes of fleet squadrons in the Norfolk area scattered as a storm approached Cape Hatteras. Landplanes went inland and seaplanes went to Pensacola. Crews of PBM's in VP-34 lived in their planes anchored in the bay off historic Fort Barrancas.

Planes from NAS ANACOSTIA flew to Harrisburg, Pa., on a Saturday afternoon, pulling many desk aviators from their hearthsides. The danger passed, however, and those husbands anxious to return home made it back before dark. No figures are available as to how many enjoyed liberty in Pennsylvania's capital city.

At NAS KEY WEST the second storm to form in the area headed for Cuba. Planes were evacuated and civilian planes at a nearby commercial field were hangared in the Navy hangars. The eye of the hurricane passed within 30 miles of the station. Only minor damage resulted.

• NAS MEMPHIS—An aviation ordnance officers school was established at the technical training center here on 16 October. The 10-weeks school turns out 10 officers trained as squadron ordnance and gunnery officers.

Air Controller Job Is Set

New Designation Created for CIC Men

A new designation for commissioned and warrant officers, other than naval aviators—that of Naval Aviation Observer (Controller)—has been set up.

To be eligible for consideration, the man must be a graduate of the CIC school at Glenview or the CIC/AEW course offered by fleet airborne electronics training units of the fleets.

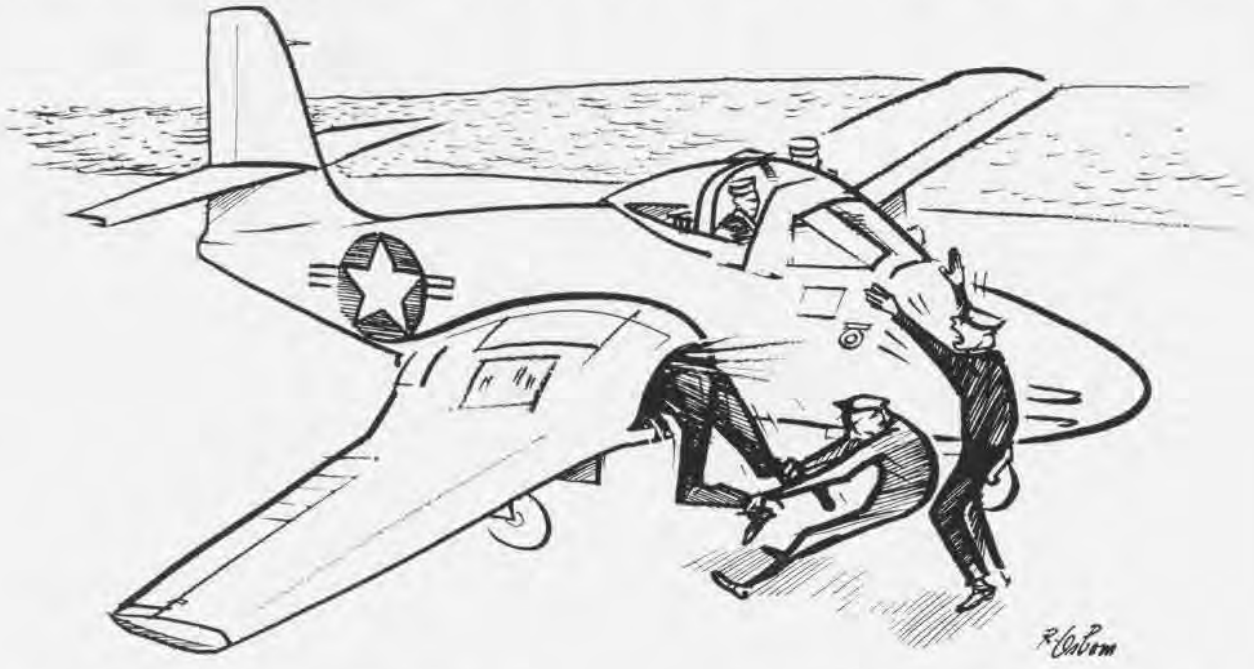
Other requirements include rank of lieutenant commander or under, a minimum of 100 hours flight time, completion of 50 hours of operational flight in the squadron as an airborne controller and demonstration of temperamental suitability and operational proficiency.

Naval Aviation Observers (Radar) who consider themselves qualified may be able to have their designations changed to (Controller). Additional details about the new classification are contained in BUPERS Letter 138-50, in the 31 August issue of Navy Department Bulletin.

