NAVAL AVIATION NEWS

APRIL 1952

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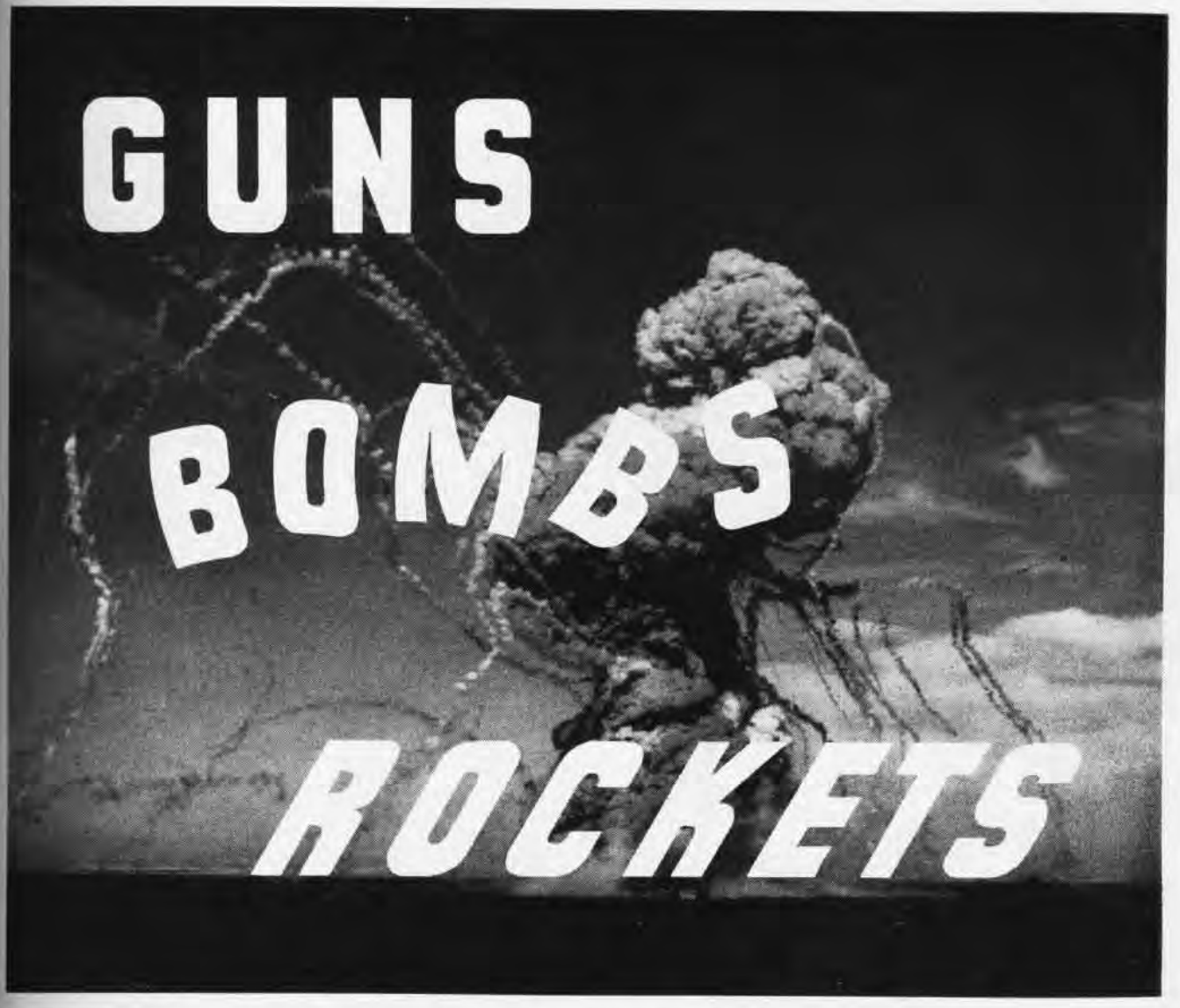
NEW NAVY JET PLANES

Two of the newest Navy jet fighters are presented here for recognition students, the F7U-3 *Cutlass* by Chance Vought and the XFJ-2 *Fury*, both high speed aircraft.



CR-R-R-R-UMP! Intermittently the windows rattle and the buildings shake, followed in a few seconds by a sharp explosion. The uninitiated visitor at the Navy's Proving Ground at Dahlgren, Virginia, finds the continuing noise of battle a bit upsetting, but to ordnancemen and their office staffs, it is proof that their work is progressing normally. It is also proof that the human system can get used to almost anything.

Since 1872 the Navy has maintained shore stations to test guns, projectiles, ammunition, armor and other ordnance material. First proving ground was on the Severn River near Annapolis, Md. From 1890 to 1918 the site was Indian Head, Md. Then activities were transferred to the present site some 50 miles below Washington on the Potomac River.

Primary concern of the Naval Proving Ground was ships' guns, but with the advent of the airplane, the field of endeavor was broadened. Both offensive and defensive weapons had to be considered. Airborne armament was developed as well as anti-aircraft guns for the ships of the United States Fleet.

As with shipboard armament, the Navy had to do much of the developmental work in aviation ordnance. In the making of aircraft, there are many private contractors who are equipped to do the basic design work on a new plane, relieving the military of that task. Not so much so with ordnance materiel and equipment, however. In relatively few cases, private industry assists in the development of new items, but this is usually accomplished either by a BUORD contract under Navy guidance, or by acceptance of a particular item with modifications or changes BUORD directs.

THE Navy's Bureau of Ordnance controls activity at the Naval Proving Ground, Dahlgren, as well as at the Naval Ordnance Test Station, Inyokern, California; the Naval Air Ordnance Test Station at Chincoteague, Virginia; the Naval Ordnance Laboratory and the Naval Gun Factory. The Bureau of Ordnance originates designs for new armament, while the activities mentioned above take care of development along lines in which each activity is specialized. Duplication of effort is avoided as much as possible in the assignment of projects to these activities by BUORD.

WITH HIS *20mm guns blazing away on a firing run over Wonsan harbor, Lt. Peck can thank NPG for having proof-fired the guns*

FUZE OF *five-inch rocket near hand of ordnanceman was developed and tested at the Naval Proving Ground; these were used in Kore*

POINTING over a broad expanse of water in the lower Potomac is a variety of guns ranging from small caliber automatic weapons to the 16-inch rifles of the battleships. Anchored out in the river are various targets which are regularly plastered with bombs, rockets and machine gun fire. Aerial mines are dropped in various depths of water, and flares and signals light the area at night.

Such an amount of activity with lethal materials requires safeguards. Stationed way out on the firing range are two range patrol boats which are in constant radio communication with the firing batteries. A permanent danger area exists on the river and in the air for five miles surrounding Dahlgren. *Notices to Mariners* and *Notices to Airmen* signal tests which will require extra caution.

Safety, the watchword of all ordnance activity, is the underlying factor in everything done at Dahlgren. Most of the safety rules in the handling of ordnance in the Navy were originated there. A lookout stationed at every battery has the final say whether a gun is to be fired or not. From his tower he can survey the range with binoculars and talk to the range patrol boats before indicating the range ready for firing.

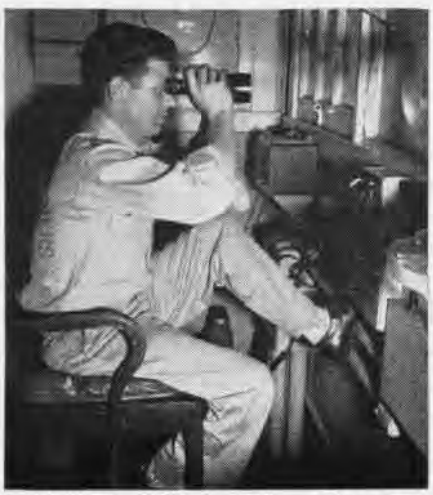
Likewise, whenever aerial tests are scheduled, every possible measure to prevent accidents is taken, from the loading of the airplane to the firing.

One of the five departments at the Naval Proving Ground is the Aviation Ordnance Department, commanded by a naval aviator captain and assisted by a civilian director of research. Its mission is to conduct research and development work on experimental aviation ordnance equipment. It also performs acceptance tests of aviation ordnance equipment prior to production, and, after production, to proof test every item.

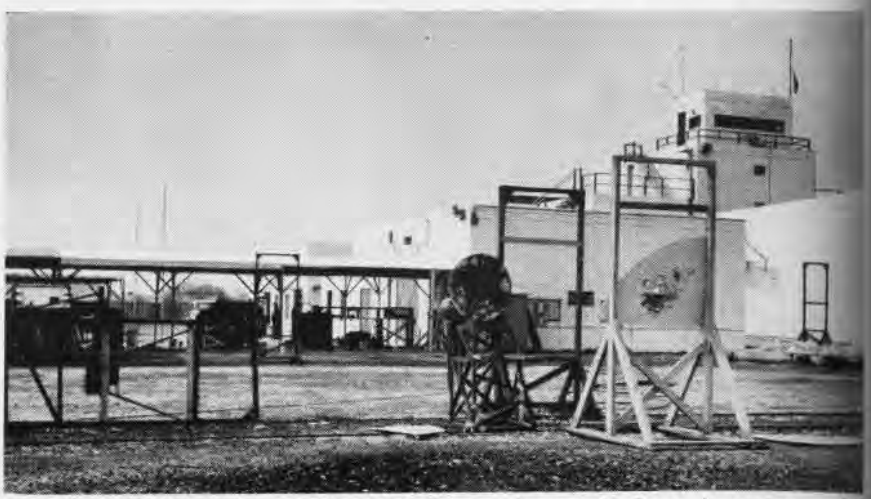
In order to better accomplish its mission, the department is divided into five divisions, each one headed by a naval officer. Each division has a head ordnance engineer. From the aviation ordnance officer, who heads the department, work is assigned each division. Responsibility rests with the division officer, while the engineer plans, directs and executes the tests. It is the civilian group of ordnance engineers which provides the continuity at Dahlgren. They are experts in their line.

Before going into the workings of the department in testing guns, mines, bombs and rockets, a word must be said about the manner in which data is recorded so that a decision as to whether an item is worthy or not can be made.

Obviously, the human eye cannot readily watch a bullet fly from a 20mm aircraft gun. Nor can a human being watching a bomb drop determine whether it did its job or not. Highly complicated instrumentation is necessary. The Laboratory Services Division provides it. For one test there are sometimes thousands of observations to be made. The division also conducts tests on items peculiarly suited for its work—tests on bombsights and fire control systems for aircraft. Not the least job is that of the station photographic laboratory.



LOOKOUT *H. G. Taylor follows safety procedures to make sure range is clear before firing*



PART OF AIRCRAFT *armament laboratory's firing test range is shown here; guns are fired from positions at left out over part of the Potomac river; control bridge atop building*

EVERYDAY *job of R. K. Marshall, J. F. Burgess, is installing 20mm experimental gun in F4U*

INSTRUMENT *maker J. C. Weaver performs delicate job of measuring bore dimensions of 20mm gun barrel in shop of laboratory services division, Aviation Ordnance Dept., Dahlgren*

MANY TIMES projectiles traveling at 2,500 feet per second or faster must be stopped dead in their tracks photographically to see what happens at the moment of impact with a concrete bunker or steel armor plate of a ship. Aircraft rockets in flight can be traced photographically step-by-step from firing to and through a target. Long before supersonic flight was considered in aviation, the shock wave phenomenon and other phases of supersonic travel were well understood at the Naval Proving Ground, for all gun projectiles travel in the high Mach ranges.

Original designs for aviation ordnance equipment come from the Bureau of Ordnance itself, the Naval Gun Factory in Washington, the Naval Ordnance Laboratory in nearby Maryland, or civilian contractors. The Bureau then farms the work to the activities mentioned previously. When a task order is received, the money to accomplish it is allotted.

There is a Naval Aircraft Facility operated in conjunction with the Naval Proving Ground. Planes assigned to BUORD for test purposes at Dahlgren are an SNB-1—the old plastic nose bomber-trainer version of the twin-Beech, which can economically drop many missiles with plenty of observation window space available—TBM's, AD's, F4U's and F7F's. AD's are used for rocket firing because that is the plane being used for similar missions in Korea. Actually, the rockets themselves are not tested at Dahlgren. It is the rocket fuzes that are tested there. They are tested on armor plate targets, concrete ones, and on ground and water.

Corsairs are used mainly for gun firing. Since they can climb to high altitudes, the F4U's go up there for firing under conditions of extreme cold. The F7F's are utilized in release of aerial mines, and release of high speed bombs up to 400 knots. The *Skyraiders* are also used for ballistic drops, where a bomb is dropped and the fall is instrumented all the way down, followed by theodolites and high speed cameras.

For precision drops with the Norden bombsight, the TBM's are used. They also drop float lights, drift signals and practice bombs. The present practice bomb in the Navy is the 25 lb. Mk 76. To mark its point of impact, it contains a signal resembling a shotgun shell, called the Mk 4 signal. Also tested are submarine rescue signals, marine markers, dye markers and parachute flares (the latter recently transferred to NAOTS CHINCOTEAGUE).

NAVY IS *constantly striving to improve rates of fire of its 20mm aircraft guns; W. W. Kraemer, AOAN, dismantles gun after firing*

PREPARING *a 20mm aircraft gun for test firing at Dahlgren's test range are J. L. Beccone, AOAN, H. L. Kearns, AOAN, L. Mitrak, AO3*

NAVAL *Proving Ground, Dahlgren, played important role in testing and developing bombs used for many purposes in WW II, Korea*

ONE *of jobs done at Dahlgren is the testing of aircraft structures' resistance to gunfire; Lt. Kane's plane could take punishment*

THE ABOVE items described come under the title "Aviation Ordnance Stores"—fuzes, mines and mine components and pyrotechnics. Mines are usually laid at high speed in enemy waters. Their impact must be eased, so parachutes and other devices must be tested. All drops are instrumented and afterward all parts are examined to see how well they worked under the conditions of the drop.

A good example of stores testing is a new fire bomb. The first bombs tested were made by a contractor. BUORD sent them to Dahlgren with some questions to be answered. How do they spread on impact? What are their release and flight characteristics? Will present igniters work with them? Are they easy to assemble under field conditions? Are the instructions adequate? Do they need special tools?

First, the engineer must figure out how to get enough information. He makes a test plan and gets it approved. Then he starts the test program. People unfamiliar with the bomb are gathered together to see how long it takes for them to assemble the bomb. Then it is hung on a plane for high speed flight to see if it will stay together. Some are released from the air with ground and air camera coverage. Eventually live bombs are dropped, with the test completely instrumented. So complete are the tests that a bomb is even considered from an aerodynamic standpoint. What is its center of gravity? How will inertia affect it? How does it affect the flight characteristics of the plane carrying it?

Most test work at Dahlgren has little glamor connected with it. Once-in-awhile, however, a new item with interesting possibilities comes along. One now titillating imaginations is a rifle-fired grenade, designed for use in helicopters.

The Navy's basic aircraft gun is the 20mm cannon. It is the task of the Proving Ground to make the gun work under all conditions. All guns produced are tested with actual firing. Any specific gun is proved by firing it, then Dahlgren says, "O.K., put it in a plane and shoot it." Any new guns go there for proof firing tests.

Ammunition-feeding systems are tested as is the ammunition itself. A constant goal is increased firepower. The best way to achieve this is to increase rate of fire. One goal that is being tried for is electric firing and priming. With this system there will be no more percussion firing. A place can be catapulted, crash, or be arrested without the guns going off as long as the switch is turned off.

Many problems have arisen from use of the 20mm gun in Korea. One was the trouble encountered from very low temperatures. A Dahlgren representative went to Korea, made on-the-spot fixes. Meanwhile, back home here, two methods were worked out—different lubrication oils and gun heaters. The most satisfactory solution came with a new lubricant developed by the Naval Research Laboratory.

