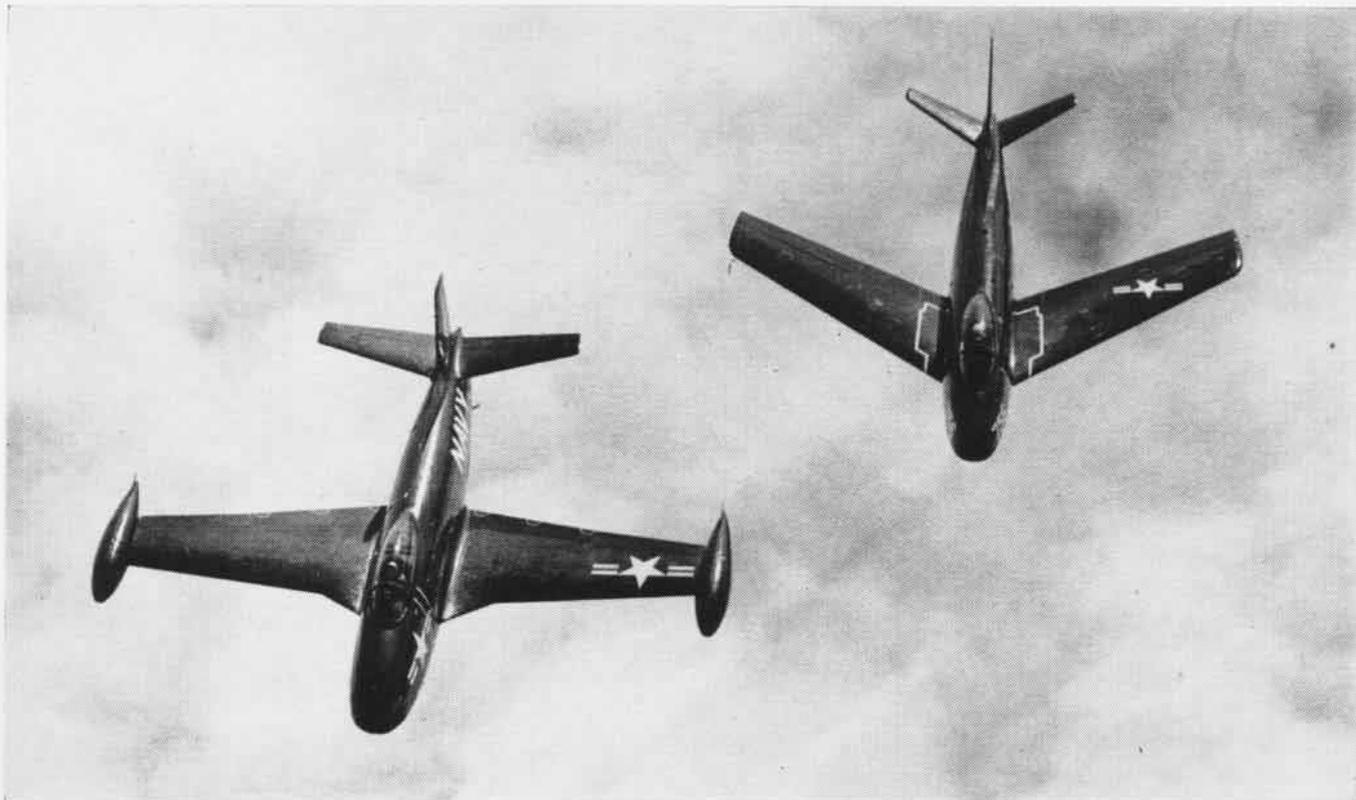
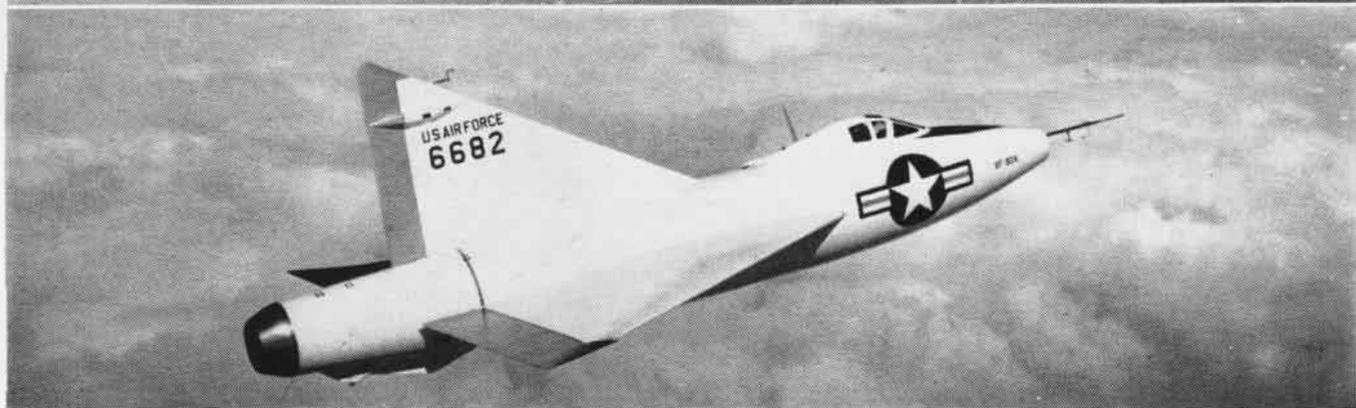


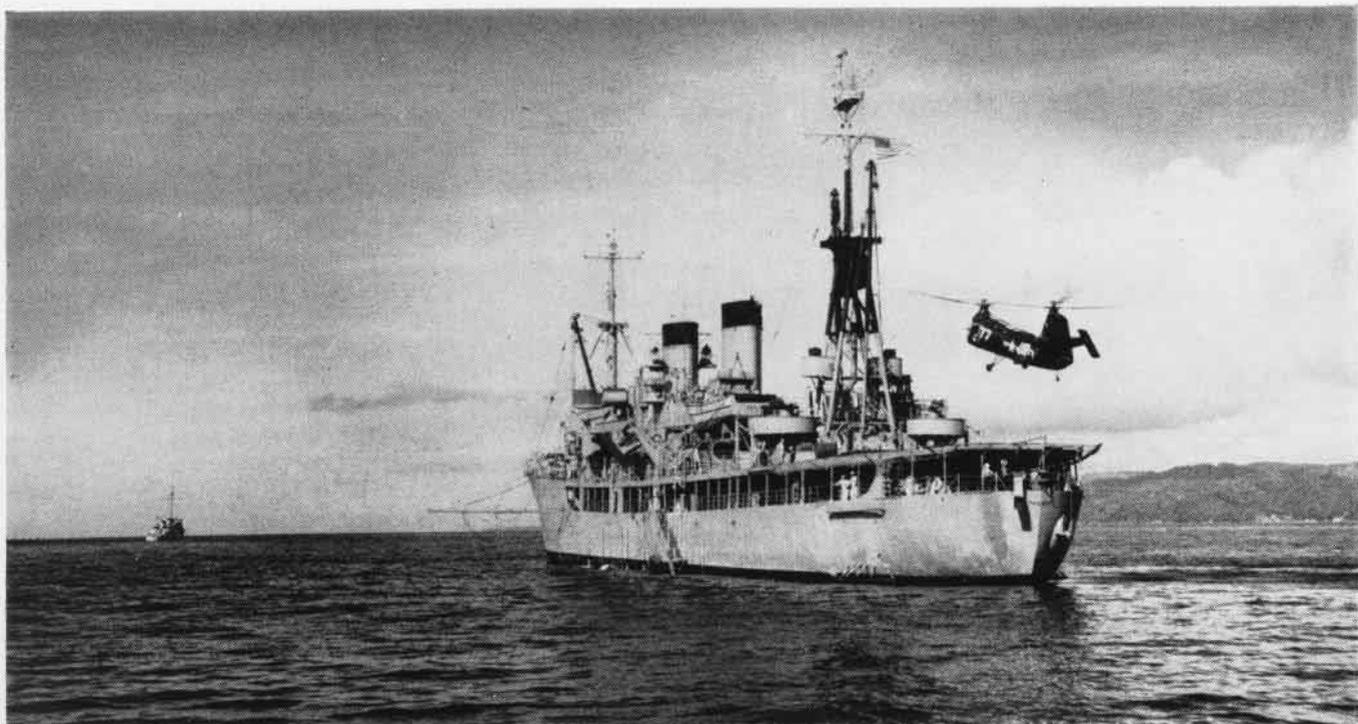
NAVAL AVIATION
NEWS





SWEPT AND STRAIGHT *The top photo shows the new Navy FJ-2 Fury, a swept-wing version of the FJ-1 (left); center photo is Canadian CF-100 by Avro, lower is Convair XF-92A delta wing with new afterburner*





SURVEY 'CHOPPERS'

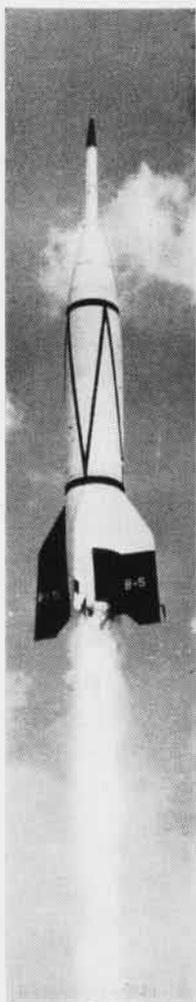
SEVERAL score khaki-clad soldiers of the Dominican Republic watched curiously as a strange-looking plane came fluttering over their heads. The plane was a Navy HUP-1 helicopter, the first pinwheel the soldiers had ever seen.

The black-faced troops were on maneuvers near Puerto Plata, on the north coast of that tropical Caribbean island. Inside the helicopter were Capt. Edwin A. McDonald, commanding officer of the U. S. S. *Tanner*, and the pilot, LCdr. A. C. "Gus" Gauthier.

As Gauthier brought the blue helicopter down to about 500 feet altitude, the Dominican soldiers all snapped to attention and saluted the captain. It probably was the longest-range hand salute ever given him, and he returned it with surprised alacrity.

That episode is a sidelight of a quiet revolution which has been taking place the past three years in one of the Navy's oldest pursuits—hydrographic surveying. The helicopter has moved unobtrusively into the picture and taken over so strongly hydrographers wonder how they got along so long without the highly-useful pinwheels.

This is a story about the part the Navy and naval aviation are playing today in assisting the Air Force to set up a chain of radar track-



ing stations through the Caribbean area. These electronic eyes will follow giant guided missiles fired from the Air Force Missile Test Center based at the former naval air station at Banana River, Fla., now Patrick AFB.

Eight of these radar stations are being set up at spaced intervals through the Bahamas, past Hispaniola to Puerto Rico. They are or will be located at Point Jupiter, north of Palm Beach, Fla., Grand Bahama, Eleuthera, San Salvador, Mayaguana, Grand Turk, Samana Del Mar in the Dominican Republic, and on the west coast of Puerto Rico.