The Navy's new XP5Y-1 high speed flying boat set a world's flight endurance record for turboprop engines recently. It remained in the air for eight hours and six minutes on a test flight. Previous record was held by XP-81 Air Force fighter, first American plane to employ a turboprop engine.

FOR THE FIRST TIME *in warfare, helicopters are being used today in Korea to evacuate foot soldiers wounded in battle. Marines are using the pinwheels land-based to pick-up casualties and also to recover downed pilots who were forced to land behind the North Korean lines. In the two photos above, HO3S-1 helicopters show some real "close air support" for their footslogging Leathernecks by evacuating wounded men to rear areas. Two different methods of transporting the men are shown—in one the stretcher is loaded crossways inside the cabin of the pinwheel while in the other two covered litters are attached to the sides of the helicopter (See photo, left)*

Who Says There's No Suction?



"There's not much suction," said Chief Bouchard,
"They may pull a little, but not very hard."
He stepped slightly closer and held out an arm
As though daring the jet to do him some harm.

"Well, doggone me," said the F2H-1,
"I reckon I'll inhale that son of a gun,
He thinks there's no suction in front of a jet?
Perhaps this will prove his theory's all wet."

"Just stand by a second. I'll empty his pockets.
Why I'll pull his eyes right out of their sockets."
The jet then inhaled as they eased on the gas
And sucked the Chief in—clear up to his hips.

Moral: In general, Chiefs are rather tough
And jets prefer more fragile stuff.
So kindly heed this warning clear
Avoid them from both front and rear.

THE WORD "STAND CLEAR OF JETS TURNING UP ON FLIGHT DECK" had been passed over the public address system on the carrier. Shortly afterwards an engine on an F2H-1 was started for the purpose of making adjustments to the engine high speed stop.

The plane captain was seated in the cockpit and a maintenance officer was standing on the step observing the cockpit instrument readings. Below the engine a chief aviation machinist was making the necessary adjustments to the fuel control system.

The flight deck officer and a flight deck chief were observing the operation which involved several high power turn-ups—but let the flight deck officer take over in his own words:

"Lieut. ——— had just climbed up on the side of the plane to note readings in the cockpit. I mentioned to the Chief that there seemed to be little suction as his pants leg showed no indication of it. He replied, 'No, there is hardly any suction.' He then walked over to within approximately two and a half feet of the intake with an arm outstretched.

"The engine was accelerating at the time, and I didn't like the looks of it. I yelled for him to come back. The next instant he was pulled up against the wing, chest first, chin atop the duct, shoulder across the opening. Unable to withstand the pressure his head slipped in and his body went in up to the waist."

Meanwhile in the cockpit the plane captain noted that shortly after he advanced power to 100%, the engine surged and there was an extremely fast rise in tail pipe temperature. The engine sounded as though the turbine wheel had thrown several buckets. He heard the maintenance officer shout for him to shut the engine down. He did so and as he turned his attention away from the instruments, he saw that the flight deck chief had been sucked into the intake.

Chief Bouchard was carefully removed from the engine duct, placed on a stretcher, and taken to sick bay. It appeared that as he was sucked into the intake his head or body struck the duct door butterfly valve, breaking its hinges. This fortunate occurrence allowed the door to wedge against his back and prevented him from being pulled into the compressor section of the engine. He was hospitalized for nearly a month with a ruptured liver, but is now back on duty.

Two years ago during the initial full power turn-up of the Air Force XP-86, one of the contractor's employees was instantly killed when he walked in front of the intake duct and was drawn in head first.

Since the Navy was utilizing the same engine in the FJ-1, tests were conducted with dummies and with live subjects protected by safety ropes. It was found that there was not a great amount of suction until the subject approached to within about two feet of the intake duct. But from there on, the suction increased extremely rapidly.

On a carrier deck the hazard is increased owing to the wind force over the deck. Shipboard safety precautions state that flight deck personnel must remain outside:

(a) an area eight feet forward of the jet intakes.
(b) an area 50 feet aft of the tail pipe.

STARS OVER THE ATLANTIC

CHIEF PHILBY, NAV INSTRUCTOR, CHECKS OUT DEGENNARO AND LINCOLN

BINGHAM TELLS HARRINGTON, MCLAUGHLIN ABOUT VR-6 ASTRO-COMPASS

VR-6 WESTOVER—This squadron regularly operates a trans-Atlantic flight a day, which places considerable emphasis on navigation. When a new pilot reports to VR-6, he can look forward to refreshing his navigation techniques and to putting in his fair share of time at the navigation table.