But before this lubricant could be used it had to be proved. Dahlgren took it high in the air on guns, cooled them and fired them. On the ground, the guns were placed in cold chambers and fired. Final air testing is the job of the Naval

ROCKET *fuzes and components, not rockets themselves, are tested, developed by the aviation ordnance department, NPG, Dahlgren*

NEW *and more deadly fire bombs, effective weapons in battle of Korea, are being developed in constant search for improvement*

IN THE STEADY *round of ground support missions in the Korean battle zone, fire bombs, general purpose and special purpose bombs and aircraft guns play the stellar role; here a Navy F2H Banshee operating from an aircraft carrier makes screaming dive*

Air Test Center's armament division, however.

Another problem is that of gun gas. Gases formed when a gun is fired sometimes ignite in the nose compartment, causing embarrassing complications, i.e., losing the nose. Tests were made with different powders, firing guns in closed boxes, finding out what happens when the gas explodes so corrective measures can be taken.

NO FACILITIES for electronic aerial gunsights exist at Dahlgren, so gunsight tests are carried on elsewhere. In the past, however, important work was done there. Norden developed his bombsight there. It became the standard horizontal bombsight of World War II.

Top civilian of the aviation ordnance department is W. F. Miller, an ordnance engineer, who is director of research. His right hand men are J. C. Talley, J. B. King, W. S. Aumen and J. Pinker. On the military side the top officer, who reports to the Ordnance Officer of the Naval Proving Ground, is Capt. S. Van Mater, assisted by Cdr. Boyd Harland. LCdr. L. D. Rucker is head of the armament division. Two officers came from Korean duty to Dahlgren, Lt. M. H. Krause and Lt. J. E. Ford.

Another facet of the work of the department is that of determining the resistance capabilities of aircraft structures and components to gunfire. These include engines, structures, fuel and oil cells, hydraulic and pneumatic systems, and oxygen and carbon dioxide systems and containers. All this work is done for the Bureau of Aeronautics through BUORD.

On one test a machine gun is fired into a fuel cell, full and part full. A high pressure oxygen bottle is fired on until it blows up. As can be imagined, the Dahlgren fire company stands by ready for any unplanned conflagration.

Bombs are catapulted to see if they can take it. Since they will undergo the same punishment when a plane is catapulted, their lugs and structures must be beefed up.

Increased firepower isn't confined to guns. Another interesting project is the test and evaluation of a special rapid fire automatic launcher for a new 2.75 in. rocket. This allows a plane to stay on a target a minimum amount of time and still get rid of its load.

Six pilots are available for flying the planes at Dahlgren. Most hops are short, less than an hour.

On the ground, the department can test rates of fire and velocity measurements to simulated altitudes of 40,000 feet and at temperatures from —70° F. to +165° F. It is in the building near the aircraft battery that this equipment is located. A natural question might be, "How can they fire a gun in an altitude chamber?" The answer is simple. The gun muzzles are placed at holes facing over the firing range. As altitude is increased by reducing the air pressure in the test chamber, the holes are sealed by doors which are operated by solenoids. When the guns are fired the doors open, while the rapid fire through the hole actually exhausts more air from the chamber, rather than letting any in.

Pilots whose 20mm guns work better than they did before can thank the Naval Proving Ground, Dahlgren, Va.

GRAMPAW PETTIBONE

TV Towers

The construction of extremely high TV towers in many parts of the country presents an additional hazard to aircraft flying VFR in low visibility or marginal weather.

One such antenna which is being built in Pennsylvania will have an overall height above the ground of 1050 feet. Since it is located on the summit of a hill, it will be 2530 feet above sea level.

Other very high antennas are now completed or under construction at Richmond, Virginia; Newark, New Jersey; and New York City. Many more will be erected in the future and will not necessarily be located near metropolitan areas.

Grampaw Pettibone Says:

We haven't hit one of these yet, but I'm knocking on wood. All pilots should familiarize themselves with the locations of these new towers by studying the *latest* aeronautical charts and publications for the routes to be flown. Also check the *Notices to Airmen*, so that you will get the word on any recently constructed towers, which may not show on the charts which you will be using.

Carbon Monoxide Poisoning

Seven AM's were on a navigation hop. After about 40 minutes, the leader received a communication that one of the pilots was feeling ill, and granted permission for the pilot to return to the base with a two-plane escort. About 20 minutes earlier, this pilot had realized that something was wrong, especially when his hand dropped off the throttle and he had difficulty putting it back.

He then turned to 100% oxygen. After contacting his flight leader, he turned to emergency oxygen and proceeded with escort to return to the base. "Emergency" position floods the oxygen mask, by passing the demand valve of the system. After depleting his oxygen supply to 250 pounds, he realized that he would not have enough to complete the flight, so went back to 100% oxygen setting, and opened the canopy. About this time he also climbed to about 9000 feet, as he put it, to "get fresh air."

During the flight back to the base, his two-plane escort directed his flying by hand signals and kept up a constant chatter on the radio to keep him awake. On landing the pilot was examined in the cockpit and was found to be in a

semi-conscious state. His face and nail beds were cherry red in color. His pupils were slightly contracted.

He became conscious in about two minutes but was still confused. He became emotional and began to cry. One hundred percent oxygen was administered until he arrived at the dispensary, and for about 30 minutes thereafter, with steady improvement. He was released the following day. Subsequent checks of all other AM aircraft revealed no excessive amount of carbon monoxide present. The presence of it in this particular plane was caused by a hole in the number one firewall, defective asbestos wrapping, and a loose clamp around the cockpit defrost duct which allowed co gas to enter the cockpit.

Grampaw Pettibone Says:

If you have a headache while flying or other symptoms such as drowziness, don't waste any time trying to decide whether you're suffering from anoxia or carbon monoxide poisoning. The corrective action is the same in either case. Turn on 100% oxygen. If you have no oxygen equipment, open the canopy or open cockpit windows. Remember that you go *down* for fresh air—not *up* (unless you're under water), so reduce altitude, don't climb.

Once you've done all these things, you can take time out to check your fingernails and find out whether you were turning blue or pink. Let your section leader or wingman know of your condition as soon as possible. They may be able to be of considerable help to you as they were here.

Grampaw Pettibone Says:

The world's best safety device is situated slightly above and between your ears, use it!

Dear Grampaw Pettibone:

"Naval Aviator Gish arrived within the control zone of his destination, NAS ZEROZERO, to find that fog had unexpectedly moved in to close the field. Gish was advised to proceed to NAS KAVOO, a clear alternate. Upon arrival at Kavoo, Gish was unable to raise the tower but was informed by the municipal tower operator, who telephoned NAS KAVOO, that there would be a 30-minute delay. Having sufficient fuel Gish decided to wait for Kavoo to take him rather than proceed to another alternate; the weather in the area was deteriorating.

"Ten minutes had passed when the municipal tower operator relayed to him the word that NAS KAVOO would not permit aircraft to land at its field because the ceiling was 800 feet broken, visibility two miles. At the time this report was received, Gish was circling Kavoo at 3000 feet and could discern all the lights in and around the air station. Gish was forced to proceed to another alternate."

The above is a true story except that fictitious names have been substituted for the real ones.

How many aircraft, denied landing clearance at fields technically on instruments and operationally safe for landing, have crashed looking for another field?

Naval air stations must be conscientious and reasonable in making facilities available to aircraft under these conditions. Furthermore, when aircraft are being diverted from a naval air station because of weather, that station should immediately alert the field to which the aircraft are being diverted. In the above case, NAS ZEROZERO should have advised NAS KAVOO to stand by for use as an alternate.

REAR ADMIRAL, U.S.N.

Grampaw Pettibone Says:

This sort of thing shouldn't happen—not even to ensigns. It sounds to me like the folks in operations at NAS ZEROZERO dropped the ball, while the Kavoo people just closed shop and went home without leaving anyone behind to turn on the runway lights and man the tower.

"Do unto others as you would have them do unto you" certainly applies in these instances. Any pilot forced to proceed to an alternate has a right to expect that the

operations department there will know that he is on the way. Any pilot circling a field at 3000 feet at night and able to see all the lights clearly wonders "What gives" when the tower tells him that he can't land because the field is on instruments.

Put yourself in the other fellow's boots when you have decisions of this sort to make.

Whoa, Nelly

An F4U-5N ferry pilot flying along in smooth air needed a pencil from his trouser pocket to record his log. After several fruitless attempts to get at it by loosening his safety belt, he finally engaged the P-1 auto-pilot and unfastened his safety belt and right parachute leg strap.

Just at the moment when his right hand was deep in the pocket, fingering for the pencil stub, the plane nosed over into a violent dive throwing the pilot against the top of the canopy. With his left fingers, he reached the stick and pulled back to level out only to have the automatic pilot reverse action and go into a violently steep climb slamming the pilot back down half prone into the seat.

At this time he managed to get a hand on the clutch, disengage the pilot, and nose forward before the aircraft stalled. Upon recovery the accelerometer had recorded in excess of —2 and + 3 g's. Had the canopy given way or had the plane gone into a spin, the pilot would have been in a rather embarrassing predicament.

Oh, My Aching Head!

A helicopter squadron was conducting flights to indoctrinate recently designated helicopter pilots in the technique of taking personnel from the water via the hydraulic hoist and rescue sling. The exercise was being conducted in a bay about 100 yards from the seaplane ramp.

Swimmers equipped with exposure suits and life jackets were used to simulate downed aviators. The procedure employed was for the instructor to demonstrate the correct maneuver of the helicopter with the student operating the hydraulic hoist on the first recovery. Then the student and the instructor changed positions and completed three or four more practice recoveries.

During one student's third recovery, the hoisting sling was lowered into the water just ahead of the swimmer. The man in the water seized the sling and pulled it sharply towards himself. As he did so, he was struck in the head by the lead weight attached to the hoisting cable. Fortunately he retained his faculties, entered the sling, and was taken to shore where medical aid was obtained.

The accident board noted that the weighted cable had been used for about four years by helicopter squadrons without previous reports of injuries. In this case, the error directly responsible for the accident was caused by the swimmer. In his eagerness to get into the sling, he started the weight swinging over his head and then projected his head into the arc of the swinging weight.

Persons in the water are cautioned to exercise care in getting into the sling and to avoid violent maneuvers. It is also recommended that the weight be padded with material such as sponge rubber and covered with canvas.

Successful Ditching

At 2300 a pilot departed NAS BARBER'S POINT for a routine night GCI flight in an F6F. Four minutes after takeoff and at an altitude of 1200 feet, he noted engine roughness and a propeller surge. He was at this time approximately four miles at sea. Examination of engine instruments revealed rapidly dropping oil pressure.

Realizing that he might experience sudden engine stoppage owing to loss of oil, the pilot quickly made the decision to ditch the aircraft. Having made this decision, he so advised the GCI controller, turned into the wind, maintained an air speed of 120 knots, and tightened his shoulder straps and safety belt. At an altitude of 600 feet, he turned on his recognition lights, the reflection of which gave adequate light for landing, and set the radio altimeter on the 50-foot scale.

When the warning light of the radio altimeter came on, he dropped his seat, pulled the nose up to a three point attitude, and held 80 knots until water contact was made. He experienced two distinct impacts. The pilot abandoned the plane and estimated that it sank within 20 seconds. The pilot did not know the proper technique for firing his Mark 30 Mod. 0 life vest flares and both failed to function. Rescue of the pilot was made by a submarine operating in the area. His location was detected by the sound of his life vest "referee" type whistle.

Grampaw Pettibone Says:

This successful night ditching has some interesting angles. In the first place, the pilot's decision to ditch was a little unusual. When he felt the prop surge and saw that his oil pressure was dropping rapidly, the field was just about four minutes behind him and he had 1200 feet. In similar circumstances, experience indicates that nine out of 10 pilots turn back to the field and try to limp home. Some make it and some don't—depending on a lot of factors, but mainly on how long the engine continues to deliver power.

In my opinion, this was a borderline case, in which it would have been just about as safe to try to maintain altitude and get back over the field for an emergency landing. After all, a night ditching in a carrier type plane, without landing lights, is no cinch. Perhaps the relatively warm water near Hawaii area was the deciding factor.

In any event, one can't help admiring the pilot for not wavering once he decided to ditch. He kept his wits about him, turned into the wind, notified the controller, made excellent use of his radio altimeter, and executed a well controlled landing.

His achievements after he got in the water were not quite up to the standards displayed in the early part of the emergency. There are far better times and places to learn the technique of firing a life vest flare than while floating in the ocean.

The whistle came in mighty handy, as it has for a good many other pilots.

***P.S.* This ditching reminds me of the famous "Powerful Swimmer Case" which occurred in the same general vicinity shortly after the war. In this case, the pilot's engine quit cold and he informed his wingmen that he was bailing out. As I recall, the bailout occurred about midnight and the spot was marked by one of the wingmen. Everybody and his brother spent the rest of the night and the better part of the next day looking for the pilot. Single and multi-engine planes combed the area. Hundreds of flares were dropped, but there was no sign of the pilot. Late the next afternoon the phone rang in the hangar, and a voice said, "You guys must be blind."**

It was the pilot phoning from a house along the coastline. His swim to shore had taken him slightly over 12 hours.

When on probation, Ensign Twist
Wore bits of string around each wrist.
He said, "This is no idle fad,
'Cause I'll remember now, by Gad,
To use the goldern CHECK-OFF LIST."

TWO CORSAIR *night fighters return to the Boxer piloted by Lt. Ely, Lt. Stranlund*

KOREAN AIR WAR

General Visits Carrier

The USS *Valley Forge* welcomed aboard LtGen. O. P. Weyland, Commander of the Far Eastern Air Force, when he recently visited the carrier for a talk with RAdm. F. W. McMahon, Commander Task Force 77. The General, on tour of naval activities, flew to the *Valley* in a Navy torpedo bomber from a United Nations airfield in Korea.

During his day on board General Weyland watched the carrier's air operations and observed the ship at battle stations. Later, the Far Eastern Air Force Commander toured the ship, visiting her numerous departments. At the close of his tour he was a spectator at the intelligence debriefing of VF-653 pilots, who had just returned from a mission over North Korea.

General Weyland chatted with Capt. W. D. Anderson, USAF, who is aboard the carrier under the Navy-Air Force pilot exchange program. Capt. Anderson flies a Navy *Panther* jet in VF-52.

Prior to his departure the General remarked about the joint Navy-Air Force air interdiction program in North Korea, "It is my opinion that Task Force 77 planes together with the aircraft of the Far East Air Forces are doing a splendid job of dealing destruction to the enemy."

Able Assistant

Not an unusual sight to Marines at an advanced air base in Korea is that of a pretty Korean girl going about her business amid the whirling dust of jeeps, trucks, and aircraft. This Korean miss, Kim Sung Sook, is the assistant to the chaplain of the 1st Marine Aircraft Wing. To her American friends she is known as Margaret.

Margaret left North Korea when nine years old to live with an aunt in Japan. During WW II she worked in an aircraft factory until American bombers destroyed her living quarters near Tokyo. After the war, she returned to Korea.

This plucky little Korean lady fled with her family from Seoul when the communists occupied the city. Before the outbreak of these hostilities, she was able to finish her schooling. Margaret received a degree in English literature. In addition to her own language she speaks Japanese, Chinese, English and French.

The men at the air strip respect Margaret's sincere belief in her work; they admire her cheerful nature and her ready wit. She tells her friends that after the fighting stops she plans to teach English and Christianity in rural schools in order "to help my country and her people to a better understanding."

He's Had It

If you are looking for an expert at paper work, Cdr. Paul N. Gray, skipper of VF-54, is your man. Famed as the "Bald Eagle of the *Essex*", Gray racked up 100 missions against the Koreans and was shot up five times before RAdm. John Perry, commanding TF-77, ordered him to confine his activities to paper work.

But Gray almost did not get to obey the Admiral's dictum. His first escape came after Korean flak set his plane afire while he was bombing a Communist railroad at Hwachwang. He rode the plane to Wonsan harbor, where a South Korean patrol boat picked him up from the freezing waters.

A week later he tried to lay his bombs in a cave into which Communists ran their railroad engines for protection.