The 1000-mile missile firing range will be linked by submarine cable which will carry telemetered information on flight of missiles like the *Matador* and the V-2 type *Bumper* back to Patrick controllers. This will enable them to know at all times how the missile is operating. If it malfunctions, they can destroy it at any time in midair.

The Navy's hydrographers and survey ships find the best route to lay the underwater cable between the above stations and the more-frequent unmanned relay stations which will "boost" the power of the signal.

The upper half of the range, from Cape Canaveral, where the missile firing pad is located, 18 miles north of Banana River, to Grand Turk was surveyed last year.



WHEN helicopters replaced float planes on survey ships, rough water landings and takeoffs like this became a thing of past

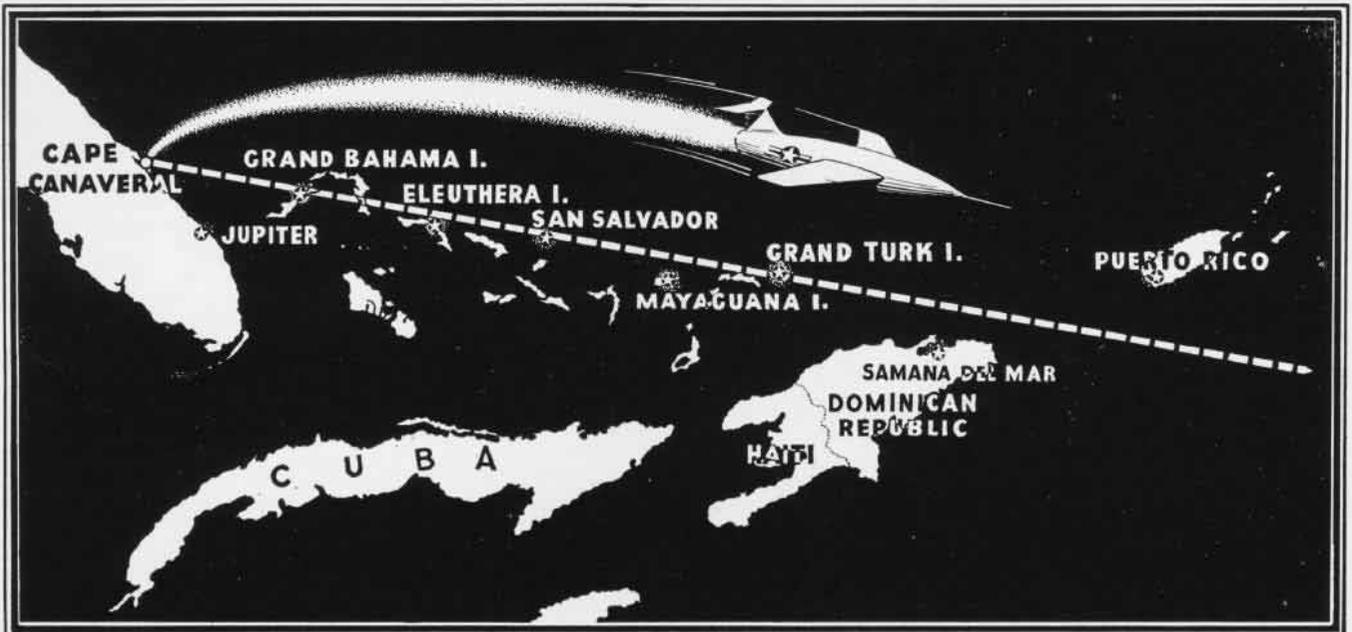
Or the top man in the field, Capt. Allen Hobbs, Hydrographer of the Navy: "When you stop to think how many different climatic conditions Navy surveyors encounter, such as desert sand—which will burn out an automobile engine in no time—or thick jungles—which even a human being has trouble penetrating—you wonder how we ever got along without the helicopter."

Or the comment of J. J. Gilbert, submarine cable engineer for the Bell Telephone Laboratory, which will lay the cable:

"This is the first time helicopters have been used on a big survey project. Their use opens the door to a new approach to cable laying. It has commercial possibilities, too."

Let's take a look aboard the *Tanner* on the job in the Caribbean and see why the pinwheel has such enthusiastic new fans. First of all, the best available charts of the sand-and-coral Bahama islands frequently are obsolete and inaccurate. Some have not been surveyed since the 1860's, and the Navy today is finding islands three or four miles from where the old charts showed them to be.

The Navy's job is to locate a route that will avoid coral reefs which will chew up a cable, "valleys" in the ocean floor



NINE RADAR tracking stations from Cape Canaveral, Fla., to west coast of Puerto Rico will follow long range guided missiles as

they fly southward; Navy survey ships made underwater survey to find best ocean floor for laying cable linking up stations

THE USS *TANNER*, AGS-15, and its two smaller survey ships, the *Pursuit* and the *Requisite*, have been operating the past winter in the Grand Turk-Puerto Rico end of the missile range. All are under guidance of Capt. McDonald as commander of Survey Group Two.

Last year the *Tanner* used an HO3S-1 helicopter, but this was replaced by the bigger HUP-1 with a greater load-carrying capacity. Capt. McDonald, who flew with VS-2B aboard the old *Saratoga* in 1936, knows his helicopters' capabilities as well as he does scout planes like the SBU's he once flew. While commanding the ice breaker *Burton Island* in the Antarctic and later the *Edisto*, he used HO3S and HTL helicopters widely to help chart the area for *Operation High-jump* in 1947-8.

It probably will be another year before the missile range cable can be in full operation. But thanks to Navy helicopters, the job time has been cut greatly. Take, for instance, the comment of Lt. F. L. Slattery, the hydrographic officer aboard the *Tanner*:

"The helicopter is wonderful. It cuts in half the time required to do a job of surveying in this tropical terrain."



SENIOR hydrographic officer, Lt. F. L. Slattery, points out survey site to LCdr. Gus Gauthier, pilot, and Ens. M. E. Anderson

which will put heavy tensions on it, and to spot the most favorable beaches to bring it ashore. In some places, the cable will run overland, and this requires a land survey to be made to pick routes.

To an outsider, the job of surveying is a confusing mass of mathematical computations, base lines and sights. Wooden or metal signal towers have to be erected along shorelines at frequent intervals and sights taken on them to establish exact positions in relation to each other. There is no point knowing water is 60 fathoms deep at a certain place in the Caribbean if you don't know where that spot is on the chart.

Shorelines are not always like the smooth beaches along Florida's gold coast, and there enters the rub. The Bahaman islands, belonging to the British, are rugged coral; the Dominican coastline is broken by bays, high peaks, coral reefs and dense tropical jungles.

In the pre-helicopter days, these triangulation towers had to be put up by sweat and toil. Shore parties landed in small boats, loaded with lumber, surveying instruments and food for several days. Once ashore, they hired burros and native guides to pack the gear. Machetes to cut through the tangled



NAVY'S underwater survey from Florida to Puerto Rico is prelude to setting up tracking stations to follow Matador missile



HYDROGRAPHIC survey man being lowered to center pole site from belly hatch of HUP-1 helicopter; in some areas, terrain pre-

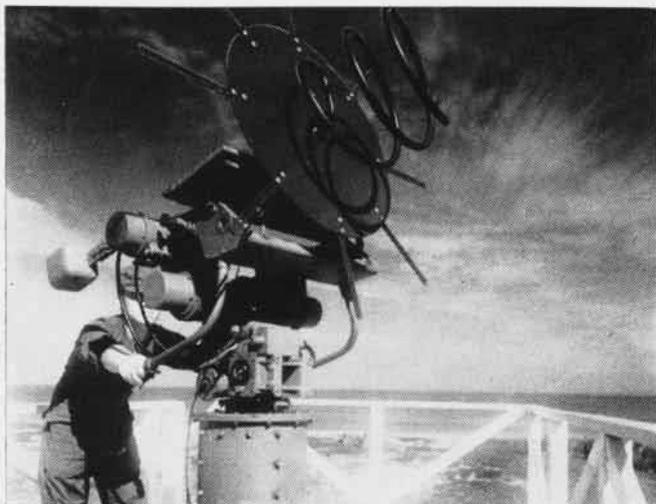
vents pinwheel from landing, so lumber and workers have to be dropped while it hovers; ships offshore sight on such stations undergrowth were standard equipment. In the tropics, it was heavy, sweaty work.

Three or four days work often was required to chop their way to the top of some mountain peak and set up the signals. Offshore, the survey ship sighted on them to establish its position. From other peaks, surveys also used the poles and bunting for reference sights.

Then someone decided to take the old float plane off the *Tanner* and put on a helicopter. That was back in 1949. The "chopper" passed its first field tests around Vera Cruz, Mexico, with loud praise. Shore parties were loaded aboard the HO3S, lumber from the signal towers was slung on 'bomb racks' under the plane and the pinwheel flew them to the coastal peaks in a few minutes. No more machete-chopping of trails, no more panting climbs up rocky cliffs with food and lumber.

If the terrain on the peak is too rugged for the helicopter to land, the men are lowered in slings to the ground. Lumber is dropped from a low altitude. Come evening, the men are picked up again and flown back to the *Tanner*.

No more sleeping in tents or campfire-cooked meals. That



TELEMETERING radar installations like this at Patrick AFB will receive flight data from missiles all down the missile range



PACKING lumber by burro train up mountain trails is technique of hydrographic surveying now made obsolete by helicopter use

primitive, time-consuming and costly surveying technique is passé. The four or five-hour boat trip through the surf to the beach is no longer necessary, nor is the search for native workers and pack animals. It's only a 20-minute flight to the signal site now.

It used to take six or eight weeks to establish bench markers in an area and put up the poles. The *Tanner's* survey parties have been doing the same work in a week, thanks to the helicopter. They are back on the ship each night to eat, see movies, record their technical findings, and send information to the Navy Hydrographic Office in Washington. With this data coming in daily, it is easier to coordinate the survey and get the over-all job done.

Both the HO3S and HUP-1 have their good and bad points for surveying use, according to LCdr. Gauthier, an old VO-VC pilot, and his assistant, Lt. William Langley, a former *Hancock* fighter pilot. The earlier model, being higher from the deck, permitted slinging lumber beneath the fuselage in "bomb racks" for dropping while flying, if necessary. It had less load-carrying capacity than the new, twin-rotor Piasecki—which weighs 4,200 pounds and has a gross maximum of 5,500 pounds.

Hoisting men aboard from shore parties is easier, thanks to the HUP's centerline hatch door. Aerial cameras had to be mounted externally on the side of the Sikorsky, which made balance more difficult, whereas the HUP has been mounting K-17's in the hatch door. It has proved to be a stable airplane for aerial photography, both vertical and oblique. Some models of the HUP-1 and all HUP-2's have the 120-pound twin tail stabilizers removed, but Gauthier prefers them because they provide greater maneuverability in mountain areas where there are gusty winds most of the time.



GAUTHIER checks weight and balance of hydrographic gear being loaded into HUP, along with sawed-up lumber, for flight ashore



BRITISH natives of Grand Turk island in Bahamas stand respectfully by as a survey helicopter pays visit to their officials

Operating the helicopter from the 45x60' flight deck on the fantail of the *Tanner* calls for some skillful piloting. Gauthier has landed aboard with as much as 38 knots of wind over the deck. Best wind direction is from about 15° angle on either side of the bow, although there is surprisingly little burble if the wind is dead ahead of the ship.