Even in this bright new world of electronics and technology, celestial navigation is still the number one method of getting across the ocean—just as in the days of yore and Columbus. So, navigation school takes up the first two weeks of one's tour in VR-6.

The first week is devoted to refreshing one on the niceties of the sextant, plotter, chronometer, E6B and a variety of charts. A few MATS regulations are injected and one learns a little about MATS flight plans. Fuel analysis charts, Pomar, logs and navigational aids also are introduced during the first week.

The last week is devoted to actual route problems, and the final examination involves navigating a typical trip from Westover to Rhein-Main. This desk trip will include sending out hourly Pomars, taking half-hourly pressure readings and working out a drift, working out hourly three-star fixes and filling out the hourly half-dozen forms, charts and graphs.

Later, when the new navigator goes on his first trip, he will find that the leg from Westover to Stephenville to Torbay, Newfoundland is duck soup, primarily radio range navigation. The leg from Torbay to Lagens—1200 miles of over water navigation to a very small island in Azores—is apt to be just soup. Two things the new navigator will learn to love: one, the weather ship halfway across which gives passing planes radar and radio fixes as they go by; two, the R5D's secret weapon, two automatic direction finders. The plane's two "bird-dogs" are about the finest pieces of equipment to be found on a dark rainy night an hour out of Lagens.

Loran is fairly good around the Newfoundland area anywhere along the east coast of the U.S. These electronic lines become long and thin before one gets into Lagens, and are of little value during the latter half of this trip. Most trips are flown during darkness and a low-level cloud layer almost invariably covers the surface, so drift readings are seldom possible. The answer can be read only through a sextant, in an Air Almanac and an HO 218 or 219. It's amazing how proficient one can become with this equipment when he realizes proficiency means the difference between a cold swim and an ETA right-on-the-nose.

On the trip from Lagens to Orly (Paris), everyone feels a bit more secure—it would be difficult to miss Europe. On the other hand, not too far to the right of course lies a nice mountain-chain and not too far to the left, of course, is plenty of open water right on up toward the Arctic circle. Loran and Consol stations in England provide on-course information.

Weather on the North Atlantic route offers plenty of instrument flying. Nevertheless, even in the worst weather an occasional celestial shot is usually possible. There are times of course when this is not true, and then the weather ship, the "bird-dogs" and pressure pattern are often the only way to stay on course.

Pressure pattern is a relatively recent innovation and may not be familiar to the older generation. This "pattern" is obtained by charting the barometric changes occuring as the flight progresses. Barometric changes are measured by taking regular pressure altitude readings and true radar altitude readings and noting the variation between the two.

Since direction of rotation around a pressure area is known, by charting the rapidity with which an aircraft is entering or leaving a high or low pressure area, a simple formula will show the amount of right or left drift being encountered.

The trip back from Rhein-Main so far as navigation is concerned requires more exact navigation going from Orly to Lagens, and the trip from Lagens to Stephenville remains about the same. However, Loran going into Newfoundland is usually good, and of course the large land mass is easier to hit. Weather over Newfoundland is likely to be bad and gas grows critical, so it is hard to relax before the needle swings over Torbay and picks up Stephenville dead ahead.

Occasionally the northern route is flown, via Iceland and Greenland, and though the flights are shorter, the weather is apt to be bad. In the extremely high variation areas a wrong application of this factor can mean heading for Chile instead of Massachusetts. And the water is reputed to be mighty rough.

A direct flight from Lagens to Westover usually offers excellent Loran for ETA and course en route, but exact position and precise gas analysis must be maintained due to the greater distance and more critical gas load.

• VA-75—Flying 1464.6 hours during May 1950, VA-75 commanded by LCdr. J. E. Kennedy, smashed by a wide margin their old record of 1000.1 hours established in July 1948. During this record-breaking month, VA-7 made 124 landings on the *Coral Sea*.

Needn't Be Ashamed Of Specs

SOMETIME IN HIS career, every naval aviator will become chairborne. In such a job he will have to do a tremendous amount of reading.

As he approaches 40, he finds it increasingly difficult to read with his book close to his face. He holds it farther away and has to concentrate harder.

His tendency is to blame "too much close work." His pride in a good pair of eyes makes him keep quiet about the condition longer than he should. Close work as such, however, does no damage. The Navy knows what will happen and makes no penalty for it.

Actually, far-sightedness is as inevitable as death and taxes.