HEAD AIR *Force man in Far East, LGen. Weyland, visits RAdm. McMahon on Valley Forge*

KOREAN LASS, *speaking four languages, aids Marine chaplain; once made Jap aircraft*

BALD EAGLE, *brave Navy pilot, poses by Skyraider; Cdr. Gray now doing paper work*

Bomb fragments from the hit almost tore his plane apart but he made it to an emergency field safely.

Escape #3 came four days later. He brought his *Skyraider* (his squadron uses them) back with 59 holes through it, but made a perfect landing aboard the *Essex*. "Those boys over there in Korea are getting closer each time," he commented.

A week later he was out again, flying lower than ever. On his way home, a 37 mm cannon shell hit his engine. He coaxed the plane into a 10-mile glide to the sea, where the destroyer *Gregory* rescued him with hands frozen and suffering from exposure. He requested transfer immediately to the *Essex* so he could brief his squadron next morning.

But Adm. Perry decided the *Bald Eagle* had had enough fighting. Before word got to Gray, however, he had taken off on a cold morning hop to plaster Korean railroad bridges and trains again. Later, the carrier broadcast the news that the squadron commander had been shot down again by .50 caliber fire and landed in the ocean. There was no word of rescue.

His squadron mates sweated it out in the wardroom and readyroom until it was announced the destroyer *Twining* had picked him out of the ocean off Wonsan. The card games resumed. A comedian posted a big sign, "Use caution when ditching damaged airplanes in Wonsan harbor. Don't hit Cdr. Gray."

So, after five times scraping with death, the *Bald Eagle* is doing paper work. The "bravest man in the Navy" has run out his string of combat missions and is running his squadron from aboard the *Essex*.

Busy Rattlers

The *Deathrattlers* squadron of Marine fighter pilots celebrated their 10,000th combat mission in Korea the past winter—and that 10,000th mission saw 1st Lt. Fred E. Croyle hit by Red anti-aircraft fire and forced to make a crash landing.

To make up to him, the Marines presented Croyle with a cake (*see photo*). A check of the devastation wrought by the *Deathrattlers* shows that the enemy has, by far, had the worst of it, however.

More than 3,500,000 gallons of napalm have been dropped on enemy positions. Guns of their planes have spit out almost 3,000,000 rounds of 20 mm and .50 cal. bullets which killed an estimated 8,500 enemy troops. From their bomb racks they dropped 5,500,000 pounds of bombs on 9,000 buildings and 800 vehicles.

Commanding the *Deathrattlers* is LCol. Richard L. Blume. In the photo are Maj. John A. Kidney, M/Sgt. Ben R. Hurst, Capt. W. C. Sprowls, Capt. R. D. Jannsen and Croyle in the front row and M/Sgt. Adam A. Pokerski, Maj. H. D. Raymond, Jr., 1st Lt. D. R. McEathern and Blume. At the extreme right is Col. Luther S. Moore, MAG-12 commanding officer.

The Well-Dressed Pilot

Pictured on this page is a new type cold weather skin tested by the Marines in Korea, which allows the wearer to use a regular work uniform minus the added weight of present cold weather clothing. The new longies are of a foam-type rubber and weigh only a fifth as much as the present gear.

In the picture are Maj. Victor J. Layton, designer of the "skin", wearing an Arctic parka; Capt. Gaylord Guthneckt, who is wearing the skin as part of the experiment, and Lt. Frederick Adams in the old style long underwear. "It wouldn't take long to freeze in this temperature," was Adams' comment.

Capt. Guthneckt flew several hours in the suit at sub-zero temperatures and commented on the comfort. Both Marines are with HMR-161, fighting in Korea.

Uneasy Friends

The First Marine Air Wing in Korea has a Marine corporal, James R. Dixson, whose hobby is collecting poisonous snakes and who is rapidly losing friends for it.

A resident of Texas, Dixson, now with a Marine transport helicopter squadron, collects his Korean specimens in his spare time and has caught several Aghistodans (the Korean equivalent of our poisonous copperhead).

Ostensibly, Dixson is collecting his "pets" for the San Diego zoo, but his big problem is to get them back to the states, since the Marine Corps just isn't going to go along with having them transported in the bottom of a sea bag.

In civilian life, Dixson ran a snake ranch and raised reptiles for various zoos. He made a sideline of milking venom from them to sell to serum manufacturers.

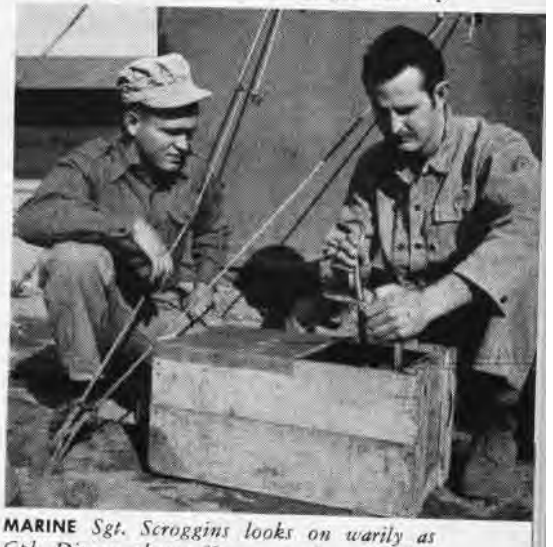
His slithering charges receive a great deal of attention from fellow helicopter mechanics, most of whom view them from a respectful distance. He complained once because they "were not the least bit understanding" when he bought some Japanese snakes and brought them back to keep in the hotel room where they were staying.

Helicopter Circuit

The helicopter may well be called a chaplain's best friend in the case of Cdr. A. Ray Cook, chaplain aboard the USS *Valley Forge*. Chaplain Cook has the "routine assignment" of flying, via heli-

NEW FOAM *rubber long oversuit (center) on Capt. Guthneckt proves self in Korea*

SOMETHING *special in cakes marks Deathrattlers 10,000th mission; Lt. Croyle cuts up*



MARINE *Sgt. Scroggins looks on warily as Cpl. Dixson shows Korean snake collection*

CHAPLAIN *Cook uses intercom system to give evening devotions to Valley Forge in Korea*

KOREA'S MOST *bombarded town, Wonsan, is completely leveled by Navy planes, ship gunfire which pounded this Communist key point for past year; harbor was popular ditching point*

copter, from one ship to another in Task Force 77, holding as many services as time will allow.

Cdr. Cook holds as many as three or four church services every Sunday. Assisting him in his duties is Seaman Bloesser. Bloesser plays a 50-lb. portable "Estly" organ which he takes with him when accompanying the Chaplain on his helicopter circuit.

The chaplain feels that his hardest job is not "circuit riding" but rather advising and helping his men aboard the *Valley Forge*—3,000 sailors, Navy pilots and Marines. Cdr. Cook has served aboard the carrier since March 1950 and has been in the Navy for 11 years. For his meritorious service during operations against the enemy he received a commendation from VAdm. Struble, Commander 7th Fleet.

The crew's favorite service is an evening prayer that Chaplain Cook broadcasts over the main inter-communication system. Each night at nine the chaplain's voice is heard throughout the ship as he offers evening devotions.

Triple Threat Carrier

A first time record for the USS *Valley Forge* was made when the carrier became a three-time participant in Korean combat. The ship, under the command of Capt. Oscar Pederson, entered the Korean war zone for the third time in December, 1951, when she rejoined Task Force 77.

The *Valley Forge* launched the first carrier offensive mission in Korean waters in July of 1950. The ship remained there until November, then headed back to the States for an overhaul.

Because of the increasing tempo of the war, the *Valley Forge* started out once more for the east coast of Korea after a brief three-day stay in San Diego. For almost ten months her planes hammered at key Communist transportation and supply centers. Then the carrier returned to Puget Sound shipyards for a major overhaul. Thus ended her second tour.

Now operating from the "Happy Valley" is the First Air Task Group. This group boasts Fighter Squadron 653, operating F4U *Corsairs*, and Attack Squadron 194, flying AD *Skyraiders*. Fighter Squadrons 52 and 111 fly *Panther* jets from her decks, as the carrier continues its third offensive mission.

Creating a Market

Purchasing agents for the North Korean Railroad Co., are going to hate a trio of ex-salesmen who have been peddling their wares with VA-923 since their St. Louis dive-bomber squadron was called up.

Lt. John J. O'Sullivan sold brass fittings, Lt. William H. Conboy sold insurance and Lt. James E. Dagon sold men's hats as civilians. As members of the Navy's Korean "sales team", they peddled bad news up and down a railroad near Kosong.

After a series of dive bombing runs, their score showed 11 complete cuts and six partial cuts in the rails over a 12-mile stretch—all nicely spaced to make repairs difficult.

Friendship Renewed

An old affinity between Seabees and Marines was renewed when a hard-charging crew of Navy Construction Battalion men "nailed down" a horrible mountain road for a semi-isolated Marine ground control intercept squadron. The Marines were 21 miles from their

BOMB CARTS *loaded with sudden death for Communists await loading aboard Antietam's Skyraiders, Panthers spotted up the deck*

ONE REASON *Navy strikes on Korea have had to slacken at times is the snowy weather; here Essex crewmen clean off flight deck*

source of supplies and were hampered for months by bridge washouts.

Working from dawn to dusk in below-zero temperatures, the Seabees strengthened several bridges. In two weeks they built four bridges capable of supporting heavy tanks.

CPO Gamble, directing the construction work, promised the Marines that his men could rebuild any of the bridges in six hours. The equipment for these projects included spikes, handsaws, hammers, and 4x12" timbers.

The Marines were very pleased when their construction friends built a cement sidewalk around the mess hall, an almost unheard-of luxury in Korea. The Seabees did this in "their spare time"—after dark.

Einstein's Successor

Marine Capt. William J. Tebow is sure that Korea has the successor to Einstein. The captain, a pilot with the 1st Marine Aircraft Wing's transport helicopter squadron, decided to teach a 17-year-old Korean houseboy the science of mathematics. Armed with pad and paper, he started with a basic two plus two routine, but the lad knew the answers.

Covering simple algebra, geometry, plane trigonometry and spherical trig, the pilot was still unable to stump this junior "Einstein."

"We were ready to go into calculus, when I gave up," Tebow admits. "I didn't remember enough about it. The boy'd probably have tried to help me if he hadn't felt it might be disrespectful."

Hi Yo Silver!

While on a flight over Pyongyang, North Korean capital, Capt. E. E. Poor, a Texas Marine pilot, started a real Texas stampede.

Firing short 20mm bursts into a huge barn in an enemy military camp, Poor saw horses pour out from both ends and hightail it through the camp area.

"They still were going when I looked back," the captain said, "and I reckon the Reds are still trying to round up those nags.

KOREAN *railroad stock went down after the Navy sent Essex planes in to plaster this Communist rail bridge; note by-pass built after original tracks were destroyed by earlier raids*

Grunt and Groan

One bleak, icy February morning a *Skyraider* guppy jockied onto the port catapult of the *Valley Forge* for predawn patrol mission.

The pilot, LCdr. Wm. H. (Buck) Rogers, got the signal from the catapult officer, revved up his engine and blinked his running lights for immediate launch.

Something was wrong. His AD was free-sliding down the ice-coated deck with no help from the still-cocked catapult. Rogers tramped the brakes and backed off power. He couldn't stop, so he slammed his throttle forward to the stop.

The crewmen, Raymond Frausto and Donald Backofen, both electronics men, were alerted for possible ditching upon contact. There was a sickening drop into the cold blackness off the bow of the carrier.

Rogers yanked up the landing gear and eased back on the stick. With a thud the heavily-loaded guppy hit the water and bounced back into the air. Salt spray flew everywhere.

The plane gained flying speed quickly and Rogers nursed it along just inches above the wave tops. A broken hold-back ring on the catapult had caused the close call.

PILOTS *of VF-52, quarterbacked by LCdr. Baslee, get in a little spring practice on Valley Forge after Korean winter wars*

CREWMAN *Backofen points out damage to Skyraider's guppy after aborted catapult launch, while LCdr. Rogers, Frausto look on*

Korea Outlasts World War I

ON FEB. 2, Americans were at war in Korea longer than they were in World I.

Naval historians moved the Korean conflict into second place on the list of the longest wars fought in the 20th century by the United States.

The U. S. Navy has come a long way since May 4, 1917, when six new destroyers under the command of Cdr. J. K. Taussig, steamed into Queenstown, Ireland, heralding the arrival of U. S. forces which were to help crush the Kaiser.

World War I planes and ammunition were a far cry from the sleek jets and destructive bombs of today. Navy Air started the war with 24 planes and suffered only 19 personnel casualties throughout the entire war. Modern carriers were still a dream. Pilots then flew "crates," and with their caps on backward, dressed in goggles, gauntlets and leathers leggin's, were called "aeronauts." Many carried shotguns and rocks on their missions.

It took our destroyers in World War I nearly a month to arrive in the theatre of war. On June 26, 1950, only one day after the Communists invaded South Korea, the U. S. destroyers *DeHaven* and *Mansfield* evacuated Americans from Inchon. Three days later the cruiser USS *Juneau* fired the first shots for the Navy against the aggressors. Five days later planes from the carrier *Valley Forge* really pounded the enemy in Korea.

Today daring naval flyers straddle jet and high-powered planes and drop well over 4,000 tons of explosives on the enemy every month. In their "crates" World War I flyers dropped 100 tons on the Germans during the entire war. Surface craft in the Korean war have fired nearly 3,000 tons more at the enemy every month.

Ships and planes in the Korean war are even breaking World War II records. During the month of December, 1951, the destroyer USS *Marshall* fired over 5,600 five-inch shells at Communist positions in eastern Korea—more ammunition than she fired against the enemy in all of her service in World War II. In World War II she participated in every major naval campaign in the Pacific. From her arrival in January 1944 to the end of the war, she earned eight battle stars in 30 engagements.

Planes of the USS *Essex*, which *Essex* men like to call the "Fightingest ship in the Navy," have fired more ammunition at the enemy since Aug. 22, 1951, than they did in the Pacific in World War II. Tonnage dropped by her planes in less than five months is about twice as much as was expended by all her air groups in the 16 months April 1944 to August 1945. Her *Skyraiders, Corsairs, Panthers* and *Banshees* of Air Group Five have fired 2,500 rockets and over a million rounds of 20 mm shells.

A BIT RAGGED *as formation flying goes, perhaps, but still about the closest formation of helicopters ever photographed are these five HUP-1's hovering a few feet off the deck at NAS Lakehurst. Early models of the Piasecki HUP's had "elephant ear" supplementary vertical stabilizers on each side of the rudder but these were eliminated to cut down on plane's weight.*

TROPHIES GALORE. *Model plane fan B. Lynch shows the 68 winners' trophies presented during the Tenth Annual Gulf States Model Air Meet, recently held at NAS New Orleans.*

Actual Battle Is Simulated

Live Ammunition Used In Air Exercise

Recent tactical air control exercises held at the newly-activated Pinecastle, Florida, impact and bombing area duplicated as nearly as possible the conditions which exist in Korea. Pilots of Carrier Air Group 4 used live bombs and rockets in the area which is located in the Ocala National Forest.

A landing strip was constructed in the heavily-wooded area. On the strip and adjacent area abandoned vehicles and aircraft had been parked to serve as targets for the Fleet Air Jacksonville pilots. In addition, fake gun emplacements were built.

Most of the targets were heavily camouflaged and pilots of attacking aircraft were guided onto the targets by personnel of an air control group on the ground via radio. A detachment of TACRon-4 handled the vital job of directing fire of the aircraft.

Key man in the air control setup is the forward air controller, an aviator, who is stationed with the ground forces in the front lines. At Pinecastle, this man rode in a radio-equipped jeep in close proximity to the bombing range. It was his job to assign targets to attacking pilots and give them the data necessary for them to complete their mission successfully.

In a control tower, some distance from the target area, others of the control group observed and evaluated the results of the strikes. Value of this close liaison between air power and ground forces has been proved many times in Korea where such tactics play havoc with enemy troops and supply lines.