Because of the short distances covered by the hops, only small gasoline loads are necessary, which enables the pinwheel to carry more payload. On the *Tanner*, the two Reserve pilots averaged 13 hours a week of flying.

Since the HUP is too squat to load lumber under its belly, the cargo has to be stowed in its roomy fuselage. Larger wheels may give it more clearance but until the problem is solved, the 20-foot long centerpoles for signal towers had to be cut in half and stowed inside. The *Tanner's* men are working on a signal tower made of aluminum which can be disassembled easily and stowed in short lengths.

WHEN THE *Tanner* first arrives in an island or shoreline area to be surveyed, the helicopter is sent out with Hydrographic Officer Slattery or his assistant, Lt. (jg) M. M. Macomber, aboard to size up the coastline, shore obstacles and type of beach.

Another early job is to relocate previous mountain bench marks which had been established by other survey parties in the past. These little concrete markers frequently are buried in undergrowth, so that the helicopter is extremely valuable in searching them out. It can hover a few feet over the trees, or several hundred feet up, and observers with binoculars can spot markers virtually impossible to see from the ground. A crewman leans out to make sure that the rear rotor is clearing the trees with a good margin of safety.



SLATTERY, Governor Willis of Grand Turk, Capt. McDonald and governor's aide discuss proposed pole site on their island



UNDER-FUSELAGE 'bomb rack' of Sikorsky helicopter was handy way to transport and drop lumber for mountain peak site work

When the markers are located, the pinwheel lands nearby or lowers men through the hatch to photograph them. The *Tanner* hydro men call these "riders" members of the *Order of the Hoisted Oyster*. From these locations, other survey points in the area can be checked. This kind of flying is pretty tough at times. Wind burbling over mountain ridges makes helicopter hovering precarious.

Once the signal site has been located and cleared, material and equipment are flown in—cement, lumber, pickaxes, tools, wire and bunting. A tripod or centerpole is set up for the sounding boats offshore to sight on to determine their positions.

In the Samana Bay area of the Dominican Republic, for instance, 25 of these stations were set up. Aerial photos from 2,800 feet up helped in locating old bench markers and were used to make photo mosaics back aboard in the *Tanner's* photo lab, presided over by Chief Photographer's Mate Richard R. Conger.

Another job the helicopters have done in the tropics is to scout coastlines for reefs and shoals. They warn the sounding boats and survey ships offshore, so they can stay in safe water and avoid grounding. Charts of many areas are too inaccurate or outdated to be depended on to show these danger-loaded shoals and reefs.

Besides the nine radar tracking stations which will be set



CAPT. MCDONALD checks chart with Gauthier and Slattery as helicopter prepares to take off for a preliminary survey of beaches

up along the Bahamas and Caribbean island chain, numerous booster relay stations are to be installed. The distance a good "signal" can be sent by submarine cable is limited, so that these stations have to be at frequent intervals between the radar installations. LST's will be used to bring in the electronic gear for these stations. To pick the best beaches for these LST's to land, the helicopter has been put to use.

The Bell telephone engineer and his assistants, N. C. Youngstrom and C. N. Anderson, flew repeatedly in the HUP to select the best sites for the relay stations. In one or two hours of aerial scouting, they can find the smoothest beaches and shore, replacing the work of days in a small boat.

The submarine cable is a coaxial type which will carry 12 two-way conversations or telemeter messages at the same time. The guided missile controller back at Patrick AFB can talk to his radar spotters all along the chain as they chart and control the progress of the missile.

In deep water, this armored cable may be only about 1¼" in diameter. In shallow, rocky waters it will be up to 3" inside, heavier coating being necessary to protect the cable against chafing on coral heads or in surf. Underwater coral heads can be spotted by helicopter and blasted out by dynamite quickly and efficiently.

In this way, the whole project has been given tremendous impetus by the use of the helicopter in the spotting phase.



TRACKING flag aboard Maury tests rotor blade alignment of 'copter before hop



DUKW waddles onto dry land with survey party; similar jaunt frightened natives in Bahamas



WORKERS in Venezuela jungle erect tower for taking triangulation sights

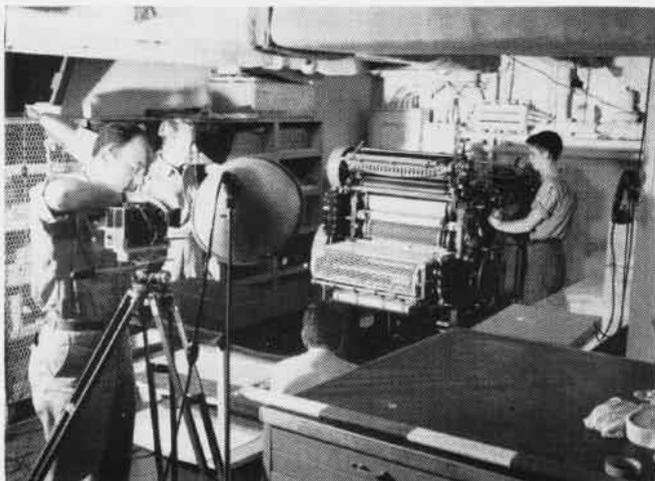


LATER model HUP-2's are minus extra tail stabilizers, but Gauthier preferred "wings" left on for stability in mountain gusts

BY GOING aloft in the pinwheel, the Bell men have been able to determine ahead of time the type of cable which will be necessary on different stretches of the underwater route. A cable-laying ship will do that job next year on the southern end of the range. Because of the depth of water in some areas, as much as two miles of cable will be strung out behind the ship, which represents considerable weight load on its stern.

The critical spot in the cable-laying operation will be close to the shore where it joins the relay or radar stations. Wave action chafes the cable against rocks, and it is here that most maintenance work has to be done on submarine cables. By using a helicopter to select the smoothest ocean floor and beach for the cable, Bell men estimate their cable may be able to last 50 years.

Most of the *Tanner* survey group's work the past winter was around Grand Turk island in the Bahamas, across the



WELL-EQUIPPED photo lab and printing shop aboard *Tanner* keeps busy developing aerial films and mosaics and printing up charts

Caribbean to the Dominican north coast around Puerto Plata, skipping along the coast past Samana Bay to Cape Engano and thence across Mona passage to Puerto Rico.

Agreements were arranged by the State Department with the Bahaman and Dominican governments to permit the work to be done. In every contact made with these foreign governments, relations with the Navy were amicable, Capt. McDonald reports.

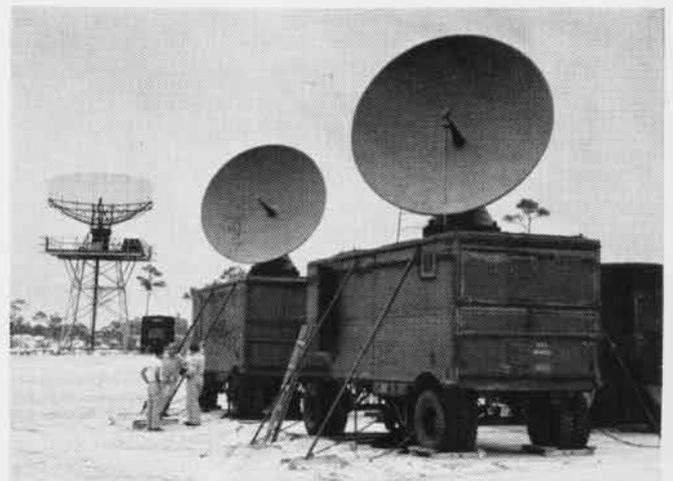
Many of the natives along the coast had seen airplanes from a distance but never had seen a helicopter. When the "chopper" would come in for a landing, big crowds of black-faced men, women and children would gather. They were not afraid of the machine, only curious, and soon learned to stay clear of the rotor downblast.

Before the helicopter has hardly touched down, natives come running and policemen appear from nowhere to control "traffic." In a few outlying places, word about the guided missile range survey had not permeated. Local gendarmes were wary of the sky arrivals until the situation was explained to them. Interpreters who could speak Spanish were carried on all trips into the hills.

Uniformly polite and interested, the natives frequently carried loads of gear for the pilots and their hydrographic crew and helped clear the area for the rotors. The *Tanner* carries a cumbersome DUKW landing boat which is used on occasion to take ground parties ashore. At a Grand Turk island sandy beach, the natives rushed to watch the "Duck" come ashore. Never having seen one before, they were alarmed to see the "boat" roll right out of the water on its wheels and lumber toward them. All natives in the area ran with fright except two small negro kids who leaned over to see what made the big vehicle go.

Although they live primitively in thatched huts with dirt floors and wear no shoes, the Caribbean natives quickly catch on when told about guided missiles and rockets. The Air Force sent its Patrick AFB public information officer out to "educate" the Bahaman natives on what was going on. He showed them photos and gave a short talk about rockets that soon would be soaring overhead. Rewards were offered for any native who spotted a recoverable missile in the water. Low-flying *Polly* planes with loudspeakers and radio broadcasts warn shipping and planes along the range during actual firings.

But to get back to the helicopters and their part in the guided missile range survey, many other uses have been found for the pinwheel on the *Tanner*, too. One time one of the small sounding boats beached on some coral rocks. The helicopter flew in a salvage party, cables and repair gear to get



GIANT Air Force radars, SCR-584 in front and CPS-5 in rear, track the guided missiles as they fly along the island chain



USS MAURY in Persian Gulf survey used HO3S, as did Tanner in early survey work, but twin-rotor HUP could haul bigger weight

the boat before it was damaged by the surf.

Capt. McDonald, his executive officer, Cdr. Wilson Erskine, and skippers of the smaller survey ships occasionally were flown ashore to pay courtesy calls on local officials along the survey route. When they came in to Puerto Plata to pay such a call, the pilots were able to put the plane down right inside a fort.

These calls are made to clear with local officials on permission to land working parties on beaches or high points. Not only are these trips easier by helicopter than by boat, but the prestige of arriving by helicopter is tremendous and impresses the natives.

The *Tanner* was able on one occasion to do a good turn for the Dominican authorities. Its helicopter went out to help search for an 80-ton cargo ship which had sunk outside Samana Bay. A Dominican official flew along with the searchers. Wreckage of the lost vessel was spotted, but the three missing crewmen could not be located.

On its flights over jungle areas, the helicopter carries a carbine for signaling. On one flight, the pilots "bagged" two whales and frequent shots are taken at sharks and sting rays. Shore parties report no animal or snake foes but plenty of chiggers to make their hiking miserable.

Along the lower end of the guided missile range, shoran and lorac electronic gear was put ashore to assist in establishing far offshore positions on the charts. Star and sun sights which usually are regarded as accurate enough for charting these navigation positions were not considered sufficient for much of this work. Hydrographers found that while depth data on old charts was accurate, they were not reliable when it came to positioning one island or group in relation to other island locations.