Every naval aviator has eyesight above average. The original examination is so thorough that myopia (near sightedness), astigmatism and other defects are spotted and the man never becomes a naval aviator.

But even with a perfect pair of eyes, age starts to take its toll. It all stems from the ciliary muscle which controls the iris of the eye.

In reading, the iris has to stop down just as it does for a bright light. As a man grows older, the muscle which does the stopping down grows increasingly stiff in its action. As a result, the point of focus grows farther from the eye. Remember the test in which a ruler is held straight out from the nose and a little card is pulled away from the eye until a line can be read? That's the test which shows how well that muscle does its job. It is an infallible indication of age. That ruler will always tell age within a year or two.

This progressive far-sightedness, or presbyopia, is normal, and the Navy allows for it. It is not disqualifying, nor is it a mark of poor eyes that a man has to use glasses for close reading as he grows older. Glasses allow the ciliary muscle to stop down only part way for close work.

Temporary visual difficulties can come from a variety of causes. In the naval aviator, the flight surgeons emphasize that disturbances are only temporary.

Fatigue can play a part in temporary loss of acuity. Other factors are unbalanced diet, excesses in alcohol or tobacco, loss of sleep, excesses in reading or poor light.

All the diminution of acuity as a result of above factors will disappear after adequate rest. Vision will be restored to normal for the individual concerned.

So it isn't the desk job in Washington, old timer, it's just the man with the scythe. You can count on the glasses between 40 and 45. You're a class II pilot after 40 anyway, so why be concerned about needing a pair of specs?

When you young squirts see the skipper put on his glasses when you hand him a dispatch to read, just remember the old epitaph, freely paraphrased:

Hearken, stranger, as you pass by,
As you are now, so once was I.
As I am now, so you will be,
And so be warned by thought of me.

VR-6 Pilots Navigate Seas

Air Force Borrows Men For Korea Run

VR-6, WESTOVER—In addition to supplying planes and crews for occasional "specials", this squadron is represented in the Pacific by 16 of its pilots. With air transport needs requiring a maximum effort on the U. S.-to-Korea airlift, a critical shortage of navigators developed in the Air Force MATS squadrons.

Inasmuch as all Navy pilots also are navigators, no such shortage existed in Navy units. To help alleviate the problem, 16 of the squadron's third pilots were shipped to the Pacific division on temporary additional duty.

Although it is an important job, the task of navigating full-time is a bit grim for naval aviators who still retain a pilot-perspective of the Pacific area. So far there has been only one request for change of duty to LTA from the contingent, so apparently the boys are holding up fairly well.

One advantage the Navy pilot-navigator has unearthed while flying with Air Force pilots who have no navigation training—they have found the pilots have an unquestioning faith in their navigators. On a dark and dreary leg between Johnston and Kwajalein, one of the Navy navigators sent a 65-degree change of heading up to the front office. Without a word, the pilot swung her around 65 degrees and buckled it back on autopilot.

Probably figured the Navy boy had a short-cut.

New Plane Book Published

'Ships and Aircraft' In Sixth Edition

A new post-war edition of *Ships and Aircraft of the U. S. Fleet,* much-used by the Navy for indoctrination and recognition training during the war, has come off the press.

Edited by James C. Fahey, associate of the U. S. Naval Institute, the new volume contains photographs and condensed information on all late-type Navy aircraft, with photographs, together with latest dope on all ships. The sixth edition of this well-known publication is the most comprehensive compilation of planes used by the Navy in existence.

The new distribution address is Ships and Aircraft, 2033 Rhode Island Ave. N.E., Washington 18, D. C. Price is $2.

LETTERS

SIRS:

During recent carrier qualifications aboard the U.S.S. *Bataan*, VC-35 was awarded the privilege of cutting the ceremonial cake for the 15,000th landing. This landing completed the first 1,000th landing since the ship was recommissioned. The landing was

made by Lt. A. F. Clapp, in an AD-4Q.

The photo shows officers from left to right as follows: Lts. (jg) Folensbee, Forgy and Raposa, Lts. Metzner and Clapp, Ens. Ness, Lt. English, Cdr. C. R. Stapler, Capt. Neale, skipper of the *Bataan*, Lt. Spell, LSO; Cdr. Ford, the ship's air officer, and Cdr. Rutherford, exec.

PUBLIC INFORMATION OFFICER

SIRS:

In the Letters to the Editor column of recent issues of NAVAL AVIATION NEWS, a running competition of high-time lieutenants in the Navy has been published. Most recent entry was a letter from the All Weather Flight School annexing the crown.