'SKIJUMP II' AVIATORS HEAD FOR ARCTIC

NORTHBOUND SKI P2V *pauses at NAS Whidbey Island, Wash.; (front) Lange, Tooley, Brown, Cheek; (rear) E. B. Gibson, Lockheed Corp., Cdr. Coley, Lt. Bascom, Russell, Albertson, Rhodes*

A LANDING at the North Pole will be made by a Navy plane if present plans go according to schedule.

This pioneering event, carrying on Navy supremacy in air-sea research, is planned as part of *Operation Skijump II*.

Sponsored by the Office of Naval Research, the operation was initiated to increase U. S. knowledge of Arctic areas. Johns Hopkins University's Arctic Research Laboratory will operate out of Point Barrow, Alaska, shuttled to and from temporary bases by an R4D *Skytrain* and two P2V *Neptunes* on skis.

Departure was made from Naval Air Test Center, Patuxent River, Md.

The distaff side will be represented on the expedition by Mrs. J. F. Holmes, who will accompany her husband, an oceanographer of the Woods Hole, Mass. Oceanographic Institution.

As with *Operation Skijump I*, which went to the same area a year ago, observations will be made by special equipment installed in the R4D—oceanographic, meteorological and geophysical. Dr. Ira L. Wiggins is scientific director.

The planes will operate from Ladd Air Force Base, where a hangar has been provided for maintenance, as well as from Pt. Barrow. Three navigators, who are also pilots specially trained in USAF polar weather reconnaissance aircraft in Alaska, are members of the plane crews.

Pack-ice bases at intervals between Point Barrow, and the pole will be stocked with fuel and other supplies.

During *Operation Skijump I* last year, landings were made at such bases in an R4D in temperatures ranging from 25 to 30° below zero. Not a case of frostbite was recorded.

Much was learned about ice characteristics. Before actually landing on the ice, two touch-and-go landings were performed by each plane.

While on the ice, portable ice saws were used to cut holes in the ice to permit soundings. Readings are taken on depth of water, temperature, salinity, direction of current and bottom samples.

Thickness of the ice must be considered for the 65,000 lb. P2V's. *Skijump I* proved that 18 inches was enough for an R4D, which weighs 30,000 lbs.

If the pole landing is achieved, measurements will be made to confirm previous American and Russian depth determinations. Commodore R. E. Peary of the U. S. Navy measured 10,000 feet in 1909.

An R4D of *Skijump I* figured in an emergency evacuation. Piloted by LCdr. E. M. Ward, who is again piloting an R4D on *Skijump II*, the plane was called upon to evacuate Harry D. Lantzy, member of a field party of the U. S. Coast and Geodetic Survey at Oliktok Point. Lantzy had suffered a compound fracture of the leg.

WARD and his plane were at the headquarters of Navy Petroleum Reserve No. 4, known as "Pet Four", at Point Barrow. Weather conditions at Oliktok Point were high winds, blowing snow and one-half mile visibility. Landing area was a 1,200 ft. strip on lagoon ice.

Frantic efforts were made to clean more space. By the time Ward arrived, 2,400 feet was available. Light was furnished by all available lanterns and vehicle lights. The landing was made without incident. Navigation by Ward was made possible by Homer Williams, a bush pilot, who could spot faint outlines of frozen rivers, lakes and beaches in low visibility.

At Umiat, the injured man was transferred to a Transocean Co. R5C (C-46) and flown to Fairbanks, where he arrived seven and one-half hours after suffering his injury. Transocean furnishes the Navy's airlift for oil exploration in the frozen north. The Navy has one officer stationed there as aviation technical advisor.

Skijump II carries 34 personnel, including two Navy photographers. Skis for the Lockheed *Neptunes* were built by Federal Aircraft Works, Minn.

SKIJUMP I R4D *which made rescue; (front) Lt. (jg) Morehead, LCdr. Ward, Lt. Woodward, Ruchard Farrell; (back) Duke, McKean, bush pilot Homer Williams, McHale, Socha*

10 YEARS OF SERVICE

OVER 48,000 *Mars* air hours, a passenger total of more than 31,600 without a fatality or injury to passengers or crew members—that's the safety record held by Air Transport Squadron TWO celebrating its tenth birthday this month.

The senior naval transport squadron in the Pacific, VR-2 was commissioned 1 April 1942 at Alameda, California under the command of Cdr. Samuel LaHache. From a complement of six officers, 66 enlisted men and one R4D, VR-2 expanded in three and a half years to a large organization of 3,068 men, 800 officers and 54 aircraft.

In July 1942, VR-2 began to receive the Consolidated PB2Y four-engine flying boats. Seemingly always one jump behind the desperate need for supplies, squadron personnel undertook the Herculean job of maintaining the four planes available for an almost daily schedule to Honolulu. By November, flights were being made to Canton, Funafuti, Espiritu Santo, and Noumea in the South Pacific as well.

As control of the Central Pacific was regained, VR-2 extended its operations to Johnston Island and Kwajalein, and later to Saipan and Manus in the Admiralty Island group.

Early in 1944, the "Old Lady," prototype of the current fleet of *Mars* aircraft, was placed in operation with VR-2. Operating between Alameda and Honolulu, she completed 78 round trips and carried nearly 3,000,000 pounds of cargo while serving with the squadron.

August 1945 was a record month. VR-2 planes—by that year, Manila was the western terminal—flew a total of 1,813,892 plane miles with a ton-mile load of 6,479,416. Then with the end of hostilities, the squadron was whittled down to a permanent complement of 316 men and officers permanently attached.

The *Marshall Mars*, first of the JRM's, was delivered in February 1946. By early summer, her sister ships, the *Marianas, Philippine* and *Hawaii Mars* had been delivered, and the operation of the PB2Y's was discontinued. Thereupon the *Mars* aircraft began to establish new world records with what came to be an almost monotonous regularity.

CAPT. MAJOR, *CO of VR-2, with Capt. Bond, CO of FLAW, and Cdr. Campbell, VR-2 Exec.*

MARSHALL *Mars in Operation Hayride flew food to ship for its six hungry elephants*

In April 1946, the *Hawaii Mars* shattered three world records within 48 hours. She carried a record payload of 35,000 pounds to Honolulu. Several hours later she flew eastward with 100 evacuation patients aboard, making a total of 120 including crew and medical attendants. It was the largest number of patients ever evacuated in a single flight and the largest number of passengers ever carried from Honolulu to Alameda.

In May 1948, VR-2 received the last of the JRM's the mighty *Caroline Mars*, which has the same dimensions as her older sisters, but is considerably faster and carries a greater payload.

THE CAROLINE has had a great career marked by many new records for seaplanes, including the world seaplane distance record in 1948 when she flew non-stop from Honolulu to Chicago, a distance of 4,748 statute miles.

On 4 September 1948, the *Caroline* transported 68,372 pounds of cargo from Patuxent River, Md., to Cleveland, O., which was the greatest payload ever lifted by a seaplane. Three days later she went on to Alameda from Cleveland with a cargo of 39,500 pounds setting a new payload distance record. Another payload distance record was established in December 1948 by the *Caroline* on a flight from Alameda to Honolulu carrying 38,622 pounds of cargo. The giant craft has carried a total of 269 persons aloft including crew, which shattered all existing records for passenger lift by aircraft, but later this was topped by the *Marshall Mars* with a record load of 301 passengers plus a plane crew of seven.

TRANSPORTATION *of large companies of Marines has become one of the regular services of the mighty Mars in Pacific areas*

CERTAIN *future soldiers of America get early training when "diaper specials" return service dependents to U. S. mainland*

One of the strangest operations ever undertaken by the squadron took place in November 1948. The SS *Swarthmore Victory,* a veritable floating zoo was 1500 miles at sea, had run short of feed for the six elephants and a number of tropical birds which were being delivered to the United States. *Operation Hayride,* as it became known, was made by the *Marshall Mars.* On a flight of 17 hours duration, she dropped several tons of baled hay and containers of worms, which were picked up by the ship's boats. The operation was a success, and while it had humorous aspects, it served the serious purpose of demonstrating the feasibility of delivering cargo at sea on short notice.

ON THE EIGHTH anniversary of the squadron, its unblemished safety record was threatened but not destroyed. On 5 April 1950, the *Marshall Mars,* while on a test flight over Honolulu, caught fire in the number three engine nacelle. Quick thinking and prompt action on the part of the pilot, LCdr. G. E. Simmons, in making an emergency landing at sea permitted the entire crew to clear the ship. Moments later the exploding gasoline tanks shattered the giant hull and sent the gallant *Marshall* to its final resting place under 140 fathoms of water .The crew was picked up by rescue vessels without injury.

July of 1950 found VR-2 shouldering her share of the immediate upsurge in demand of logistic support of our Pacific forces following the outbreak of the Korean war. An average of 6.2 round trip flights to Honolulu per week for the following six months is a record that speaks for the hustling squadron. The four JRM's were carrying capacity loads on all west-bound flights grossing out at 148,500 pounds. During October 1950, the *Hawaii Mars* set a new high for aircraft utilization by amassing a grand total of 370 hours in the air.

Early in 1951 the trans-Pacific operating schedule was reduced from seven to three round trips per week with west-bound flights continuing to haul near-capacity loads. There were also numerous special trips, and during March 1951, four such flights to San Diego carried 762 officers and men attached to fleet units. On 8 April 1951, the *Caroline Mars* made two round trips to San Diego carrying a total of 391 passengers and 27,910 pounds of baggage.

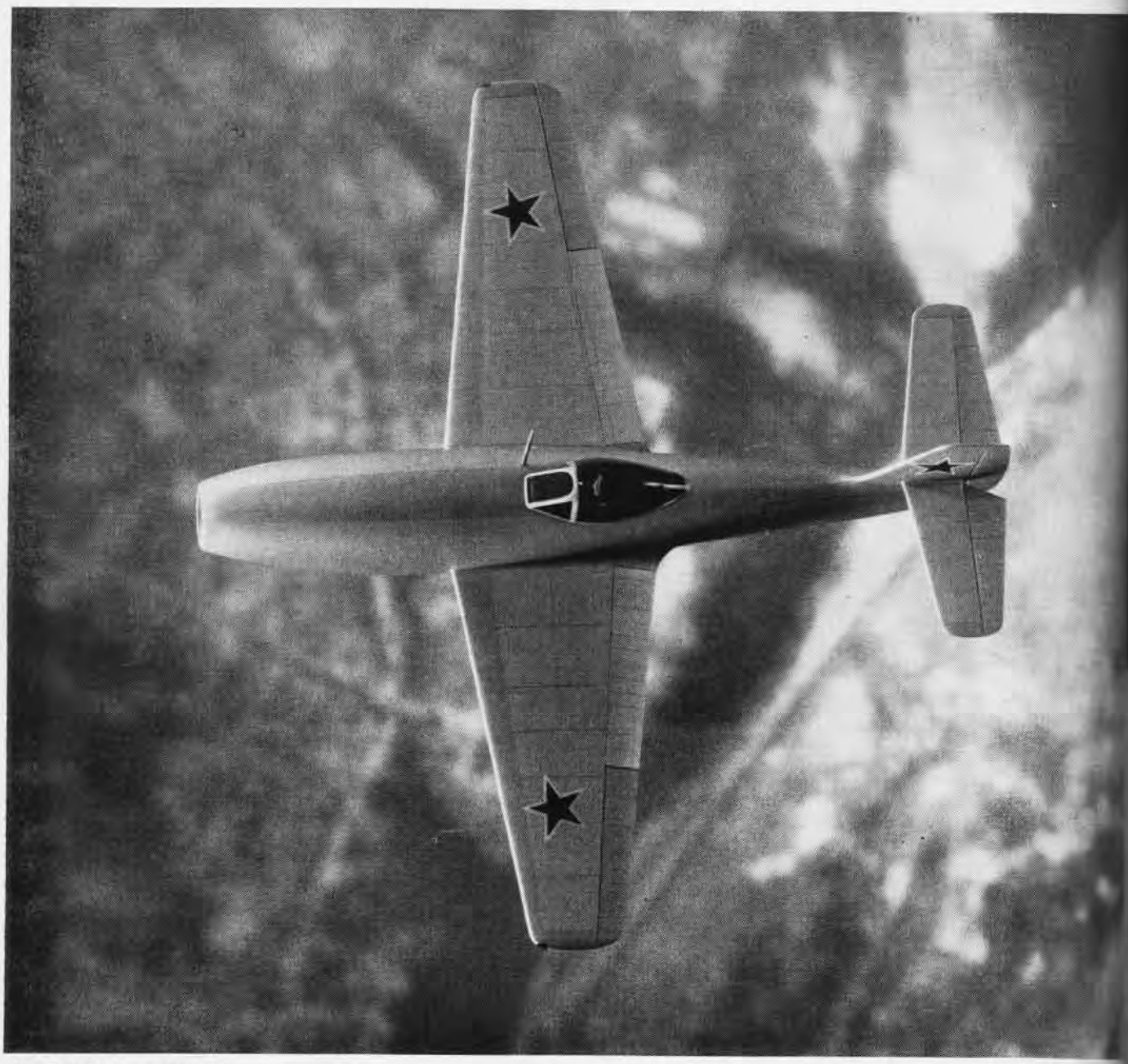
THE CAROLINE MARS made another first just this year. Only a few weeks ago Lt. Earl Turner with 116 passengers enroute from Hawaii to Alameda put the big boat down on the San Joaquin River when both Alameda and the alternate landing spot at Clear Lake were fogged in. It's the first time in history a *Mars* has been forced to use a river for a landing spot, but it did it like a veteran.

The *Mars* ship can be used in so many ways. Within a few hours, a huge JRM can be converted from its normal "plush seat" version to an all-litter or bucket seat configuration. As many as 139 fully equipped Marines or over 100 hospital patients have been flown across the Pacific when thus equipped. It is the versatility of the *Mars* that makes it one of the mainstays of Naval air transportation. VR-2 flies it proudly.

THE BIG *Mars ships provide scenery as well as speed. Here the Philippine Mars flies over Treasure Island and the Bay Bridge*

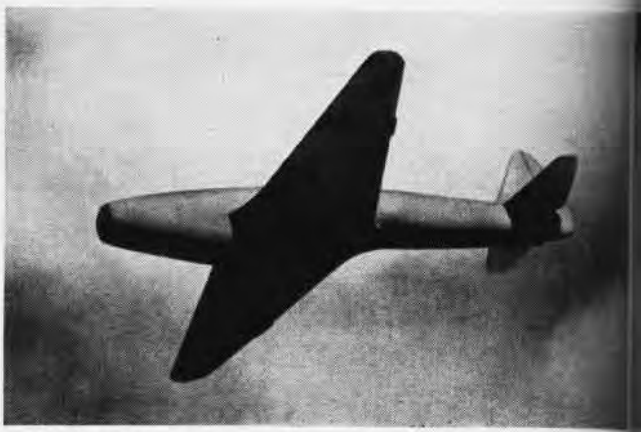
THE PHILIPPINE *Mars is making a jet-assisted takeoff, a procedure used only when the sea is extremely smooth or extremely rough*

YAKOVLEV 'STABLE' OF S



☆ YAK-15 MOD 2

☆ YAK-9



☆ YAK-15

SOVIET PROP, JET FIGHTERS

☆ YAK-15 MOD 2

From Yak-9 propellered fighter of World War II fame to three versions of designer Yakovlev's jet fighter are presented on these pages. The four photos of models at the bottom of the spread show the progression from prop to latest jet.

The Yak-15 Mod 2, the latest, apparently has a bigger jet engine since the exhaust extends farther back under the wing, the fuselage is stubbier, the nose wheel fairing has disappeared and a fatter wing with square tips replaced the tapered wing. Note also the change in rudder shape over the Yak-9. Since it lacks swept wings, the Yak-15 probably is slower than the Mig-15, now seeing action against the U.N. in Korea.

☆ YAK-15 MOD 2

☆ YAK-15 MOD 1

☆ YAK-15 MOD 2

ITALIANS FLY JET TRAINER

THE GLOSTER GA.5, A TWIN-JET, DELTA-WING PROTOTYPE AIRCRAFT IS BEING TESTED BY RAF

ITALY'S entry in the jet field—its first in the past 10 years—and the newest of England's delta-wing fighter prototypes are presented on this month's recognition page.