DATA secured on the missile range survey can be used by the Navy Hydrographic Office to correct its existing charts of the area. One chart used by the *Tanner*, covering Samana Bay, was made in 1867, mostly from hand-line soundings and other obsolete surveying equipment.

Using planes to aid in hydrographic surveying is not a new idea with the Navy, even though helicopters are. Back in 1934, VJ-3S had a Loening amphibian which was taken aboard survey ships for aerial photography purposes. This was put aboard or launched by the ship's crane. Because of the difficulty of operating in rough water, these float planes were not so useful as helicopters, because of their higher speed and lower maneuverability.

After World War II, the Navy's survey ships carried OS2U *Kingfishers* and J2F's on their fantails. They used them mostly for carrying mail, aerial photos and reconnaissance.



TAKING OFF from 45x60' flight platform on fantail of Tanner, HUP carries five men; low undercarriage hampers lumber carrying

Postwar years saw the development of helicopters to a point where the Navy began using them for almost everything. In 1949, the first one to go aboard a survey ship operated a limited time around Vera Cruz. On one of its trips ashore, the HO3S damaged a rotor when it hit a tree. Pilots on this cruise were Lt. W. C. Dixon and Lt. (jg) W. E. Matthews of HU-2. Eight to 10 maintenance men were taken along with the pinwheel unit. Gauthier's HU-2 detachment has six men.

A HELICOPTER also was aboard when survey ships worked around Labrador later on. Bad luck hit the pinwheel on one of its first hops, the plane going into the water shortly after takeoff. Flotation gear helped the pilot, Lt. (jg) W. H. Rorick, escape the icy water bath.

A helicopter was used aboard the USS *Maury*, the *Tanner's* sister ship, to survey the poorly-charted Persian gulf. An idea of how useful the *Maury* found its helicopter can be seen from the fact it put up to 100 hours a month flight time on it. A year ago, a survey party took an HO3S along on a survey cruise in Venezuela waters. Some of the photographs accompanying this article were taken on that cruise.

In all, helicopters have operated off survey ships in Labrador, Persian Gulf, Bahamas, Mexico, Venezuela, and Caribbean waters. Like other planes, helicopters find cold weather operations more difficult but not too much so.

The wedding of the pinwheel and the sounding ships has proved a highly profitable one for the Navy. Veteran hydrographic officers in one voice agree they cannot see how they ever got along without them. And they hope they never have to go back to burro pack trains and machete-chopped trails.



WHEN THE *Maury* was operating in Persian Gulf area, Amir Turki Ibn Atashan and two officials visited the ship's chart rooms



GRAMPAW PETTIBONE

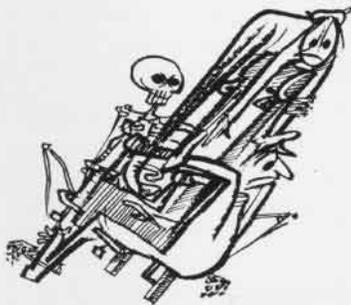
Whammo!

Two mechanics working on an F9F-2B were injured when the ejection seat was inadvertently fired. Both are recovering rapidly and are off the serious or critical list, but one man was blown into the overhead of the hangar deck, turned over twice on the way down and landed on the wing of an AD. He suffered a broken wrist, a gash in his leg, and a four-inch slice in his scalp. The other chap who was leaning over the seat, didn't get quite so much of a ride, but received multiple fractures and lacerations of the face.

These men had removed the canopy and had commenced the removal of the ejection seat to gain additional working space in order to repair a circuit breaker in the electrical panel in the right hand side of the cockpit. The cabin pressurization and oxygen hoses had been properly disassembled, and the drogue gun firing cable had been disconnected from the gun release key.

It was then decided that the work could be performed without removing the seat, and efforts in this direction were abandoned.

Immediately prior to the explosion,



one man was kneeling on the seat facing aft, while the other was standing on the flat part of the cockpit, looking down at the seat.

Evidently the safety pin had been removed in the firing mechanism although the pre-ejection lever had not been actuated and the canopy dump bottle was still fully charged, and the firing curtain in the stowed position.



With the safety pin out, it is possible to fire the seat by inadvertently grasping or leaning on the firing cable or its housing. This has sufficient "give" to actuate the firing cam.



Gram Paw Pettibone Says:

The safety pin in the firing cam is very strong, and it requires a good pull to remove it. If you want to live to enjoy your retirement rights, **LEAVE THE SAFETY PIN IN PLACE** when working on the ejection seat. If it is necessary to remove the canopy, disconnect the spring clip fitting used to attach the safety pin to its operating cable.

As far as I know, this is the first case of inadvertent firing of an ejection seat. Let's make it the last! Remember, the seat is just like a loaded gun. You probably wouldn't look down the barrel of a loaded gun even with the safety on. Treat the ejection seat with the equal respect. The safety pin is plainly visible from the outside of the airplane. If you like your face—leave the pin in place.



EJECTION SEAT CAUGHT IN BASKETBALL CAGE

A Christian Now

With winter behind us once more and summer just around the corner, let's take a look at some of the "stuff" you may run into during months when the weather is supposed to be good.

The excerpts below are from the statement of a VR-3 plane commander who didn't have an accident, but found the last half of a transcontinental trip mighty rough.

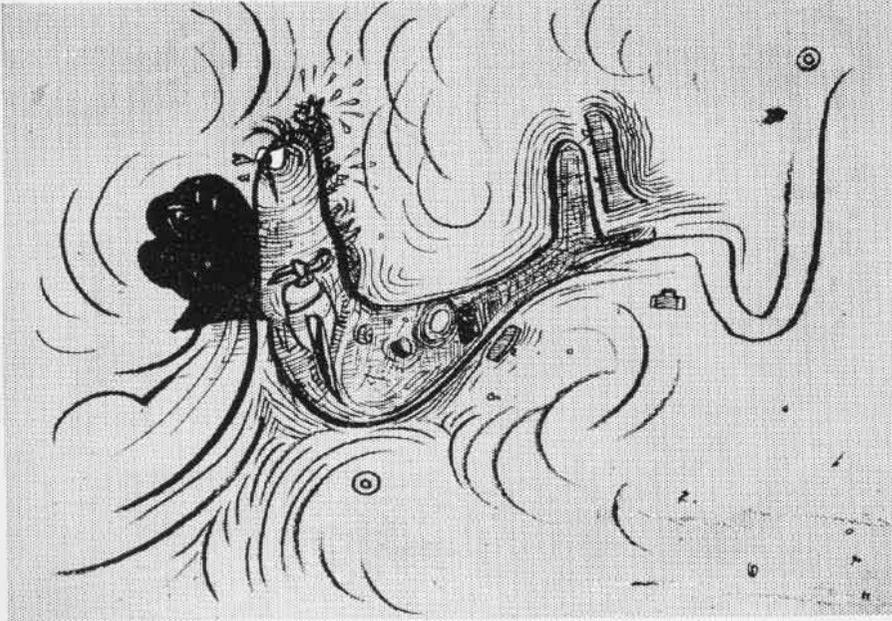
We pick up the flight after it passes Omaha. Weather had been CAVU up to this point. Thunderstorms were predicted to be building up between Omaha and Cleveland, and a troughline was reported to extend between Kansas City and Chicago, but was forecast to be very weak and of little consequence:

"Upon approaching Des Moines at 9,000 feet, a line of towering cumulus clouds, which appeared to be perpendicular to our course, was observed directly ahead. On checking over Des Moines, the CAA radio was reporting thunderstorms south and north of Des Moines, and also, gave the Moline weather, which was about the same. Prior to entering clouds, the word was passed to prepare for rough flying. We had 15 passengers aboard but no cargo.

"Ensign —, who was flying in the right seat, and myself prepared the cockpit for rough weather such as: mixtures rich, bypass down, gear handle up position, pilot heaters on, reduced power to give about 140 kts, and instrument lights full on (local time was about 1900 CST). For about the first 30 minutes after entering the storm, the turbulence was only moderate with rain and occasional lightning flashes. At times, we broke into the clear and managed to dodge a few of the build-ups.

"Twenty minutes before reaching Moline, the turbulence, rain, and lightning began to increase with the airspeeds reaching as high as 200 kts and as low as about 110 kts. The power was varied in accordance with these airspeed readings but continued flying by attitude using the artificial horizons. Before reaching Moline, I requested Ensign — to find out from CAA if there were any pilot reports on the weather between Moline and Chicago. CAA advised there were none.

"On checking over Moline (by using the radio compasses which continued to point to the tuned-in station), the



turbulence had reached what I considered to be severe. I might add at this point that no radio signals could be heard on any of the radio equipment except the VHF which continued to work perfectly. However, as I said above, the radio compasses continued to point to station selected (which was done by frequency setting only). At this time, it was decided to try a lower altitude. ATC granted our request for 7000 feet. It took a good 20 minutes to reach 7000 feet, with the turbulence and lightning continuing to be severe.

"By this time, it became quite apparent that something had to be done to reduce the amount of strain being put on the airplane and passengers, not to mention the crew. I instructed Ensign — to ask ATC for any heading that would take us out of the storm area. ATC returned with: 'Chicago Weather Control advises make a 180° turn. Thunderstorms in the Chicago area are unpenetrable.' With this an immediate 180° turn was made. Upon completing this turn, and after half way settling down on a 270° heading, the magnetic compass was observed to be still reading approximately 090°. The electrical disturbance was apparently great enough to cause this error in the magnetic compass.

"After about one-and-a-half minutes on a heading of 270° the compass suddenly swung around to our gyro heading. Rather than re-fly what I had already flown, I decided to attempt a landing at Moline which was estimated to be about 30 minutes away. Moline CAA advised the weather was clearing over the field. Before landing, the wind direction changed twice, but held steady during my final approach.

"We checked at the weather office to

see if there might be any chance of re-routing our flight to bypass the storm area. The forecaster thought there was a good chance of us going south to Peoria and then to Terre Haute on East via green four. But the question was getting through the storm area to Peoria. The forecaster said he thought we would have about 15 to 30 minutes of thunderstorms to fly through and then be out into the clear. With this weather information, we decided to give it a try. I might add that four passengers decided that Davenport, Iowa was closer to their destination than Westover, and declined further air transportation.

"The first 15 minutes of our flight to Peoria was VFR at 5000 feet with continual lightning flashes in all quadrants. However, very shortly we were back in the thunderstorms with Lt. — at the controls and me in the right seat. Again the radio compasses did their job and we managed to arrive over Peoria. My report to Peoria was, 'Estimate to be over Peoria, varying altitude between 7000 and 3000 feet supposed to be at 5000, will not be able to check over Pontiac intersection since static is too great, will proceed on direct course to Chanute.'

"They returned with, 'ATC advises you can maintain any altitude you desire, no IFR clearance in the area.' After about one hour and 30 minutes of flying through the worst turbulence that I have



ever encountered, we broke into the clear just west of Indianapolis. Needless to say, it was certainly a welcome sight to see clear skies ahead. The remainder of the flight went very smoothly.