Our compliments to USNS, All Weather Flight—and our regrets—they have just been dethroned.

VR-6, attached to ATLD-MATS, stationed at Westover Air Force Base, Mass., claims championship honors in the lieutenant flight time race. The following 10 two-stripers attached to VR-6 have managed to scratch together (up to 1 August) 62,608.6 hours during their flying careers.

Philip C. Hill	8131	Harold O. Tietjen	5981
Robert M. Hurt	7165	Robert W. Shreve	5856
Geza Lozar	6780	Alvin W. Rentsch	5839
Vaun G. Short	6271	James R. Seaton	5375
Theo. H. Stearns	6114	Harry Bigham	5093

The log book notations of where these gentlemen have put in their time reads like a world traveler's wildest dream—China, Japan, India, Africa, Azores, Iceland, Denmark, Sweden, Germany, Portugal, Spain, Italy, France, Philippines, Hawaii, Australia, Siam, Korea, Palestine, Lebanon, etc.

As a matter of interest, 62,000 hours represents many miles. At RSD speeds, in 62,000 hours, one could girdle the globe some 470 times, or fly 23 round trips to the moon.

As for the NAF WEEKSVILLE squadron whose 10 representatives had 36,850 hours

in the air, VR-6 could almost offer a team of ensigns who could parallel this mark, but a few of these lads made Lt (jg) a couple of months ago.

Lest one get the idea that all this time was amassed in multi-engine aircraft, we cite our second-high-time man, Lt. Hurt, who acquired 4,000 hours in single-engine aircraft before becoming a transport pilot.

The accompanying photo shows four of the 10 lieutenants who accumulated the 62,000-hour record—Lozar, Tietjen, Hurt and Short—looking at their favorite you-know-what magazine.

PUBLIC INFORMATION OFFICER

SIRS:

Regarding your silhouette of the P2V-4 taken against the Arctic midnight sun, in the September issue, I am sure that this plane is the P2V-3. This statement is based on the APS-33 radome instead of the APS-20, with which all P2V-3W and P2V-4 planes are equipped.

C. E. SCHINDELE, ALC

NOB NORFOLK

¶ The Arctic midnight sun was too dim for our aging eyes but Chief Schindele wasn't fooled.

SIRS:

Your article on the *Militant Meataxers* in the September issue of N. A. NEWS was excellent. However, having been the fighter director officer of the U.S.S. *Belleau Wood*, CVL-24, and having vectored this bunch of aces onto lots of their kills, would appreciate your setting the record clear.

Admiral Red Tomlinson's "Beuhal Maru" was "home" to them during their last tour in the Pacific. I'd sure like to be in another squadron like that one with Bruce Weber, Ray Hawkins, Connie Nooy et al! They were tops both as pilots, men and poker players.

JACK W. COLTER, LT.

AIRLANT SAFETY OFFICER

THOSE NAVY CARRIER PILOTS ARE ALWAYS SHOWING OFF!

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● THE COVER

The Navy's famous flight exhibition team, the Blue Angels, made their last public appearance at NAS Dallas National Model Airplane Meet on 30 July before going to war. This spectacular photo by Bernard W. White, AF3.

● CITY QUIZ

Top—Seattle, Wash. Lower—Miami Beach, Fla.

● PHOTO CREDIT

Drawings of Russian jet aircraft and recognition silhouettes by courtesy of Flying Magazine, Chicago, Ill.

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● The printing of this publication has been approved by the Director of the Bureau of the Budget, 10 June 1949

NAVAL AVIATION NEWS

Published monthly by Chief of Naval Operations (OP-501) and Bureau of Aeronautics to disseminate safety, survival, maintenance and technical data. Air mail should be used if practicable, address to : Chief of Naval Operations, Naval Aviation News, Navy Department, Washington 25, D. C. Direct communication can be made to Naval Aviation News, Room 4D356, Pentagon Bldg., office phones 73685 or 73515

East Or West?

Pilots flying cross-country should recognize cities. These two have a few outstanding landmarks to distinguish them. *Answers will be found on last page.*

NAVAL AVIATION
NEWS

TRANSPORTS FOR FREEDOM

AS THE FORCES for democracy unite, Navy's two Constitutions *join other transports to provide vital airlift facilities. Naval Aviation News gives you the story of all air activities. Send $2.00 for a year of NANews to Superintendent of Documents, Government Printing Office, Wash., D. C.*