Not since the Caproni-Campini jet flew from Milan to Rome 10 years ago have the Italians had one of their own jet designs flying. The new arrival is the G.80 trainer, a two-place plane designed by Giuseppe Gabrielli and manufactured in Fiat's Turin factory.

The jet trainer is the first prototype of a planned series of three versions. Jet power for the first version is a British de Havilland *Goblin* engine of 3,500 pounds thrust on takeoff. The other two will be powered by British jet engines in the 5,000-pound thrust class.

Fiat's jet trainer is a rather clean looking aircraft and the nearest U. S. counterpart is Lockheed's jet trainer TV-2. Because of its lower-powered engine, the G.80's top speed of 478 knots is a bit under the TV-2's.

From the photograph, it can be seen that the G.80's horizontal stabilizer is placed high on the fin. This is done to avoid undesirable air characteristics set up by the jet exhaust stream.

The G.80's straight-wing has pronounced sweepback on the leading edge. Because of its very thin wing profile, it was necessary to stow the main undercarriage in the body of the wing. The fuselage is in three parts, which makes possible its conversion to other roles by replacing of a section by another with different equipment. Its over-all length is 40′ 6″, and the wingspan is 36′.

GA.5 The Gloster GA.5 is a twin jet, delta-wing prototype aircraft now undergoing evaluation tests for the RAF. When radar equipped, it could be used as an all-weather day and night fighter. It is the first twin-jet aircraft of its kind to fly. Jet power for the delta-wing fighter is provided by two Armstrong-Siddeley *Sapphire* turbojet engines each rated at 7,200-lbs. thrust. With more than 14,000-pounds of thrust, the aircraft should be capable of tremendous speeds.

Round wing tips are featured on this new fighter along with a high set horizontal tail surface. The protruding point at the rudder and stabilizer junction may be a tail parachute fairing. Noticeable on the starboard wing tip is a yaw indicator. The Martin Baker ejection seat is included as a safety feature.

YAK 15 Modifications. Pictured on the center pages is a recently reported addition to the YAK-15 jet family. The original YAK-15, operational in 1947, appears to have been a transitional design based on Yakovlev's piston engine fighters. The 1st modification of the YAK-15 introduced improvements in design including tricycle landing gear and a remodelled empennage. The nose wheel retracts into an external fairing, leaving a recognizable protuberance under the nose. The 2nd modification has carried the development one step further, incorporating a fully retractable nose wheel, and squared-off wing and tail surfaces. The heavier forward portion of the fuselage with jet exhausts further aft indicate a more powerful engine.

RECOGNITION

The name Skyray has been approved for the F4D aircraft being manufactured by the Douglas Aircraft Co. at El Segundo. This new Navy jet fighter has a delta wing, and a single tail. A single jet engine powers the aircraft.

A Canberra twin-jet bomber recently flew from England to Australia where it is now being used for familiarization flights. Plans call for production of an Australian built version. Presently this aircraft is being produced for the USAF by Glenn L. Martin with the designation B-57.

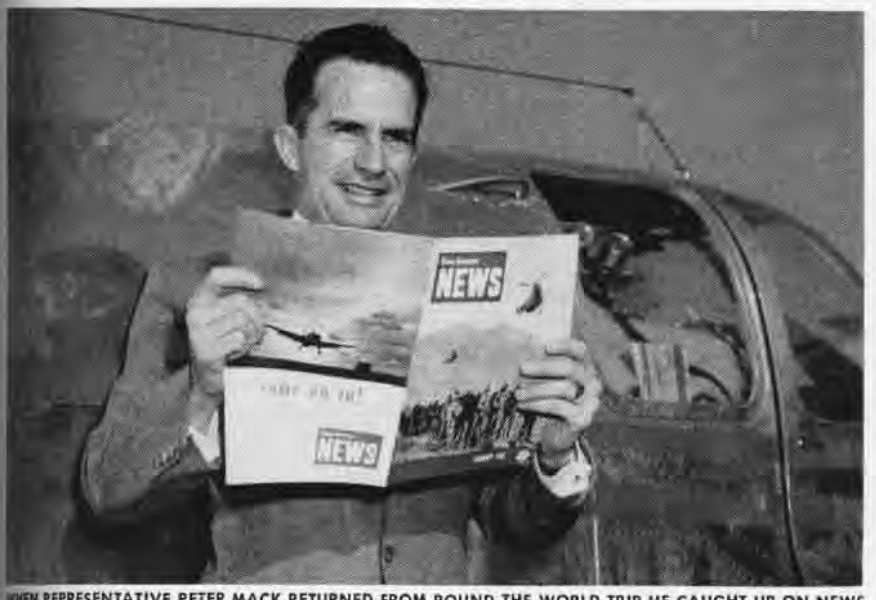
AU. The most recent member of the *Corsair* family has been slightly modified for service as on attack plane. Changes include a more powerful engine, relocated oil coolers, and additional armor protection.

F9F-6. Flight tests continue on the swept-wing F9F-6. Streamlined design and greater power should produce performance equivalent to the best of communist aircraft. Its name *Cougar* stamps it as an aggressive new member of the feline family of Grumman fighters.

FJ-2. Delivery is imminent on this Navy version of the F-86 *Sabre*. Although bearing the name *Fury*, the FJ-2 is a different airplane, from the point of view both of appearance and performance, from the original *Fury*, the FJ-1.

FIAT'S JET TRAINER COMES NEAR BEING ITALIAN COUNTERPART OF LOCKHEED'S JET TRAINER TV-2

MACK COMPLETES GOOD WILL TOUR



WHEN REPRESENTATIVE PETER MACK RETURNED FROM ROUND-THE-WORLD TRIP HE CAUGHT UP ON NEWS

AFTER 33,233 miles in 113 days, Congressman Peter Mack, LCdr. USNR, brought his Beechcraft *Bonanza* to its starting point, Springfield, Ill.

Member of the Organized Reserve with FASRON 665 at the Naval Air Reserve Training Unit, Anacostia, D. C., Mack completed a good will tour around the world. The trip was sponsored and paid for by the people of the Abraham Lincoln country of Illinois. Thus the name—"Abraham Lincoln Good Will Tour."

Plane he used was the same *Bonanza* flown by Bill Odom from Hawaii to Teterboro, N. J. nonstop. It is fitted with extra tanks on the wingtips and in the cockpit. Total gas capacity is 265 gallons.

With that load of 1590 pounds of gasoline, Mack had to use 2,500 feet of runway on his long hops—a lot of runway for a small plane. Rate-of-climb with that load was 150 fpm.

Mack said his Navy navigation training paid off on the long overwater hops. He used dead reckoning and the "bird-dog" automatic direction finder.

Only routine maintenance was needed for the plane on the long trip. The Continental engine perked along without a miss. Fuel, oil, and maintenance added up to about $1,000. Other expenses amounted to $7,000. Mack had made an original estimate of $15,000 for the trip.

The plane had been placed in the National Air Museum of the Smithsonian Institution by the Beech Aircraft Corporation. By agreement, it was withdrawn for the tour. The plane will probably be returned to the museum after formal procedures for readmission are completed.

Mack's route took him south to Argentina; across the Atlantic via the Azores to Spain; as far north as Helsinki, Finland; the Mediterranean, India, Korea, Japan, Wake Island, Midway, Hawaii and home.

In Korea, the Congressman visited forward airstrips where he talked with Marine pilots engaged in ground support missions.

While in Japan, Mack visited the Naval Air Station, Atsugi, near Tokyo, where he met Cdr. Frank W. Lowe, Jr., under whom he served at the Navy flight school at Clarksville, Tenn., during World War II.

The projected final return of Mack to Washington from Springfield, where he had rested from the arduous trip, left his welcoming committee hanging on the ropes.

He was scheduled to arrive Sunday 3 February, but weather held him in Springfield. Four Congressmen, many pretty girls (Mack is a bachelor and this is leap year), and officials gathered around a cake formed in the shape of the world, surmounted by a model of his plane. The ceremony was recorded, including a ditty written for the occasion by Capt. T. B. Payne, Commanding Officer of the NARTU.

Typical eastern U. S. winter weather prevented Mack's arrival until the following Friday, when the press and newsreels had a field day with him. During the press interview Capt Payne handed him his appointment as Lieutenant Commander, USNR, which had arrived during his absence.

Mack stated that most of the receptions he received were warm and friendly. Some 30 goodwill scrolls were presented to officials along the way.

R5D Makes Special Flight

Polio Patient Flown to Warm Springs

An R5D of Air Transport Squadron Three, NAS MOFFETT FIELD, Calif., recently made a special non-stop flight to La Grange, Ga. Aboard the transport was WAVE seaman, Louise Schuall, a victim of polio. The patient was flown to La Grange so that she could undergo treatment at the nearby Warm Springs convalescent center.

Miss Schuall was stricken with polio last October. For three weeks she was kept in an iron lung at the Naval Hospital, Oakland, Calif. At first she was paralyzed in all four limbs, but at the present time she has partial use of her arms.

Medical personnel accompanying Miss Schuall on the flight were VR-3's medical officer, Lt. D. E. Brown, Lt.(jg) Lily Pechal, flight nurse, and hospital corpsmen Edwards, King and Green. An iron lung was also transported with the patient so that it would be available if needed.

SN SCHUALL BIDS HER WAVE VISITORS GOODBYE

VF-192 Gets Special Training

Some Pilots Make Outstanding Records

Fighter Squadron 192 recently completed a highly successful two-week tour at NAAS EL CENTRO, California, which was devoted to fighter weapons training.

The first four days were given entirely to individual pilot qualifications in bombing, rockets, and strafing. Lt. (jg) H. W. Westervelt completed the outstanding individual score: a rocket firing score of a three-foot average for eight rocket drops. This consisted of seven bullseyes and one 30-foot drop.

Every pilot in the squadron qualified in rocket firing.

When the sun went down, it was the signal for intensive work on night weapons. Each pilot flew three night strikes. Best scores in this category were made by the skipper, Cdr. E. A. Parker, and Ens. C. H. Molling.

During the ten-day training period, the squadron flew over 1,000 hours without a plane accident of any kind.

LONELIEST JOB ON THE EAGLES' BARREN CRAG WAS THE PLANE WATCH. P2V's FLEW PATROLS AROUND THE CLOCK IN "HUNTER-KILLER" TEAMS

THIRTY DAYS WITH THE 'FLYING EAGLES'

CHEERFULLY *sharing the cramped quarters of "El Rancho Poncho" are squadron photographers—Kirchen, Demelas and Mayer*

THE "FLYING Eagles" recently spent a month on a lonely aerie on San Nicolas Island, Calif. After arriving from NAS WHIDBEY ISLAND, VP-931, Philadelphia Reserve unit, set up camp and began patrolling a wide area of the Pacific. They received no aid from outside sources.

The crews dug in like infantrymen, sleeping outdoors in sleeping bags covered with ponchos. Water was distilled in a portable plant; bathing limited to one helmetful of water.

Flying more than 350 hours during "Operation Pack-up," the nine P-2V's detected and knocked out many "enemy" submarines. A close study is being made of the test in order to determine what amount of equipment will be necessary on future "pack-up" operations.

VAdm. T. L. Sprague, COMAIRPAC, who made an inspection during the test, said that the operation was further proof of the Navy's mobile and high-speed striking power. It demonstrated that squadrons can operate swiftly and efficiently without assistance from remote bases.

AUXILIARY *power booster is unloaded from R5D. All supplies and equipment were flown in by transports or squadron P2V's*

THIS IS *a radio shack? Outside contact was maintained with a communications unit consisting of tent and field radio unit*

NO FRESH *water supply was available on the island. Salt water distillation unit provided some 600 gallons of water daily*

FIELD SICK *bay was operated by Lt. (jg) Jesse Bowers, shown treating hand of Lt. James Manolakis as Thomas Fox assists*

CLEANING *mess kit is Richard Ellis; rations in background were used exclusively*

HUNTER, *Clifton Hill, holds duck which found resting place but not in stew pot*

WINDS UP *to 40 knots delayed engine change which was done in about 200 man hours*

VADM. T. L. *Sprague and inspection party check heater immersion units in G.I. cans used for general cleaning purposes*

SOCIAL *life on the island centered around camp fires when the winds, which often averaged 20 to 30 knots, weren't blowing*

Tower Has Separate Ground Control

ALTHOUGH the Naval Air Station, Anacostia, D. C., is not an all-weather station, it is one of the busiest.

Its control tower can be compared to a man who needs 10 arms and four mouths to handle all his business.

After extensive alterations, the tower now is believed to be the only one in the Navy and Air Force which has an official separate ground control frequency. Some

L.-R. ERSKINE, COUPE, DEORTH, SARGENT, DOYLE

CAA towers have it. NAS's at Patuxent River and Norfolk are due to follow suit.

The Washington area offers a unique problem in that three busy airports, Washington National, Bolling Air Force Base and Anacostia NAS, are within a circle with a diameter of three and one-half miles.

NAS alone handles 6,000 departures and arrivals per month. To coordinate the local traffic with other fields a system of control positions was devised.

The new console in the forward part of the tower room was modified from a design originated at Wright-Patterson laboratories. Four controllers operate at this console. The "A" position, local control; "B" position, flight data; "D" position, ground control; senior controller, liaison with Air Route Traffic Control, Bolling AFB and NAS Operations.

The ground controller directs all traffic and vehicles on the operating portion of the field, issues taxi instructions (runway in use, altimeter setting, wind conditions and time check). The local controller controls all aircraft in or approaching the traffic pattern, arriving and departing, and coordination with Bolling and National airports to avoid traffic interference.

Pneumatic tubes from the tower to Operations have been eliminated. Communications are now by means of a teletalk system. Telephone instruments have been cut to two, although there are many additional lines coming in.

Ground control is on 132.2 mc, and the regular low frequency of the tower. Operators can use headphones instead of speakers when noise level is high.

ANACOSTIA TOWER ONE OF BUSIEST IN NAVY

Navy Gets Sweptwing Jet

FJ Has Many Engineering Changes

A new Navy *Fury* is flying today, the XFJ-2, similar in appearance to the Air Force F-86 but with many engineering changes inside its sleek fuselage.

Powered by a General Electric J-47 turbojet, the plane is rated in the 650 mph class. It has a 35° sweptwing. Like the first *Fury*, the FJ-1, it has a tricycle landing gear, but does not have the kneeling nose wheel mechanism of the straight wing model. Its normal nose-up attitude can be increased for carrier deck catapulting.

The cockpit is an entirely new design and covered with an advanced designed sliding, jettisonable canopy and Navy ejection seat. It has four 20mm cannons instead of the .50 cal machine guns of the FJ-1. It has a 1,000-mile range and service ceiling of more than 45,000 feet.

An improved Navy gunsight and new homing radio equipment are included in the plane's design changes. For easy maintenance, it has many additional access doors. It has a 37-foot wingspan and comparable length. Maximum take-off weight is 18,000 pounds.

The prototype FJ-2 first flew from the Los Angeles plant, but it is going into production at the Navy-owned plant of North American at Columbus, Ohio.

Marines Get 3rd Air Wing

Miami Air Station Houses New Outfit

MCAS CHERRY POINT—The Third Marine Aircraft Wing was commissioned at this air station on 1 February as a part of Aircraft, Fleet Marine Force, Atlantic. Like the Second MAW, it is under MGen. Thomas J. Cushman, who led the first Marine air units in the Korean war.

The new Wing is commanded by Col. Walter L. Bayler. Right now it consists of administrative squadrons only, although tactical squadrons will be added soon. As soon as facilities are completed, the Wing will move to Mainside field at the former NAS MIAMI.

Commanding officer of the new Marine field is Col. Thomas G. Ennis. Since the war, Mainside has been used by civilian commercial firms and aviation companies, with Naval and Marine Air Reservists operating off nearby Master field. It is expected Reserves will use Mainside also.