"Knowing what I know now about this particular storm area, I would have certainly flown it quite differently, namely:

"a. Landed at Omaha, refueled, filed a new flight plan that would have taken me around this storm area to the south.

"b. Or landed at Omaha and waited for the storm to clear before proceeding.

"In conclusion, I might pass along what I intend to do before encountering any such future thunderstorms.

"a. Obtain all possible information on the storm area by requesting pilot reports, forecaster information, and CAA Weather Central forecasts.

"b. If the storm is over a large area and cannot be circumnavigated with fuel aboard, I will land, refuel, and refile a flight plan around the storm area.

"c. If the storm appears to be a rough one and the above things cannot be accomplished, land at the nearest suitable airport and wait for the weather to clear.

"d. Never believe that all thunderstorms are flyable. I have generally had this opinion from past flying experience, but I have certainly changed my mind.

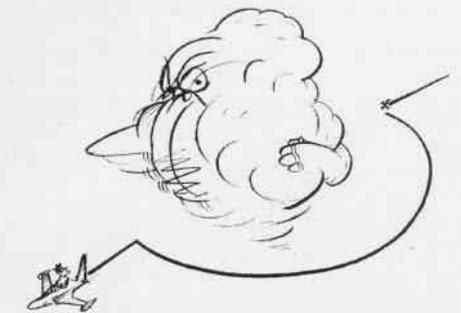
"e. If the thunderstorms have to be flown, fly at the lowest safe altitude over flat terrain. In mountainous country, I suggest plenty of reserve altitude."



Grampaw Pettibone Says:

Just reading about a trip like this curls my beard and makes the hair stand up on the back of my neck. The flight had a definite "Christianizing" effect on this crew, and I don't have much to add to the excellent advice contained in the Plane Commander's list of resolutions.

However, I'll pass on a tip which has helped me live to such a ripe old age. When you see a line of thunderstorms ahead, and find that you can't go OVER, UNDER, or AROUND, then ask yourself: "Is this trip necessary now?"



If you can find any way to arrive at a negative reply, land and treat yourself to a short beer for being safety conscious. Nine times out of ten the weather will be fine the next morning, and those towns nobody lands at often prove interesting.



WINTER flying off Korea coast was rough as crewmen scraped ice off Valley Forge deck; F9F jets had to be scraped off too

side cave. A few seconds after the rockets exploded in the target cave, he observed a tremendous secondary explosion 250 feet back of the target, which indicated the hill was honeycombed. Recon flights next day confirmed this, and fires were reported still burning in the hill 36 hours after the first explosion.

Matter of Minutes

United Nations naval forces conducting the siege of Wonsan on North Korea's east coast have a proud record—22 successfully completed rescues of UN pilots between the first of January and the 23rd.

Most of the air-sea rescues were accomplished by helicopters stationed aboard ships and on nearby friendly islands adjacent to the besieged Communist port. Credit for the rescue of Air Force and Navy aviators was given to the excellent air-to-surface communica-

KOREAN AIR WAR

Honor Gothamites

When the *Antietam* designated 11 March as New York day, its squadrons joined with those from the *Valley Forge* to make it a memorable occasion.

The two New York Panther jet squadrons, VF-831 and VF-837, together with ATG-1 planes from the *Happy Valley* made 161 rail cuts in Communist territory, destroyed 3 railroad bridges, 4 railroad bypasses, 34 rail cars and killed 326 troops to celebrate the day.

Returning from the strike, *Corsairs* and *Skyraiders* of the *Antietam* flew over the ship forming the letters NY in salute to New York and its fighting representatives.

Since joining Task Force 77, the two all-Reserve squadrons have destroyed

100 trucks, 21 locomotives, 32 bridges, 275 rail cars, 67 sampans, made 490 rail cuts and killed 537 troops.

Tricky Business

A new form of Communist trickery was discovered by *Bairoko* fliers off the west coast of Korea when pilots spotted what they thought was a United Nations plane on the ground behind Red lines.

As a low level reconnaissance flight passed over on investigation, an explosive charge was set off from the ground. The charge was estimated at being about equal to a 100-pound bomb. The planes overhead were only slightly damaged by flying shrapnel.

Maj. Neal E. Bredesen of the *Bairoko* hit the jackpot on one morning mission when he fired seven rockets into a hill-

tions which allowed helicopters to be on rescue station minutes after alerts were sounded.

The 13-month-old siege of Wonsan is being conducted by the ships of the UN Blockading and Escort Force commanded by RAdm. George C. Dyer.

A Close Shave

Returning from his 30th bombing mission, Ens. John Higgins told fellow pilots about his narrow escape from a piece of flak.

Higgins, attached to VA-728 aboard the *USS Antietam*, was making his first bomb run during a recent flight south of Wonsan. He had just released two bombs on a rail line and was getting ready to pull up from his dive when there was a loud splintering noise and

MARINE HRS-1 helicopters pick up ground troops from Camp Tripoli in Korea, airlifting them to area of enemy guerilla action



BAIROKO'S alert photographer, C. J. Becker, AF-1, catches rocket torn from plane of Capt. Robert J. Morrison, VME-312 pilot





ENS. JOHN T. Higgins of VA-728 on *Antietam* holds shattered canopy hit by Korea flak

the cockpit was filled with a rush of air. Higgins pulled up from the dive and headed for the coast. His face was covered with blood from surface scratches caused by pieces of plexiglas. The canopy had been hit by flak.

After Higgins recovered from the shock he gave the voice distress call and found that he was being followed by Lt. George Johnson and Lt. James Walley. Higgins said, "It didn't occur to me to bail out as the plane was maneuvering okay—I kept looking for likely landing areas, just in case."

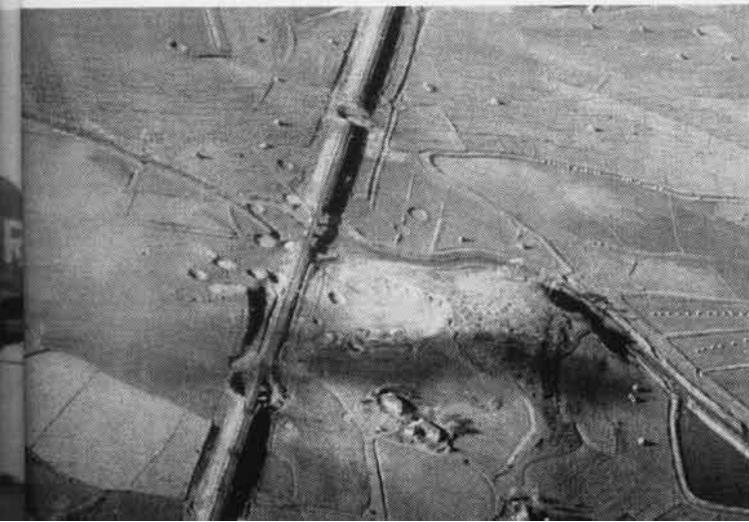
When the three pilots were sure that Higgins' plane was going to hold up, they headed back to the *Antietam*. The shattered windshield obstructed Ens. Higgins' view so the LSO, Lt. Ollie Cramer, talked the plane in.

After examining his plane Higgins found a heavy piece of rounded flak, five inches long and about an inch and a half wide, lodged in the headrest behind his seat. The flak had come through the windshield, grazing the left side of his helmet. "That was sure a close enough shave for me," said Higgins. "Two more inches to the right and I wouldn't be here telling this now."

60-Mission Whitehat

VP-28 based at NAS ATSUGI, Japan, has a white hat pilot, one of the few in

TWO DIRECT hits were scored on this North Korean rail line by pilots from *Antietam*; other bomb holes indicate full treatment



KIRSCHNER, one of Navy's few white-hat pilots, flies with VP-28 at Atsugi, Japan

the Navy, with 60 combat missions over Korea during the past year.

The man is Robert G. Kirschner, aviation structural mechanic, first class, whose 60 missions were flying P4Y *Privateers*. Kirschner has more than 3,300 stick hours and has flown almost every Navy plane except jets, even trying out an Air Force B-29.

Since last summer he has specialized in night flare dropping operations in direct support of 1st Marine Air Wing night fighters. Before that he was flying shipping surveillance and weather patrol missions.

His *Privateer* usually carries a crew of 12. As plane commander he is over three officers and numerous enlisted men senior to him. LCdr. Edward R. Hawley, Kirschner's immediate superior in the squadron, often rides as co-pilot.

Inquiry among the crew proved that Kirschner was an able and popular plane commander. Said T. M. Miller, tail gunner: "A damn good pilot. Never worry about cockpit trouble with Kirsch." Radar Operator W. H. Wymond said: "There's never a sweat with ole Kirsch. He's the best."

When he enlisted in June 1941, Kirschner went to Navy hydraulics school, served on the *Monterey* and in 1944 was assigned to flight training. He

NAVY'S specialty in Korea has been wrecking railroads; here's what's left of North Korean railroad after Essex planes hit it



FIRST Japanese-American commissioned in U. S. Navy, Joe Akagi, flies with VF-194

won his wings in 1947 and joined his present squadron in Guam that year.

Kirschner finds his white hat inconvenient when he lands at airfields controlled by other armed services. "They figure I've stolen a plane somewhere and am just out for a dangerous joyride," he said.

Jap-American Pilot

The first Japanese-American ever to be commissioned an officer in the U. S. Navy recently was assigned to the VF-194, the *Yellow Devil* squadron aboard the *Valley Forge* off Korea.

A native of Texas, Ens. Joe Akagi entered the Navy in the old v-5 program, winning his wings in 1950. When his squadron boarded the carrier for the Western Pacific last October, Joe was on his way to renew friendships his father had made before he left Japan in 1914. VF-194 flew *Skyraiders* off the *Valley Forge*.

First's the Worst

It was Lt. Irving A. Robinson's first hit by enemy antiaircraft in 2,300 hours as a fighter pilot, but that hit set off a chain of events that would curl your hair.

He was 200 miles from his home carrier, the *Valley Forge*, when his *Panther* jet was hit by AA which exploded in

his left wheel well. The jet lost all hydraulic fluid and its emergency air pressure. This left him without wheels, dive brakes or wing flaps—not good for carrier landings.

When over a friendly Korean airfield, Robinson blew off the canopy and unhooked his oxygen mask, his life raft lanyard and finally his parachute. Slowing the plane down to 120 knots he made a perfect belly landing on the



LT. IRVING Robinson tells Dadisman of his hair-raising snow landing on Korean field

steel matting, fully expecting to stop within 600 feet.

The following action then took place before the horrified eyes of 250 spectators:

Like a rocket, he continued to skid 4,000 feet forward!

A fatal crash into a 17-foot high dike running at an angle to the far end of the runway appeared inevitable. Robinson closed his eyes and braced himself for it.

The plane hurdled a deep ditch, landed with a crash on a frozen pond, shot forward another 300 feet, struck and climbed the embankment of the dike, slid along the top for 150 feet and finally stopped on the opposite side of the levee!

Robinson stepped out uninjured.