NEW NAVY FURY IN BACKGROUND IS OUTGROWTH OF AERONAUTICAL FINDINGS IN EARLIER FJ-

NEW SAFETY RECORDS MADE

IN 19 MONTHS, VMF-223 HAS CHECKED OUT 146 PILOTS IN PANTHER WITHOUT AN INCIDENT

ON BOTH coasts, Marine fighter pilots are making enviable safety records. On the east coast, VMF-223, commanded by LCol. F. E. Hollar, is the prize unit. On the west coast at one of the largest military reviews in the history of El Toro, VMF-235 was recently presented the Navy's Safety Award for the second consecutive time.

All units attached to Aircraft, Fleet Marine Force, Pacific, participated in the parade and passed in review before Col. P. K. Smith, acting Commanding General, and members of the award-winning squadron.

Presented to VMF-235's commanding officer, LCol. Joe L. Warren by Col. Smith, the Navy's Safety Award is given quarterly to the Navy or Marine Corps fighter unit with the greatest number of accident-free hours by the Commander Air Force, Pacific Fleet.

The squadron received their first award for the July-September 1951 period during which they flew 2493 accident-free hours.

The squadron surpassed this record by logging 3156 hours during the October-December 1951 period.

During both periods, VMF-235 was attached to Marine Air Group 15 under the command of Col. Edward B. Carney.

Many members of the original squadron which won the two awards have been assigned to other organizations at El Toro, but the present personnel of VMF-235 are determined to make it "three-in-a-row."

At Cherry Point, on the first day of 1952, VMF-223 listed on its roster only 12 pilots who had flown the F9F *Panther* jet. Added to this, the squadron could field only seven flyable aircraft as it was in the process of switching from F9F-2's to F9F-4's.

Within a week, pilots from Organized Reserve activated last October began reporting to VMF-223. They hailed from VMF-124, Memphis, VMF-132, New York; VMF-233, Norfolk; VMF-244, Columbus; VMF-217, Squantum; VMF-231, Akron, and VMF-541, Birmingham. Five weeks later, 33 pilots from these squadrons had checked out in the *Panther* smoothly.

This marks a total of 146 pilots checked out within the past 19 months without incident. During 1951, VMF-223 flew 10,200 jet hours in training replacement pilots for action.

In addition, the squadron has completed training cruises aboard aircraft carriers *Franklin D. Roosevelt, Midway, Saipan* and *Tarawa.*

NO, THIS *gruesome-looking beast isn't out of a nightmare. It's an iguana, direct descendant of the prehistoric dinosaurs and other reptiles. W. D. Bell, ADC, of VP-23, captured the reptile in his backyard in Miami after it had thoroughly frightened his children. Origin of the reptile is a mystery, since it is a native of South America. It was turned over to a Miami rare bird farm for exhibit*

Hurricane Hunters Are Busy

100-Knot Flights Win Century Honors

VP-23, MIAMI—Aviators interested in high speed flight at low altitudes should join this squadron, the "hurricane hunters", which just completed the winter season with a record of 54 reconnaissance flights, 12 of them through winds of 100 knots.

A total of 366 flight hours were put in checking on hurricanes, with 26 flights resulting in direct penetrations into the calm "eyes" of full-blown hurricanes.

Personnel making the flights into 100-knot winds were awarded "Century Club" cards certifying they had performed the feat and become members in one of the most exclusive outfits.

Ocean Search Finds Pilot

Hawaiian Squadrons Locate a Civilian

COMFAIR HAWAII—Seven ships and 15 planes scoured the waters around Oahu island for a lost wildlife biologist, Donald Smith, whose private Stinson plane had disappeared on 21 January.

Bound from Kahului, Maui, for Kailua, he closed out his flight plan at noon while still airborne. Minutes later he radioed he was in distress, bucking headwinds and out of gas. Bearings taken on him resulted in only one leg of a fix that was trackable. Then one last message: "Here I go . . . goodbye."

LCDR. BLODGETT, CHIEF TERPAK WITH SMITH

Navy and Air Force search planes left nearby stations immediately. A patch of brown, possibly shark repellent, was sighted but no pilot. Sunset saw no trace found, so all planes but one from the Coast Guard returned to base. The latter flew around in hope that Smith had a signal flare he might use.

At sunrise planes from VP-9, VP-6 and VP-28 were launched at Barber's Point. At 0923, some 80 miles northeast of Oahu, he was sighted.

"There he is," cried plane captain A. J. Terpak, chief aviation machinist, from the gun turret of a P4Y of VP-9, piloted by LCdr. R. B. Blodgett. Twenty-eight minutes later, the destroyer *Gurke* picked him up and brought him safely home.

BLIMP PILOTS TOTAL 139

NEWCOMERS *to the Navy's ranks of blimp pilots are these 22 men, who finished the course at NAS Lakehurst on 29 January. They are: seated, Beck, Dorish, Fisher, Curless, Farrell; standing, middle row: Wenzell, Holoien, Proctor, Wintraub, Nilson, Williams, Wade, Stewart; back row, Johnston, D'Esposito, MacIntosh, Cochrann, Mitchell, Prosser, Tigert, Monroe and Stiteler. Absent from the photo were MacMurray, Janousek and Miller.*

NAS LAKEHURST—A dozen heavier-than-air pilots and 13 former aviation cadets comprised the February graduating class in the lighter-than-air school here, having completed the four-months training course to become qualified blimp pilots.

Since 1949 only heavier-than-air men have been enrolled in the airship training classes, a total of 139 having graduated since then. The next class convenes on 1 June and applications can be made to BUPERS via commanding officers at any time.

Heavier-than-air pilots who have graduated from airship training since 28 December, 1949, follow:

Lt. J. D. Richardson, Lt(jg). R. C. Lemert, Lt. W. B. Longino, Lt(jg). W. C. Richison, Lt(jg). M. O. Richel, Lt. H. W. Kest, Jr., Lt. W. L. Balestri, Lt(jg). F. E. Rivers, Lt(jg). D. Mosser, Lt. H. F. Newell, Lt(jg). R. J. Poynter, LCdr. F. Hewitt, Lt. R. E. Duncan, Lt. R. D. Webb, Lt(jg). V. R. Knick, Lt(jg). W. Hurst, Lt. C. R. Meissner, LCdr. J. W. King, Lt(gj). A. E. Powell, Lt. H. A. Carter, Lt(jg). R. G. Baker and Lt(jg). W. H. Weimer.

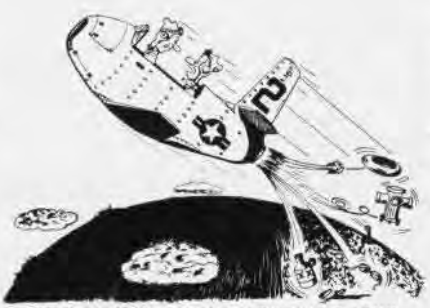
Ens. J. N. Spring, Ens. A. G. Wartman, Lt. A. W. Byrd, LCdr. L. H. Reagan, LCdr. J. F. Weatherly, Ens. T. R. Cuthbert, Ens. A. G. Carter, Lt(jg). R. H. Pauls, Lt. W. B. Dever, Ens. O. E. Gerchen, Ens. J. F. Schneider, Lt(jg). J. G. Snyder, Lt(jg) W. J. Harper, Lt. E. B. Young, Lt. A. B. Rhodes, Cdr. M. J. Halman, Ens. J. R. Hogan, Ens. C. O. Borgstrom, Ens. E. P. Ausbrooks, Jr., Ens. R. D. Kephart, Ens. A. S. Stromski, Ens. W. M. Fitzgerald and Ens. D. R. Brown.

Ens. C. B. Cox, Ens. G. H. Morgan, Ens. R. J. Scherer, Ens. O. J. Fry, Jr., Ens. R. L. Nelson, Ens. R. C. Lowry, Ens. A. E. Debout, Ens. G. R. Bonsignore, Ens. P. A. Brandorff, Ens. R. J. Kulus, Lt(jg). F. Peterson and Lt. R. E. Redmond.

Lt(jg). N. O. Stieler, Lt. C. E. Phillips, Lt. A. L. Walsh, Lt. E. O. Jensen, Jr., Lt. A. R. Vaatveit, Lt. J. G. Ballou, LCdr. W. E. Griffin, Jr., Lt. A. R. Boyle, Lt. E. A. McDonald, Lt(jg). L. V Altz, Jr., Lt(jg). G. F. Smith, Ens. W. E. Biro, Ens. C. F. Lapple, Ens. W. A. Kimball, Ens. N. A. Laderer, Ens. H. A. Chandler, Ens. F. E. Rowan, Jr., Ens. R. L. Williams, Ens. J. E. Rylee, Ens. E. H. Sengstacken, Ens. L. H. McClone, Ens. B. M. Barton, Lt(jg). R. F. Curry, LCdr. C. Duncan, Ens. J. W. Erhart, Ens. J. J. Hale, Ens. J. H. Hartley, Lt(jg). W. M. Hickman, Ens. W. B. Hunter, Ens. W. E. Klinker, Ens. E. D. McConnell, Ens. W. J. Payne, Ens. R. A. Pettigrew, Ens. J. R. Redman and Ens. V. L. Saxe.

Ens. L. H. Schubert, Jr., Ens. I. N. Schwarz, Lt(jg). J. S. Williams, Ens. R. F. Wenzel, Ens. A. P. Weintraub, Lt(jg). J. A. Wade, Lt(jg). M. A. Tigert, Ens. D. G. Stiteler, Ens. G. R. Stewart, Ens. W. R. Prosser, Ens. R. B. Proctor, Lt(jg). C. E. Nilson, Lt(jg). R. J. Munroe, Ens. J. C. Mitchell, Ens. W. L. Miller, Lt(jg). C. P. McMurray, Ens. M. M. Johnston, Jr., Ens. J. R. MacIntosh, Ens. R. J. Janousek, Ens. L. A. Holoien, Ens. J. H. Cochrane, Ens. J. D'Esposito, Lt. J. H. Fisher, Lt. R. L. Farrell, Lt. A. Dorich, Lt. J. P. Curless, and Lt. C. L. Beck.

Lt(jg). R. J. Born, Ens. J. V. Canto, Lt(jg). W. W. Denney, Lt(jg). P. A. Dilgren, Lt(jg). T. N. Drace, Lt(jg). J. J. Dulhagen, Lt(jg). H. C. Finkel, Jr., Lt(jg). W. R. Gawthrop, Lt(jg). R. L. Hagedorn, Lt(jg). E. M. Haugh, Lt(jg). W. P. Mulholland, Lt(jg). R. F. Jones, Lt(jg). C. D. Little, Ens. W. E. Longley, Lt(jg). S. R. Overall, Jr., Ens. C. J. Rose, Lt(jg). H. G. Spahr, Lt(jg). R. Tull and Ens. M. E. Twaddell.



WHAT DO YOU MEAN THAT WASN'T LOW!

Babies Must Breathe Too

Oxygen Available On Overseas Trips

FLOGWINGLANT/CONTL — Oxygen masks for infants will be available on FLOGWING transatlantic and Mediterranean flights. The masks, a standards nasal type used by MATS for infants, will be distributed to VR-1 and VR-24 for use on overseas flights.

The face masks that are in use at the present time are designed for adults. The nasal type, which is also designed for adults, is small enough to be used as a face mask for the babies.

HOW WOULD *you like to get a 24-foot letter from home as Seaman Apprentice John F. Helm of the Bairoko did? Papa Helm put a writing pad by the cash register in his grocery store in Thiensville, Wis., for the folks to jot a line to "Bud." The result was a letter that took 85¢ worth of air-mail stamps to send him in Korean waters.*

USS Oriskany Gets Robot

Device Keeps Ship On Straight Course

The *Oriskany* has been designated as the first carrier to be equipped with a new automatic steering device recently approved by the Navy.

Originally developed after World War II, experimental predecessors of the robot helmsman are already being used in destroyers and submarines. The new steering device will hold an aircraft carrier's heading accurately over long periods of time and will keep a straight gyro course despite varying wind and sea conditions.

It has also been reported that the robot can follow rapid change-of-course commands and that personnel can take over manual steering at any time. Besides aiding carriers in combat maneuvers, the robot can assist vessels in refueling dirigible airships and smaller surface craft at sea when accurate steering on a straight navigational course is essential.

Right Through the Bull's-Eye

Pilot Scores High In Rocket Firing

VF-44, ATLANTIC—An oft-quoted remark from Alice in Wonderland, "things grow curiouser and curiouser", must have seemed quite apt to squadron mates of Ensign G. C. Lyne of VF-44. Last month, in rocket firing competition conducted by Carrier Air Group 4, the young *Corsair* pilot systematically threaded the eye of the bull's-eye four times out of four tries.

Then, in quick succession, Ensigns J. R. Macy and R. B. Dowst, also of

FOUR OUT OF FOUR IS A TOP SCORE FOR LYNE

VF-44, scored hits with average errors of 12 and 15 feet respectively. The three ensigns ended practice with a nine-foot average error.

Ensign Lyne, when asked how he managed to hit the eye of the bull four times in a row, made almost as fine a statement as Alice: "I made the same mistake four times."

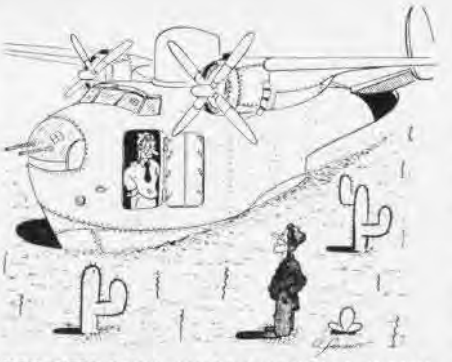
FallWeaTraPac Gets Jets

Fighter Pilots To Receive Training

NAS BARBER'S POINT—A sleek new jet plane arrived at Barber's Point recently to be used by Fleet All Weather Training Pacific. It is the first jet to be permanently based at that station since 1949.

This is the first of three TV-1 jets allotted to FallWeaTraPac by BUAER. Generally known by its Air Force name of *Shooting Star*, the Navy's designation for the plane is TV-1.

At present there are five men in the squadron who are qualified as jet pilots. With these men as the nucleus, the squadron plans to qualify all their permanent night fighter pilots for the TV-1. With this training they expect a quick transition to the new Douglas F3D which the squadron expects to receive shortly.



YOU WERE RIGHT, CHARLIE, IT WAS A MIRAGE

Navy Laymen Get Religion

Volunteers Conduct Chaplain Duties

Amazing as it may seem, more than 1,000 officers and enlisted men of all religious faiths are conducting divine services aboard ships of the U. S. Fleet throughout the world.

The Navy has initiated a program to provide religious observances in the absence of a chaplain, whereby the volunteers carry out certain chaplain duties but do not conduct communions or perform baptisms.

The lay program is designed to maintain religious activity aboard smaller vessels which depend entirely on "circuit-riding" chaplains for church activities. The Protestant and Jewish religious representatives conduct worship services, while Catholic lay leaders conduct rosary services. A program has been adopted to supply equipment for divine worship including recordings of religious music.

It's A Long Way To Drop

Reserve Pilot Crashes On High Peak

When 12 Marines arrived at a lofty spot just 20 feet from the top of Sonora Peak, they received a sincere welcome from Lt. William A. Poe. He had crashed his plane there 28 hours earlier.

The former Reserve Marine pilot, who is stationed at NALF FALLON, survived the crash and his many hours in 30-below-zero temperature at a height which approaches the oxygen-mask level.

Lt. Poe was never lost, having been sighted going down and, as the plane crashed, skidding in the snow toward a precipice (a shear drop of 4,000 feet) by his fellow pilots. He was seen walking away from the wreckage and waved at the two remaining airplanes circling overhead. The third raced back to the field to pick up a rescue kit of warm clothing and emergency rations and later parachuted the bundle by the wreckage.

After the first aerial drop, a B-17 from Hamilton AFB dropped a sleeping bag and tent. Lt. Poe waved after both drops, signaling recovery.

The rescue party was forced back the first time to obtain warmer clothing to battle the 30-foot drifts of snow in its path to the wreckage. In the meantime, Lt. Poe had wandered from the plane. Efforts to wave him back to lessen the possibilities of his getting caught in a snow slide failed at first. He finally caught on and trudged back in time to meet the rescue party.

THE NAVY'S *new XA2J-1 takes off from Los Angeles International Airport on its first flight. This carrier-based attack bomber, built by North American Aviation, is capable of speeds in excess of 400 miles an hour. Its maximum take-off gross weight exceeds 26 tons, thus making it the heaviest of the Navy's carrier planes. The XA2J-1 is powered by two Allison T-40 turboprop engines, turning six-bladed contra-rotating propellers. It carries 20mm armament and has a bomb load of 10,000 pounds*

TRANSPORT PLANE FITTINGS STANDARDIZED

WITH the opening of the Korean conflict, the Navy, having long recognized the absolute necessity of a strong and well-balanced air transport arm in support of the Fleet, launched a substantial procurement of new and modernized transport aircraft, both land and seaplanes.

This was done to rejuvenate the fast dwindling facilities of its Fleet Logistic Air Wings and, concurrently, of the Naval components of the Military Air Transport Service.

When the Navy first tackled the job, four types of aircraft built by three prime aircraft manufacturers were involved. There were the new R3Y-1 seaplane transport built by Consolidated Vultee, the R6D-1 (DC-6A) built by Douglas, the R7V-1 (Super Constellation) built by Lockheed, and the R4D-8 (Super DC-3) modernized completely by Douglas from long-used Navy R4D's.

In addition, it was required that each type be configured for three-way usage as cargo aircraft, as personnel transports, and lastly as hospital or litter evacuation transports. Each airplane of each type was to be capable of being readily changed from one configuration to another by the operating squadrons at a moment's notice.

The Navy went even further. It began looking into the means of effecting interchangeability of principal contractor-furnished-equipments between all the types of aircraft involved, for the obvious benefits of economy, simplification of fleet supply problems, and ease of maintenance and repair.

It began in San Diego last Fall at the original R3Y-1 mock-up, where Consolidated-Vultee trotted forth a new and unique little gadget called the "Pogo Stick". The "Pogo Stick" is a relatively simple device consisting of a steel rod, on the lower extremity of which is mounted a pulled wheel (*see illustration*). When being used it fits into a standard seat stud, the same stud incidentally that all the aircraft were to use to anchor their respective seats.

POGO STICK MAKES EASY TASK OF SLIDING LARGE CRATES ONTO AND INTO NAVY TRANSPORTS

Now what is a "Pogo Stick", and why does such a small and insignificant gadget occupy so much space and attention? First, it was an obvious means of changing the direction of tractive effort of the power-winch location within the airplane and used to assist the loading of large, heavy, and otherwise unmanageable pieces of cargo.

SECOND, and perhaps more important, the "Pogo Stick" gave birth to the idea of seeing what could be done to effect standardization of other contractor-furnished-equipments between aircraft, i.e., seats, litter installations, external hoist devices, ground-handling equipments, and other associated hardware.

In the early part of this year, ConVair, Douglas, and Lockheed, along with the Bureau of Aeronautics, got their respective heads together in an effort to see what could be done.

In the case of the "Pogo Stick", ConVair had already done the job. In the case of the seats, which were to be contractor-furnished in each case, a large and seemingly insurmountable task was in store. These seats were to be reclining and would have to fit the interior dimensions of each of the four aircraft involved. In addition, the seat legs must each fit all of the stud patterns of each aircraft, and be readily foldable.

Other requirements included the design capability for aft as well as forward facing, with a 20G requirement in the case of the aft-facing installations, and lastly minimum weight.

Since the basic seat requirement was dedicated principally to the elimination of the curse of bucket seats and troop benches which have continually plagued the military air traveler in the past, a compromise on seat comfort or airline "plush" features was reached.

SAFER AFT FACING SEATS FOR PLANES WILL BE STRESSED TO OVER 20G'S

REMOVABLE LITTER STANCHIONS TRANSFORM PLANES FOR INJURY CASES

Inasmuch as the Navy is requiring identical seats for all aircraft on a continuing basis, a master specification is being prepared by the Bureau of Aeronautics for open building.

No less a contribution was that of the Douglas Company which handled the engineering coordination of interchangeable litter installations and associated hardware. For example, any of the litter stanchions will fit any of the aircraft involved and, like the seats, the Navy supply system won't be cluttered with a multiple of loose pieces of equipment, all different.

SIMILARLY, the Douglas R6D-1 litter lift and cargo lift is destined to be adapted to the Lockheed R7V-1. Both are land-based cargo planes and will fly, in many cases, into and out of the same bases with the same kinds of cargo.

Douglas engineers have also cooperated with ConVair and Lockheed engineers in formulating and conducting various cargo loading studies.

"Now why," one may ask, "is all this so phenomenal? Why is anyone making a point of parading this small effort for all to see, when, in fact, the need for standardization and interchangeability in such as this should be obvious to any average high school sophomore?"

Well, it's a good question, and the answer is fairly short and clear-cut. First, the Navy is not in the plumbing, hardware, and electrical supply business.

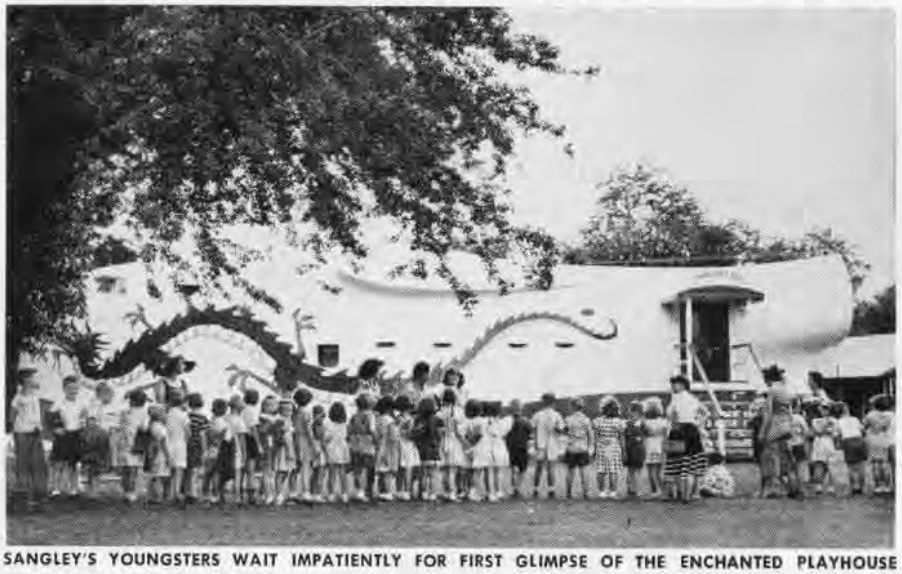
While the Navy does have hard-and-fast standards and rigid specifications for aircraft primary systems, it has in the past preferred to procure such items as seats, for example, directly from the airframe contractor and contractor-furnished-equipment rather than government-furnished-equipment. Flight instruments, electronics and communicating equipments, propellers, engines, and so forth, are GFE.

Second, in the case of the R6D-1 and R7V-1 aircraft, the Navy is procuring these aircraft essentially "off-the-shelf"; that is, from current production lines of equivalent commercial airline aircraft, rather than through an independent and far more expensive military development of a specific military cargo plane.

Since the "off-the-shelf" airplane is thus in production, it has very likely many design features already committed, which may make interchangeability of equipment with other aircraft hard.

• The average SNB at the All Weather Flight School at NAS CORPUS CHRISTI spends 80 hours each month in the air. Each week it gets a 30, 60 90 or 120-hour check. In one year, this average plane flies 124,800 miles, or five times around the center of the world, at an average speed of 130 knots; it uses *360 miles and burns 43,000 gallons.*

PBM ENCHANTS NAVY TOTS



SANGLEY'S YOUNGSTERS WAIT IMPATIENTLY FOR FIRST GLIMPSE OF THE ENCHANTED PLAYHOUSE

Shades of the Middle Ages! The "Dragon's Den" has become a playhouse for the small fry in this modern day and age!

By all rights the old PBM from VP-731, having sprained her back in a waterloop in Manila Bay last spring, should now be rusting quietly on the airplane graveyard scrap heap at the U. S. Naval Station at Sangley Point, P. I. But because Capt. J. T. Brown, then skipper of the station, felt that the bored Navy juniors shouldn't be wandering listlessly around the station, he decided they should have a place to play. That's how the idea was born to turn the old PBM into an enchanted playhouse for children.

At Capt. Brown's suggestion, and under the direction of Chief Aviation Machinist's Mate Edward L. Murray, an ex-aviation pilot with three children of his own, work was completed in three months, mostly in spare time. Scrap material was used in the project.

JOHNNY WIGGINS POINTS AT SMILING CLOWN

In the last days before the playhouse was finished, curious children gathered to watch attentively as a sign painter decorated the side of the PBM with a fascinating illustration of a dragon. The nose of the PBM was painted with the picture of a smiling clown.

On 9 November 1951 children stood outside the new playhouse waiting patiently for the dedication ceremony to began. The plane was recommissioned as the "Dragon's Den" by Capt. Brown. Immediately after the official opening, the children were taken inside for an inspection tour. Inside they found thrilling playrooms with intriguing names like the "Sky Room."

The plane is currently logging more hours than her sisters on the ramp at Sangley. There is a waiting line of small fry for the pilot and copilot seats. There's no restrictions on flights. Any child who wants to fly the wingless craft is cleared, regardless of weather. Oil pressure, fuel, and airspeed indicator are painted on the panel for instrument work.

Naturally, there's one fly in the magic ointment—all flights must end in time for supper.

• NAS QUONSET POINT—Lt. (jg) Charles Driscoll of VS-913 recently risked death when he noticed twelve potato pickers in the field he had picked for an emergency landing. He "mushed" his TBM into a woodlot instead. He was not injured but his plane will never fly again.

• NARTU SEATTLE—The first squadron operation when VMF-216 reported aboard for active duty was an en masse blood donation at the King county blood bank.

• NAS OAKLAND—A concerted drive is on at Oakland to recruit men for billets as stationkeepers and for Organized Reserve squadrons. A mobile recruiting unit is visiting California cities with very good results.

AS PLANE IS WHEELED INTO CATAPULT POSITION ON ANTIETAM'S FLIGHT DECK, PANTHERS ROAR INTO CLOUDY SKIES TO HIT COMMUNISTS

RESERVES STAR AT WAR AND AT HOME

NAVAL AIR Reservists continue to turn in fine performances on both the war front and the home front. The all-Reserve Air Group aboard the *Antietam* is completing a second tour of combat flying over Korea. If the second tour turns out as successfully as the first, the fliers will get back to the Tokyo area with their chests covered with decorations.

Among CVG-15's squadrons there is a good deal of friendly rivalry between the jet jockeys and the prop boys. The competition is helping the group make headlines. But when it comes to giving credit where credit is due, there isn't a single pilot who won't pay tribute to the men who play second fiddle—the ground crews who keep the planes in the air.

Not much has been written about these men and the training they received as members of the Organized Reserve, but that training is paying big dividends now. Their jobs are much like those of a boxer's seconds. They keep the planes in fighting shape and patch them up between missions. Their goal is to see that the planes put in as many flights as possible over enemy territory. They are fighting a constant battle against the salt spray and soot from the ship's stacks, but they keep the planes as fit as any champion fighter.

On the home front too the ground crews are helping to keep the Naval Air Reserve in the headlines.

Recently in Hilliards, Ohio, 52 freight cars of two Pennsylvania railroad trains piled up in a wreck that set off a terrific gasoline or naphtha explosion and badly damaged a large Farm Bureau grain elevator.

Five firemen from NAS COLUMBUS answered the call for help in fighting the fire. Many of the wrecked cars were set afire and one of them was loaded with Army ammunition and shells which exploded almost continuously for more than three hours, imperiling the lives of the firemen battling the flames.

DRESSED *in asbestos fire suits, Asche and Vercruysse of NAS Columbus apply foamite to the raging fire at Hilliards, Ohio*

INTERESTED *spectators hear R. M. Faust, ADC, of NARTU Norfolk explain details of model J-30 Westinghouse turbojet engine*

PREPARING *attack bomber for next flight are Budzinski, Rhodes, Zielinski, McElroy and Barth—VA-728 mechs on the Antietam*

AVIATION *metalsmiths of VA-728—Lang, White, Burton and Jerome —prepare to repair Skyraider on hangar deck of Antietam*

Since the firemen from NAS COLUMBUS were the only crew with asbestos face masks at the fire, they got closer to the holacaust with their equipment than anyone else. At first they thought someone was throwing rocks at them, but then they learned that they were getting hit with shell fragments. In lending their assistance in the community disaster, the firemen claimed that they saw more action that night than they ever saw overseas in combat.

The community around NAS LOS ALAMITOS underwent a serious emergency during recent storms and heavy rains and the personnel from the air station immediately began emergency disaster work in helping to evacuate families from their homes in the town.

A field station was established at the fire house and auto telephone communication was set up with the station. Navy vehicles, ranging from huge trucks to smaller pickups were constantly roaming the area picking up evacuees. A steady stream of people was brought aboard the station and housed in the BOQ annex.

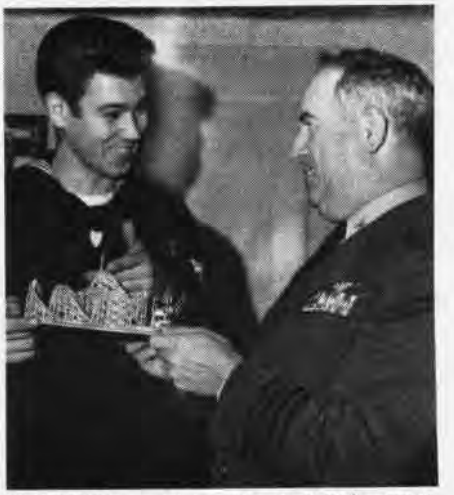
Many of the evacuees were children and most of them were inoculated against typhus. In addition, a total of 1000 local residents were given typhoid shots in the medical department. To assist in this work two nurses were flown in from the Naval Hospital at Oceanside, Cal. Prior to setting up the inoculation station, permission was received from the Orange County health department.

While not participating in a community disaster, the men at NAS WILLOW GROVE recently undertook a community project in typical Navy style. When the United Cerebral Palsy Center was established in the neighborhood of the station, word soon got around that the center was in dire need of an electroencephalogram. The instrument is used to determine brain injuries and record brain waves. The big-hearted Navy men sponsored a benefit dance and show on the station to raise between $2,000 and $4,000 to procure the machine.

Norfolk Plugs Reserve Week

The Mayor of Roanoke, Virginia recently proclaimed "Naval Reserve Week" during which NARTU NORFOLK had an opportunity to publicize the NavCad program. On display at the U. S. Naval Training Center at Roanoke were a cutaway J-30 Jet Engine, a KD2G target drone and a TBM torpedo bomber which turned out to be the "Star of the Week." The jet engine and the target drone caught the eye of the adults, but the TBM fascinated the hearts of all youngsters who long to fly.

The outstanding event of the week was "Open House" to acquaint the citizens with the Naval Reserve program. NARTU NORFOLK's "Baby Flat Top", which creates interest wherever it is shown, gave the NavCad program a big boost. It was given ample coverage by radio and newspaper throughout the week. Approximately 3,000 pamphlets and other literature were distributed for the NavCad program.



MOOREHEAD *explains the toothpick coaster to Capt. Drew, CO of NAS Los Alamitos*

More Than Time On His Hands

Here's a most unusual hobby which requires not only a lot of time, but a great deal of patience.

Since Patrick Moorehead, third class disbursing clerk at NAS LOS ALAMITOS, was 14, he has been building model structures out of toothpicks and matchsticks. Tweezers, glue, toothpicks, matchsticks and a lot of time are the only requirements for this type of building. Although he has just finished an original model of his conception of a "fast roller-coaster", Moorehead plans to start in right away on a working model of a ferris-wheel.