PRESIDENT of South Korea, Syngman Rhee, BGen. Lamson-Scribner of Marines congratulate Capt. Trimblay on passing Korean bar



ACTRESS Betty Hutton on USO tour of Korea eats hamburgers with 1st MAW enlisted men

After spending the night on the beach, he was flown back to his carrier to rejoin his mates in VF-52, the unofficial "ski jumping" champion of Task Force 77.

Handy Man

It's always handy to have a lawyer in the family, but First Marine Aircraft Wing pilots are wondering how much good it will do to have Capt. Elie G. Trimblay a member of the South Korean Bar Association.

Capt. Trimblay was presented with his official certificate authorizing him to practice law in that Oriental country by Syngman Rhee, President of South Korea. The Marine fighter pilot received the award in the presence of BGen. Frank H. Lamson-Scribner, deputy commander of the Air Wing.

Double Nightmare

Two Marine pilots of the "Flying Nightmares" Squadron did a good night's work recently when they destroyed 18 enemy trucks and damaged four. The night flyers are 2nd Lt. A. G. Sadeski and MSgt. R. J. Tubbs.

Sadeski got his share when he caught a lead truck out in the open, strafed it, and set it burning. He destroyed the next

in line, a tank truck, with a napalm bomb. Flames halted two more lead trucks, and the pilot bombed them. When the remaining trucks attempted to file past the blazing mass of wreckage, they were strafed or bombed by Sadeski until he ran out of ammunition. His total—10 trucks destroyed, four damaged.

MSgt. Tubbs remarked that he "didn't clutter up the landscape", his were "all in a neat pile." This neat pile was the remains of a convoy that Tubbs sighted and destroyed. He bombed the lead and tail trucks. He then finished off the remainder of the convoy with seven more bombing and strafing runs. Total score for Tubbs—eight destroyed.

As they left the debriefing room that night, Tubbs challenged Sadeski. "I've got five that says I get more trucks tomorrow night."

"It's a bet," replied the lieutenant.

Barely Made It

Hoisting a water-soaked pilot out of the Japan Sea sometimes proves a hard job for rescue helicopters. When Lt. Aaran Modansky, *Panther* pilot, ditched his plane after a launch, the pinwheel came to his rescue.

The plane had shattered when it hit the water. Modansky kicked himself free 30 feet under water and found himself tangled in the parachute lines. As he came to the surface he saw the helicopter's rescue sling hovering over him.

He was so heavy the wheels of the helicopter touched the water as it slowly lifted him to safety. Because of bruised legs, Modansky was unable to climb into the helicopter, but was flown back to the *Antietam* with Crewman Lester J. Harwood holding the pilot's arms down to keep him from falling out of the sling.

Rough Landing

It was a routine carrier landing. The only thing was the flaps of the *Corsair* were up, the landing gear wouldn't lock and a hung rocket clung to the left wing.

The *Valley Forge's* crash siren sent all

VADM. ROBERT P. Briscoe, Com7th Fleet, greets Kichisaburo Nomura, former Jap naval Fleet Admiral; VAdm. Harold Martin, center





WITH TWO wounded men in its external litters, helicopter from VMO-6 prepares to land men at "Easy Med", front area hospital



DEATHRATTLERS squadron ordnancemen of 1st Marine Air Wing in snowy Korea find amusement in job of shoving a 1,000-lb bomb

hands hurrying to clear the flight deck for LCdr. R. S. Edinger, exec of VF-653, the Akron *Flying Circus* squadron. Flying rail interdiction and rescue patrol around Wonsan, he had AA knock out his hydraulic system.

He radioed in he would have to make a no-flaps landing. While the crash crews stood by, Edinger brought the plane down, his hook catching the #2 wire and the left wing bomb racks snagging #5 wire. Deck crewmen chased down the rocket which broke loose and went sliding up the deck. The *Valley Forge* sustained a hole in the deck planking. After wing and engine changes and a new coat of paint, the plane was flying again.

Just Seasick, Doc

A stiff wind was blowing across the black, pitching Korean waters as Marine Capt. Arthur W. Rawlings brought the transport helicopter slowly down out of the darkness and settled on the lighted deck of the hospital ship.

He helped unload the two badly wounded Marines he had flown in from the front lines. While he watched Navy hospital corpsmen carry the stretchers away, a doctor looked at him with a note of concern.

"You don't look well," remarked the surgeon. "Did you have a rough trip coming over the mountains?"

Rawlings shook his head miserably. "Gotta get off this ship," he muttered. "I'm getting seasick!"

Celebrates 150th Hop

1st Lt. Timothy J. Keane of the Marine *Checkerboard* squadron, VA-312, celebrated his 150th combat mission in Korean hostilities by scoring a clean, one-punch knockout of a railroad bridge west of Haeju in north central Korea.

This total of 150 missions is tops in the veteran squadron. He put his 500-pound bomb squarely in the center of the western span of the bridge and it crashed to the ground in a geyser of mud.

Fast Moving Navy

When Fireman John Banghart, aboard the frigate *Everett*, awoke one morning feeling not as well as usual, he did not realize that soon, because of this, his ship would be sending an emergency stand-by message to the *Valley Forge*.

Banghart was going about his routine duties when he realized that he was becoming more ill as the day progressed. He turned into sick bay and was found to be running a high fever. The corpsman, recognizing appendicitis symptoms, recommended immediate surgery.

The frigate, acting as an escort for supply ships, was many miles from a friendly base or the Task Force. No surgeon was immediately available. It was then that the *Valley Forge*, three hours away, received the message, "Stand by to receive man with acute attack of appendicitis!"

Steaming ahead at full speed through heavy seas the *Everett* reached the carrier just three hours later. Banghart was taken aboard the *Valley* in a boatswain's chair. Below waiting doctors examined him. A few hours later the patient was resting comfortably, minus



FIREMAN John Banghart on stretcher ready to be examined by *Valley Forge's* doctors

one appendix.

Later Banghart was told that his transfer could have been made much sooner via helicopter but the rough weather prevented such a flight. "Even so," said Banghart, "I've never seen the Navy move so fast!"

Good Deed Done

Crew members of the USS *Valley Forge* did their good deed for the day when they played host to representatives from Boy Scout Troops in Tokyo. Twenty-five American Boy Scouts and 25 Japanese Scouts spent a very interesting day aboard the carrier while the ship was at Yokosuka Naval Base.

The boys were given a complete tour of the ship. They saw engineering spaces, bridge, signal bridge, hangar



INTRICACIES of F4U cockpit intrigue Scouts of Japan and America on *Valley Forge* visit

deck, flight deck and the elevators. They inspected the ship's guns and living spaces.

Time out was taken in the middle of the day, for ice cream and cookies served by ship's cooks in the crews' mess hall.

The scouts arrived at the Naval Base early in the morning after a bus trip from Scout Headquarters, Palace Heights, Tokyo and spent a busy day.

LEST WE FORGET....

ASSISTANT Secretary of the Navy for Air Floberg, speaking in Akron, Ohio, March 12, emphasized the importance of Naval aviation in the Korean fighting.

"One of the factors of the air fighting in Korea which is sometimes overlooked," Mr. Floberg pointed out, "is the fact that while highly important, very significant, and certainly spectacular air battles are fought almost daily at great altitudes between American jet fighters and Russian built MIG-15's, the great bulk of the air effort by the Air Force as well as by the Navy and Marine Corps is being delivered at low altitude in furtherance of the interdiction and close support operations, which have, incidentally, been greatly assisted by the gunfire of the surface ships.

"Let there be no mistake about the contribution the Naval and Marine aviators have made in the Korean war. They have flown about a third of all the American combat sorties in the war. By now they have passed the 120,000 combat sortie mark and have made close to a half million runs on enemy targets in the course of their flights. Only last weekend Task Force 77 pilots set a new one-day record of 215 rail cuts in furtherance of the interdiction effort."

Helicopter Group Formed First Of Its Type To Be Commissioned

MCAS EL TORO—Another page in the history of Marine Corps aviation was written when the first Marine helicopter group was commissioned at the Marine Air Corps Facility, El Toro. The group, first of its type in the nation, will be commanded by Col. H. J. Mitchener.

Three transport helicopter squadrons based at the Facility were merged to

form the new unit, designated Marine Air Group 16. These squads serve as nucleus for the group which, in the near future, will include necessary support squadrons and additional "whirly-bird" squadrons.

The group will be equipped with the Sikorsky HRS helicopter. This type is now being used in Korea by another Marine transport squadron which was trained at El Toro. The Sikorsky HRS can carry eight fully equipped troops.



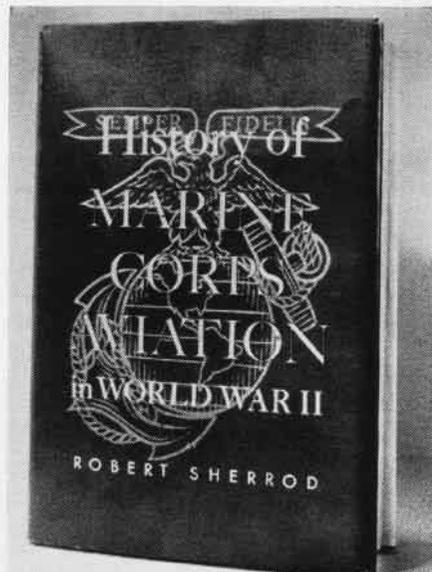
EVER SEE a more unholy mess than this F4U that caught afire aboard the carrier *Philippine Sea* when the ship was off Korea? The fire broke out when the plane was warming up and the fire-fighting crew immediately pounced on it with foamite hoses until it looked like this.

Marine Air History Complete World War II Volume Out May 22

Four and a half years of writing and research by a staff of Marines and civilians will be brought to an end on May 22 when the 512-page *History of Marine Corps Aviation in World War II* is released.

In addition to being sold at all book stores and military exchanges, 75,000 copies of the \$6.75 book will be mailed out free to every Marine who earned a battle star while serving in Marine aviation during WWII or his survivor.

The history was written by Robert Sherrod, *Time* magazine war correspondent, during his spare time and leaves of absence between *Time* assignments.



MARINE AVIATION HISTORY TO BE OUT MAY 22

Doing full-time research and writing on the project since June 1947 was Capt. Edna Loftus Smith, USMR-W, a member of the Marine history board, and a staff of assistants.

The book contains two chapters on early Marine aviation, which on May 22 will celebrate its 40th anniversary—the day in 1912 when Lt. A. A. Cunningham received orders to report to Annapolis for flight training. Its final pages give some history of Marine aviation in early days of the Korean war. Included in the book are 64 pages of photographs of pilots and planes.

Sherrod landed with the Marines at Tarawa and was at Saipan, Iwo Jima and Okinawa. Capt. Smith's connection with Marine aviation dates back to 1922 when her husband, now RAdm. Clyde W. Smith (Ret.), graduated from Pensacola. She also is the author of two chapters in the *Navy's Air War*. She was called back to active duty in 1947, ostensibly for a year, to work on the Marine history, a compilation which took more time than was anticipated.

MARINE FLYING IS 40 YEARS OLD

BORN IN the heart of a young man who never forgot the thrill of a balloon flight, Marine Corps aviation in 40 years has grown to be an indispensable part of the world-famed Marine fighting organization.