The roller-coaster took over 88 hours to complete, using about 950 toothpicks, three tubes of fast-drying glue, and a cigar-box top as a foundation. (It would be worse than 52 pickup if the model ever broke!) Moorehead says that because of the delicacy of the toothpicks, each tiny piece of wood must be set in place wth tweezers, a very eye-tiring procedure.

Station Roundup

• NAS DENVER—C. R. Carlock, chief aviation controller, was recently commended for developing a new-type lighting system for use in the control tower during night operations. A red light enables tower personnel to work efficiently with all equipment and still retain night vision. The system is now being procured and installed in the tower at NAS DENVER.

• NAS AKRON—Pilots of VF-651 logged approximately 192 hours in one day recently. This is a record for one day at this station. Included in the total were 40 hours of night flying.

• NAS QUONSET POINT—Sunken places in the parking apron and hangar concrete decks have been raised by pumping mud-and-concrete mixtures into the low spots.

NOT STANDARD *equipment by any means is this lovely addition to a helicopter. In a recent visit to El Toro, Penny Edwards of 20th Century-Fox was chosen Miss Whirly-Bird by Marines of Observation Squadron 2.*

Onslow Makes Stormy Trip

Emergency Operation Done at Sea

On its recent homeward trip from Iwakuni, Japan, USS *Onslow* (AVP-48) struggled with heavy seas clear across the Pacific. On one day, the clinometer on the bridge registered a roll of 40° to starboard, the maximum roll ever recorded for the *Onslow*.

The same day a P500 pump located on the main deck portside broke loose and travelled the entire length of the deck, finally coming to rest on the fantail.

By the time the ship arrived in Hawaii, the high winds and heavy seas had combined to dislodge several of the liferafts, remove about 100 square feet of paint from the main deck and twist two ladders out of shape. There were cleanup operations as well as liberty at Hawaii.

Once underway again, the *Onslow* was pitched and rolled in 12-foot swells. The pounding seas caused the chain locker to flood from a split seam. However, the damage control party was able to slow down the intake of the water and pump the locker dry in a matter of hours.

A little later, word was received that the USS *Symbol* (AM-123) in the vicinity had a man on board with acute appendicitis. The *Onslow* made all preparation for transferring the man, and at 2000 the following night made rendezvous. A half hour later while the ship struggled with 12-foot swells and 40-knot winds, the doctor, Lt. (jg) R. Bouer, successfully operated on J. A. Quintana, SKSA. The man was on his feet again ready to go in three days.

During the operation, the *Onslow* changed course to bring the swells on the bow and reduced speed in order to make operating conditions as smooth as possible.

The *Onslow* came to the pier at NAS ALAMEDA only five hours off schedule.

VMR-253 Makes Rescue

Flying Boxcar Saves Snowbound Men

MCAS EL TORO—A "flying boxcar" from VMR-253 added another "first" to El Toro's already long list of accomplishments when it returned recently from a successful rescue mission to Pickle Meadows, Nevada.

Using for the first time the new monorail system for emergency drops, 300 pounds of much-needed medical supplies were delivered to Camp Pendleton ground units and El Toro pilots stranded at the cold weather base.

Heavy snows had cut the camp off from every source of supply for about a week prior to the rescue. It was impossible for the men to move without the aid of snowshoes and all roads were blocked.

Emergency supplies from Camp Pendleton were packed into para-containers and prepared for loading. Although held up by storms, the R4Q plane finally got off. Three and one-half hours later the plane was over the drop area. Heavy snows had covered the markers set up to guide the plane in its drop, but smoke grenades were set off in their place.

The plane came through the narrow canyon entrance and made its first drop at 400 feet. Direct hits were scored by all five of the para-containers dropped by this new method.

RECENTLY *returned from duty in Thailand, LCdr. Brooks and Ltjg. Cote check in at FASRon 7 aboard the North Island. Both men wear wings of the Royal Thailand Air Force with which they served as instructors.*

No Fatalities—No Injuries

Crew Credits Training for Survival

The five-man crew of a Navy *Neptune*, attached to VP-812 at NAS WHIDBEY ISLAND, safely rode their plane in to a perfect landing in the icy waters off Smith Island, Wash., recently.

As soon as the plane settled in the water, escape hatches popped open and the crew took to life rafts in a calm and orderly fashion. There were no fatalities and the only injuries were minor scratches. The plane sank in 11 minutes.

A Navy crash boat rescued the men from the life raft 17 minutes after the plane hit water. Every man in the crew offered thanks for the many hours of survival training which enabled them to meet the challenge when the chips were down.

BIGGEST *thrill on SecNav Orientation Cruise at NAS Pensacola for 32 business and civic leaders from the Washington area was the run out into the Gulf of Mexico aboard the carrier Monterey to watch carrier qualification landings. They visited Pensacola installations and met Washington area NavCads on three-day trip. The VIP's ended cruise full of enthusiasm for the Navy's aviation training program.*

EJECTION TRAINER AT JAX

LCDR. RIGGSBEE, CHIEF VLASEK TRY TRAINER

JET PILOTS won't have to depend on theoretical knowledge of the operation of their ejection seats any more. A jet ejection trainer, one of the first ever built, has been installed at Jacksonville.

About 20 pilots a day will be given instruction in the use of the seat. First flyers to be checked out will be members of jet squadrons, but after they have been indoctrinated, it is planned to make the procedure part of all pilot training.

One of the principal reasons the trainer was developed was that past experiences have indicated that many pilots have been reluctant to use their ejection seats under emergency conditions. Use of the trainer will demonstrate to pilots the effectiveness of this method of leaving their aircraft when an emergency arises.

Operators of the trainer emphasize that it is not an amusement ride in view of the fact that explosive charges are used in the operation of the seat. However, if proper care is exercised, the device is foolproof. Contrary to what might be expected, pilots projected from the trainer have very little sensation of leaving the cockpit. The ascent is so rapid that before they realize what is happening, the seat is on its way down.

The sequence of operation of the trainer is much the same as in an airplane with the exception of the cockpit canopy which, in actual bail-outs, would be opened and blown away prior to firing the seat.

Initial step in bail-out procedure via the ejection seat is to retard the throttle to reduce speed. Then the pilot pulls the pre-ejection lever, jettisoning the canopy and locking his shoulder harness in the same operation. He then removes the safety devices from the seat catapult.

With the bail-out oxygen bottle knob pulled out, which will allow him eight minutes of oxygen after ejection, the pilot is ready to leave his plane. To fire the seat, he simply pulls a curtain outward and down over his face. This automatically fires the cartridge propelling the seat and, at the same time, protects his face from the terrific wind blast he encounters when he leaves the plane.

Paul Vlasek, ADC; Jay D. Waldron, AO1; and Richard O. Bradley, AD2 comprise the crew who maintain and operate the ejection seat along with LCdr. John Riggsbee, flight surgeon, all of FASRon 6. They recently completed a special course of instruction at the Aerological Medical Equipment Laboratory to qualify them for their work with the device.

LETTERS

SIRS:

1. The caption over the photograph of a bomb hit on a bridge in Korea is in error. This particular picture was taken by me with a K-25 camera from an AD-3 *Skyraider* while operating with Attack Squadron 923, abroad the USS *Bon Homme Richard* (CV-31).

2. The bomb was dropped by LCdr. D. L. Rodd, of Marion, Illinois, who was flight leader on this particular strike. He also was flying an AD-3 *Skyraider* and was also a member of the St. Louis Naval Reserve Attack Squadron 923, operating off the USS *Bon Homme Richard*.

3. This photograph along with a photograph of the bridge after the bomb hit was released through proper channels, but through error somewhere along the line credit was given to *Corsair* pilots operating from the USS *Essex*.

LT. WILLIAM H. CONBOY

FASRON-110
NAS SAN DIEGO

SIRS:

The claim of VF-12, "The Flying Ubangis", that one thousand is a possible record number of carrier landings for jet squadrons during a single cruise cannot go unanswered.

Our outfit, VF-831, has been so busy flying F9F aircraft on strikes against Communist forces in Korea that little significance was placed on our thousandth landing, which occurred in mid-December aboard the USS *Antietam* (CV-36).

At this writing we have 1260 carrier landings to our credit. When this cruise is over next April, we'll let you know of a real record claim.

J. E. PERRY, ENS.
PUBLIC INFORMATION OFFICER

SIRS:

It was noted in NANEWS of December 1951 that VF-12 felt it may have made a record for jet carrier landings for a single cruise with 1,000 landings.

During a normal tour of duty in the combat area VF-721, flying F9F-2's, compiled a total of 1,749 carrier landings aboard the USS *Boxer*.

This is not necessarily a claim to any record number of carrier landings for jet squadrons, especially in AirPac, but merely information for VF-12 and other interested parties.

PUBLIC INFORMATION OFFICER
VF-721

¶ The Executive Officer of VF-721, who used to fly a desk as an inmate of the Pentagon, forwarded the above letter with this comment, "West coast duty sure shades that Puzzle Palace." Amen, brother, but somebody has to grow the ulcers to keep you guys flying, as you well know.

SIRS:

I have read the latest issue of the *News*, and I am interested in the fact that some of the former men of different aircraft carriers seem to think that the plane crash that appeared in your September issue, page 12, happened on their carriers. Well, fellows, I have news for you.

While aboard the USS *Yorktown* in 1944, this plane landed, and the tail was taken off by the jar of the landing. . . . I was one of the men who helped the officer from his plane, and I am very, very sure that this plane belonged to VF-6.

MERLYN L. ST. GEORGE

DULUTH, MINN.

SIRS:

I should like to take this opportunity to inquire about the NAVAL AVIATION NEWS service journal. A while ago, I was fortunate enough to borrow two "ancient" copies of this journal dated way back in 1947.

I can honestly say it is the finest service journal I have yet seen, and packs a wealth of useful information and "know how" between its covers . . .

EDMUND T. JOHNSON

ADELAIDE, SOUTH AUSTRALIA

SIRS:

Being interested in matters concerning developments in the naval aviation world, especially in that field held by the United States Navy, would it be possible for me to subscribe annually to your fine publication?

Recently I had the good fortune to acquire the January, 1952, issue of that magazine, which I found to be most informative in matters relating to the aviation service of the U. S. Navy. During the war I was connected with Royal Navy aviation.

CHARLES W. R. BARRETT

LONDON, ENGLAND

¶ The News is glad to see its fame has spread to both ends of the Empire. Anyone can subscribe to the unclassified edition by sending $2 ($2.50 for overseas) to Superintendent of Documents, Government Printing Office, Washington, D. C.

LETTERS

SIRS:

In connection with the recent letter to the editor about pre-rotation of tires to cut down on tire wear and landing shock, another question has arisen in my mind about the problem.

Could compressed air be directed into cupped flanges on the wheel's rim, thus driving them to sufficient RPM to gain your point?

ANDREW P. KERN

STOCKTON, CALIF.

¶ This idea of using compressed air is not new as a wheel pre-rotation measure. The Navy uses this same system to spin the nose wheel on the XF7U-1 and F7U-3 aircraft. This is done to reduce drag loads on the long nose gear and not for decreased tire wear. Pre-rotation pays for itself only on this basis.

SIRS:

I have just finished reading your article *Needn't Be Ashamed of Specs* in the November, 1950, issue. (Being a reservist, the magazine is about fourth hand by the time I get it, but I still find it most interesting.)

I especially enjoyed this article on vision as related to aviation as I still fly a couple of weeks a year at Los Alamitos and spend my time as a civilian diagnosing the functional problems of vision.

I was interested in the part of the article concerning temporary visual difficulties, but I think the aviators should be warned that these difficulties may become permanent if allowed to persist too long a time—with a permament loss of distance vision. Better yet, why not tell them how to prevent such things as functional mypoia?

The Navy has spent too much money training these men to chance losing even one unnecessarily—even if it is to a class 2 status. I am referring to those under 40, especially those who are in schools as they are most likely to be affected because of excess close work.

LT. WILLIAM M. ALBERTS

CULVER CITY, CALIF.

SIRS:

On page 24 of your December 1951 issue, which was distributed to members of a newly formed Air Intelligence Reserve Unit in Baltimore, I noticed the picture captioned, "A New Way to Land".

As a former Arresting Gear Officer abroad the *Monterey*, CVL-26 and the *Hoggatt Bay*, CVE-75 I witnessed five squadrons qualifying, and four of them operating for periods of six months at a time. I believe I have seen pilots hook the last barrier cable and come down directly aft of the planes spotted forward over half a dozen times. This was in 1943, 44, and 45.

During this time we flight deck personnel saw many other kinds of landings. Let me see if I can think of a few:

a. No hook down—No. 5 wire was raised above the deck with ammo boxes to catch landing gear struts. It worked.

b. No hook down—TBM stopped with brakes just aft of first up-barrier.

c. Two arresting gear installations not functioning—successive landings with four wires off the decks. No barrier crashes.

d. TBM lands with two 100-lb. bombs hung up. One explodes and only the motor soars up the deck and is stopped by the first barrier.

e. With one arresting unit bent like a pretzel from bomb explosion and the two wires not on the patched up deck, landings for a six-week period.

f. TBM's, three hours overdue, coming in at 2230 in a heavy sea and lashing rains, with the deck lighted up by the escorting DE's, and making it O.K.

g. Many planes catching two wires instead of just one.

h. Planes pancaking in on deck with landing gear raised.

i. Planes boiling in with their flaps up because of hydraulic trouble.

j. Others ditching into the sea.

k. Several in emergencies coming in long before the preceding planes forward had a barrier raised aft of them.

l. Missing even the last barrier and landing right smack on the planes forward.

m. The same but gunning up enough to miss the planes and coming around for another try.

n. Of course, the usual number landing in the catwalks, gun mounts, ramp aft, etc.

o. And something you seldom see—the C.O. making the first landing with the Exec. acting as LSO!—that is of the ship, not the squadron.

Of course, in all fairness to everyone, these were the exceptions, not the rule. For three months one of our squadrons came in perfectly without one waveoff, crash or anything else but just remarkable coordination. Flight deck personnel became bored stiff.

Before another "first" or "new way" is claimed by some naval aviation ship, squadron, or pilot, it must be remembered that there have been a lot of each out there in the past, and it will take a lot of research before such claims can be really classified as "firsts".

J. K. COOK, LCDR

BALTIMORE, MARYLAND

SAN JACINTO REUNION

Men who served on the aircraft carrier USS *San Jacinto* are holding their annual reunion in San Francisco April 19 and 20. All reservations should be sent to:

LCdr. Frank Cortese, USN
Pacific Reserve Fleet
Bldg. 511, Hunters Point
San Francisco, California

CONTENTS

● THE COVER

Corsairs flying in cruciform over the station chapel at NAS Dallas were photographed by MSgt. R. T. Davis. Planes were from VMF-111 and VMF-112. A few months later these men were flying combat missions in Korea.

● SUBSCRIPTIONS

An unclassified edition of Naval Aviation News, containing special articles of interest to Reserves, is available on subscription for $2 a year through Superintendent of Documents, Government Printing Office, Washington 25, D. C.

● THE STAFF

LCdr. Arthur L. Schoeni
Editor

Izetta Winter Robb
Associate Editor

Cdr. Larry L. Booda
Associate Editor
Head, Aviation Periodicals Section

Lt. Dorothy L. Small
Associate Editor

LCdr. Andrew W. Bright
Associate Editor

James M. Springer
Art Director

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SQUADRON INSIGNIA

BUSY fighting the war in Korea are two squadrons featured this month—VF-831 on the *Antietam* and VMO-6, the Marine observation squadron which divides its time between spying on enemy movements and rescuing wounded men with its helicopters. VF-831's eagle signifies its job of shooting down enemy planes, while the body stands for the *Panther* jets it is flying.

WELL, I'LL BE..!

Grampaw Pettibone can learn new things by reading Naval Aviation News each month and so can you. Make it your reading habit . . . keep up with outstanding things the carriers, squadrons and air stations are doing . . . brought to you in readable form by an outstanding service magazine.