In 1903 Alfred Austell Cunningham twice soared aloft in a gas-filled balloon. In 1911 he was a Marine second lieutenant who spent his spare time and money tinkering with a flimsy flying machine dubbed *Noisy Nan*.

Although the contraption was never able to carry a man aloft, Lt. Cunningham's enthusiasm finally persuaded his superiors to consider seriously the possibilities of aviation in warfare. On 22



LT. CUNNINGHAM AT CONTROLS OF EARLY PLANE

May 1912, he was ordered to study at the Navy's new aviation camp at Annapolis, and Marine Corps aviation had begun.

He soloed after two and a half hours of instruction and later became the first Marine pilot. Skepticism died slowly, however, and by 1917 Marine aviation had only five officers, 30 enlisted men.

The first Marine Aviation Squadron was formed in October 1917. In 1918, Capt. (later LGen.) Roy S. Geiger led Marine flyers to France for action, where they piloted British and French planes until two months before the end of the war when they were given *Liberty*-powered de Havillands. By the end of World War I, the Marine air arm comprised 282 officers and 2180 enlisted men.

Between the two world wars, the *Flying Leathernecks* were kept busy in Central America. In the skirmishes with bandits in Nicaragua, they gradually built up the tactics which have resulted in the present concept of close air sup-



MARINE FLIERS ARE FAMOUS FOR THEIR PERFECTION OF THE CLOSE AIR SUPPORT TECHNIQUE

port of ground troops.

First Lieutenant Christian F. Schilt (now Major General) was the first to evacuate wounded men by air.

In the years before World War II, Marine pilots pioneered in many other fields. In addition to transporting troops by air in Haiti, flying reconnaissance flights in China and mercy missions in Central American disasters, they began operating from aircraft carriers as organized units.

At the outbreak of World War II, with only four battered Grumman *Wildcats*, Marine pilots at Wake Island fought a lopsided battle against the Japanese, taking on as many as 41 planes at a time. Even against such odds, they downed at least six enemy aircraft and sank a Japanese cruiser and sub.

AT MIDWAY, Marines spearheaded the aerial defense. Guadalcanal-based fighters continually took on enemy forces overwhelmingly superior in numbers. Divebombers and torpedo planes chalked up a remarkable record of sunken ships and demolished enemy installations.

It was a Marine pilot who downed five enemy planes to become the first ace of World War II. It was also a Marine—Maj. Joe Foss—who was the first American airman to tie the World War I record of 26 kills.

In a three and a half month period, Marine pilots destroyed nearly 1,000 planes in the air, neutralizing the once powerful Rabaul and Kavieng. As they

gained strength, Marine squadrons once again began operating from CV's, dealing telling blows to the Japanese in and near their homeland.

When the Japanese surrendered on 15 August 1945, the Marine aviation had expanded from a strength of less than 15,000 at the time of the Guadalcanal invasion to more than 118,000 men in four separate aircraft wings.

With demobilization, its squadrons shrunk again, but the outbreak of hostilities in Korea brought rapid expansion and new techniques. After WWII, Marine officers had established an experimental helicopter squadron at Quantico, Va., and had studied "vertical envelopment" techniques. Helicopter landings of combat-ready troops in Korea last fall proved the versatility of the strange, ungainly craft. The pioneers of close air support had forged another weapon for modern warfare.

Throughout the Korean fighting, Marine airmen have proved effective as ground support forces and harassers of enemy supply lines. *Flying Leathernecks* supported the Tenth Army Corps in the Inchon-Seoul campaign and helped blast open the route for the breakout from the Chosin Reservoir. For almost two years now, Marine airmen have hit the enemy night and day.

Whether on land as forward air controllers, at sea operating from carriers or in the air as fighter-bombers, Marine aviation is always on hand to support the ground forces. Today's Marine aviation is a poised, efficient, 40-year-old.

POLAND'S AIR FORCE

RECOGNITION

AS IN other Soviet-dominated countries, the communists in Poland have played a leading role in shaping the destiny of the air force. In continually exhorting Polish aviation personnel to greater heights, the Soviets have officially urged them to fly better, higher and more quickly so that they might equal the "heroic falcons of Stalin." To assist them in attaining this state of perfection quickly, Soviet methods and equipment have been incorporated into the postwar Polish Air Force.

The history of the air force dates from 1918 with the re emergence of Poland as an independent nation. This independence marked the end of another bleak chapter in the unfortunate country's long subjugation to the militaristic powers of Russia, Prussia and Austria.

After serving four years as a World War I battlefield for these nations, the Poles managed to assemble an aircraft from salvaged parts abandoned at the end of war. This hybrid was used for aerial reconnaissance against insurgent Ukrainians.

By 1919 the air force had increased in size and consisted of Poles, French, British and American pilots who flew a variety of French, British and German aircraft. This assorted force participated in a number of successful operations against the invading Bolos (Bolsheviks) who had laid siege to a number of Polish towns.

In September 1939, Poland was attacked by Germany. After a gallant stand against overwhelming odds, a small percentage of the PAF made its way to France where units were formed to continue the fight against the Luftwaffe. With the collapse of France the remnants of the air force moved to England and from there flew with the RAF until the war ended.

The exploits of the Polish airmen



POLES USE IL-10 STORMOVIK TANK BUSTERS TO SUPPORT GROUND TROOPS; NOT FAST BUT STURDY

while with the RAF are well known. In size of organization the PAF was the largest of Allied Air Forces formed in exile. At the end of the war it consisted of 14 squadrons and the total personnel was more than 13,000. After the Germans invaded Russia in 1941, other units of the PAF which had fled eastward to Russia in 1939 were organized by the Soviets to fly against the common enemy.

With the defeat of Germany and the rise of communism in Poland, this group received the usual political indoctrination preparatory to its becoming the nucleus for the new PAF. On the other hand, those returning from the RAF were subjected to closer scrutiny and were weeded out if found to have unreliable political views. It then remained for the Soviets to rebuild the air force to the extent that would serve them best. In 1945, after a period of reorganization, the PAF emerged as a pattern of the Soviet air force and at that time it was intended to serve primarily as a tactical air force.

THE PAF is organized as an independent service on the same plane as the Army and Navy. These services operate under the Commander-in-Chief of all the armed forces in Poland, Marshal Rokossovsky. Although born in

Warsaw, the Marshal is a distinguished Soviet officer whose entire service career has been spent in the Soviet Army. He was drafted by the Czarist army in 1914 and later became a revolutionary leader in the Red Army. Similarly, the commander of the PAF, Lieutenant General Turkiel, is a Soviet officer who formerly served with the SAF.

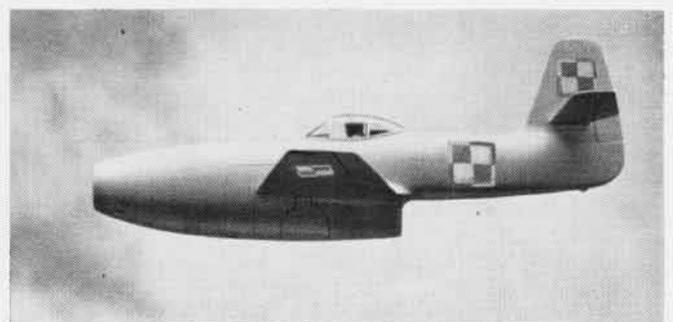
Like the SAF, the basic tactical unit of the PAF is the air regiment. There are a number of different types of regiments, such as fighter, ground attack bomber, transport, reconnaissance and training. The regiments vary in strength depending on the mission they are to perform. Some regiments have as many as 50 aircraft while others run around 30. For operational purposes the regiment is often divided into three squadrons with the squadron further divided into flights.

In addition to the air force there is a small naval air arm. This component is an integral element of the Polish Navy and is administered separately from the PAF.

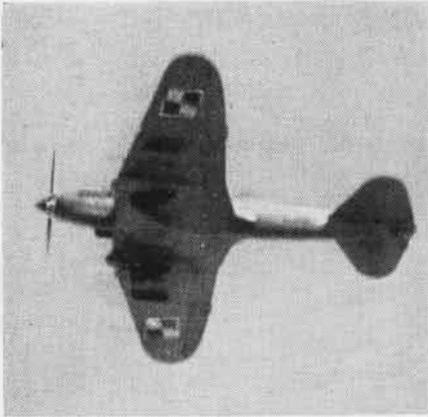
Fighter regiments in the PAF are equipped with propeller-type aircraft and jets. The standard prop fighter is the YAK-9, which is apparently in plentiful supply as the Soviets have assigned it to most of the satellite air forces. This includes Korea where UN pilots have



YAK-15 MOD 1 JET TOO SLOW FOR KOREAN WAR; POLAND GIVEN SOME



MOD 2 VERSION OF YAK-15, ALSO WITH POLISH AIR FORCE, IS FASTER



IL-2 30 KNOTS SLOWER THAN LATER ILYUSHIN

destroyed a number of them in combat and on the ground. The YAK-9 fitted with an in-line engine, has a maximum speed in excess of 320 knots. A more powerful version of this aircraft can attain a maximum speed in excess of 350 knots. Its armament includes two to three guns fitted in the upper nose section.

DURING the past year there have been accounts of jet fighters flying in air shows. To enable the PAF to equal "Stalin's heroic falcons," it is apparent that the obsolete Yak prop fighters must be replaced with more modern equipment. Already on the western side of the Iron Curtain, UN nations have started re-equipping their squadrons with F-84 *Thunderjets*, *Vampires*, and *Meteors*.

Polish bomber regiments are equipped with the Soviet World War II PE-2's. This plane, a twin-engined light bomber, was designed by Petlyakov who was killed in an air accident during the war. Fitted with two fixed nose guns and three other flexible guns about the fuselage, it proved quite formidable against the Germans. In a postwar line up, however, it must be considered on the obsolete side. The two in-line engines of the PE-2 give the twin-tail bomber a maximum speed of around 290 knots.

Ground attack planes are highly regarded on the other side of the Iron Curtain. During the war, the Soviets



RUSSIANS HAD SURPLUS OF PROP FIGHTERS SO MANY YAK-9'S WERE TURNED OVER TO POLAND

developed the heavily armored IL-2 and IL-10 *Stormovik* "tank busters" and used them in stemming the German ground advance. They served well in this role and the Germans unaffectionately referred to them as "Black Death". These sturdy but now obsolete aircraft comprise the PAF's ground attack force.

Both aircraft were designed by Ilyushin, and while they are similar in appearance, the more powerful IL-10 has a maximum speed of around 260 knots, some 30 knots faster than the IL-2. Armament on the IL-10 consists of four guns in the wings and another gun in the cockpit. Beneath the wings and fuselage it can carry several rockets and bombs.

Aircraft assigned to the transport regiments consist of Lend-Lease R4D's and Soviet built LI-2's the Soviet version of the R4D. There are also some IL-12's in service. These newer twin-engine transports have been seen at various international airports in Europe carrying Polish commercial markings. The IL-12 is fitted with a tricycle landing gear which consists of dual main wheels and a single nose wheel. An average cruising speed for the transport is around 170 knots. Aside from routine transport duties these aircraft are equipped for dropping parachutists.

A NUMBER OF Soviet light aircraft are used for training, liaison, and reconnaissance duties. Most prominent is the old standby PO-2 biplane. This

little biplane, first flown back in 1927, is still in service with Soviet and satellite air forces in large numbers. The PO-2 is a two-seater constructed of wood and fabric with a five-cylinder radial engine. The biplane's span measures 37'5" with N-type struts holding the wings together. A number of versions have appeared through the years and some have been equipped with skis and floats. During World War II it served in a variety of roles. It annoyed the Germans, as a night nuisance bomber, sometimes dropping as much as 220 pounds of bombs on some unsuspecting target. In Korea the PO-2 is still active in this role.

The PAF aircraft military marking is a departure from the Soviet pattern in that the customary communist red star is missing. Actually the marking has not changed since before the war. It is unique in that it is a square with four checker board smaller squares inside. Two of the squares are red with a white edging while the other two are white with a red edging.

Obviously the caliber of the Polish pilot has not benefitted from the many purgings that accompanied the merging of the Soviet element of the PAF with those returning from the RAF. However, as the PAF gains in political reliability, it can be expected that communist aid will be reflected in increased expansion and training. Equipped with jets and ground attack aircraft, the PAF will be a key link in the Iron Curtain air forces as well as provide the Soviets with a buffer zone defensive air force.

Valiant. Although the only existing model of the Vickers' 4 jet bomber, the *Valiant*, recently crashed, production is reported on this sleek design. The four Rolls-Royce *Avon* jets are housed in the roots of the swept-back wings leaving no projections to clutter the clean design.



TWIN-ENGINED PE-2 LIGHT BOMBER PACKS FIVE GUNS, IS OBSOLETE BUT STILL USED BY POLES

RECOGNITION

BIG CARRIERS RENEW GAGS FEUD

THE RIBBING "feud" between the two big carriers, *Franklin D. Roosevelt* and the *Coral Sea*, went into Round Three when the FDR sailed into Norfolk recently after a four and a half month Mediterranean cruise.

The slapstick greetings now employed



ADMIRAL FROM MARS EXAMINES FDR TONSILS

by the CVB's all started in Oran, Algeria, in January 1951 when the FDR relieved the *Coral Sea* in the Mediterranean. That day, the FDR steamed unsuspectingly into a welcome barrage complete with 10 massive cakes, a 150-foot *Welcome* sign, phoney admirals and Arabian princes on official calls and a 3000-man horselaugh by the crew of the *Coral Sea*.

Round Two saw the *Roosevelt* get in her innings in Lisbon, Portugal. She sent a convoy of boats to the *Coral Sea* with the signs "Granby Cleaners" and "Tours to Portsmouth and Virginia Beach". A sharp character in a zoot suit with a wolf's mask held a sign "Your Wife is Fine."

The *Coral Sea* retaliated with *Sky-raid*ers painted "Welcome" and "Stranger", plus signs ribbing them for being in the Norfolk Navy yard so long.

Round Three opened when the *Franklin D. Roosevelt* came back from the Med in February. The SNJ and SNB from the *Coral Sea*, suitably painted with "Welcome Home, Little Brother" signs roared over the FDR until she came within distance of the *Coral Sea* band which commenced playing "Shrimp Boats Is A'Comin'" when the first line went over.

As the FDR drew closer, the *Coral Sea* sprang its posters bearing such remarks as "4 Months?"; "Welcome Home, Signed—Main Street Debutantes"; "How Was Your Leave?"; "Now You are Eligible for U.M.T."; "Congratulations on a Successful Reserve Indoctrination Cruise", and "Money Changed—Uncle Sugar—Church Street."



CORAL SEA SIGNS WELCOME FDR ON RETURN

The FDR, suspecting in advance her rival would be up to her usual tricks, dressed up some of her crewmen in ridiculous outfits to represent Sam and George, the irrepressible Italian travel agents, and an Admiral from one of our neighbor planets—Mars perhaps. (see photo).

VJ-2 New Hurricane Hunter Replaces VP-23, Now ASW Squadron

A new weather-chasing squadron, VJ-2, has been commissioned at NAS JACKSONVILLE. Specifically organized for hurricane hunting, the squadron replaces VP-23, formerly based at NAS MIAMI and long the scourge of the tropical cyclones.

VP-23 has been moved from Miami to NAS BRUNSWICK, Me., where it will do antisubmarine patrol work.

VJ-2's primary job will be to detect and track hurricanes throughout the Caribbean, South Atlantic and Gulf areas. It will work with Miami Weather Central, notifying that center of weather which might endanger cities, farms and military installations along the Florida and Gulf coasts. Cdr. David J. Walkinshaw is commanding officer; LCdr. Lloyd L. DeLatour, executive officer. Most of the personnel of VJ-2 came from VP-23.



DELATOUR, WALKINSHAW INSPECT P4Y AIRCRAFT

Exchange Pilot Is Honored Receives Scroll, Wings From VP-49

VP-49, NS BERMUDA — Newest "naval aviator" of VP-49 is Capt. Frank Alagna, USAF. Capt. Alagna, under the inter-service exchange program, served with the squadron for 16 months as patrol plane commander.

VP-49 gave the captain a send-off party, and on the entertainment agenda



"NAVAL AVIATOR" ALAGNA WEARS NEW WINGS

was an impressive ceremony. Cdr. E. J. Fisher, squadron skipper, presented Capt. Alagna with his wings, the degree of "naval aviator," and a lengthy parchment honoring his achievements including successful night landings and take-offs "in hairy crosswinds and in sea states 4, and up." Naval aviators were asked to honor the scroll at Navy Clubs to the tune of a free drink.

First Saved Pilot Signs Up Liked Helicopter Rescue, Learns How

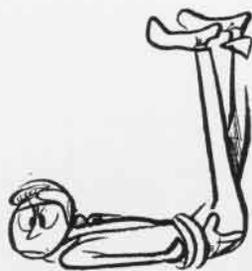
NAAS ELLYSON — The first naval aviator to be rescued by a helicopter recently became a helicopter pilot himself.

Lt. Robert A. Shields was flying off the *Leyte* in 1947 when his SB2C had an engine failure and he made a water landing. He and his crewman, Aviation Radioman Donald K. Little, swam free of the sinking plane and prepared to wait for rescue by a destroyer as they both had done four and a half months previous when a similar accident befell them.

Before a destroyer could arrive at the scene, a helicopter piloted by Jimmy Viner, chief test pilot for Sikorsky Aircraft Co., was hovering over the downed airmen. Shields and Little were back aboard the *Leyte* in six minutes.

This rescue served at least a dual purpose. It opened a new chapter in naval aviation and it created a desire in Pilot Shields to one day fly the helicopter himself. In March, 1952, he qualified as a pinwheel pilot with HTU-1 and is now with the Atlantic fleet.

AND THERE I WAS



"Ichabod's" Sonobuoys

TEMPTATION is a terrible thing. During the late, great struggle, for example, there were a large number aboard one of the CVE's that bobbed like corks on every navigable ocean around the globe.

On this particular bulwark of democracy was a VC squadron and, like most, it had an electronics officer. He was regarded with amusement by his fellow officers because of his close physical resemblance to Ichabod Crane and because of his intense loathing for any machine involving flight. He was, however, captivated by the arrival of a batch of glistening new sonobuoys, a captivation that turned to frustration when he was unable to find any way to duplicate combat conditions from the platform deck.

Finally, the stress proved too much and with his courage screwed up like a zeus fastener, he clambered aboard a *Turkey* outbound on ASP, hoping fearfully for a chance to see his buoys in the acid test—albeit without gunfire.

The four hours of patrol passed like thousands of others had—uneventfully—and the TBM headed home to nestle aboard. This step was complicated somewhat by the fact that the carrier was now steaming in a dense fog. The pilot finally located a clear area, gave the ship a steer and began the endless orbiting. The ship then instructed the TBM to jettison its load, because the wind was

light and fitful. (As a matter of fact, the plane finally landed DOWNWIND, but that is another story).

Thus advised, the pilot selected a calm section of sea, opened the bomb bay doors and sent his load of sonobuoys parachuting delicately to the water. The electronics officer, whose Adam's apple was bouncing like a runaway yo-yo at this sudden turn of events, was ecstatic. As soon as the buoys had alighted and sent their hydraphones coiling down into the depths, he spun the frequency dials like Jimmy Valentine on his biggest job, and sat transfixed as he strained every fiber listening to the mystic sounds of the sea beneath him.

Up front the pilot pondered for a few minutes, then shrugged and with a faint smile dropped his load of depth charges squarely on the sonobuoys.

BOB REILLY, LT. USNR
NAS, LOS ALAMITOS

This One May Burn You

EVERY DAY the ingenuity of the sailor-pilots contributes something to the success of Naval Aviation. The latest comes from VF-837, a New York Reserve squadron currently flying F9F's from the *Antietam* in Korea.

These intrepid pilots have used their rockets to destroy tanks, their 20mm cannon to knock out gun emplacements. When it came to knocking out ox-carts which might be carrying hidden strategic materials under their load of hay, they were doing fine as long as they had the ammunition. But what was the pilot to do when he spotted a juicy ox-cart and his guns were empty?

The squadron studied the problem for several days and finally arrived at a solution through the combined efforts of Lt. L. G. Wisnyi and Lt. L. R. Gebert. A theoretical situation will best explain what they decided upon.

VF-837 has just returned from a successful mission, having knocked out 11 tanks, 6 MIG's, 4 buildings and 7 locomotives. They see an ox-cart moving along the road. No more ammunition. What to do? The leading jet dives upon the ox-cart, spraying it with gasoline by unloading its wing-tip tanks. The wingman then follows through by igniting the ox-cart with his jet blast. Result: one ox-cart destroyed and more meat for consumption.

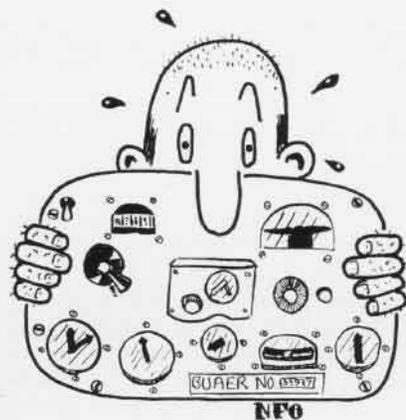
(Another solution which reached NANews by rather devious means was to have the wingman back his plane up to the ox-cart.)

It is rumored from the *Antietam* that the two heroes are now spending sleepless nights trying to devise a method for folding the wings of the jets in flight to enable them to chase locomotives that hide in tunnels.

Well Loaded

IN A CLASS lecture on research and development at the Naval All Weather Flight School, our instructor, Lt. Johnson, was enthusiastically describing the instrument panel of the experimental plane *Delta*.

"It has omni, DME, the course line com-



puter, instrument landing aids, the zero reader, everything!"

A voice in the rear asked, "Partial panel?"
CDR. A. E. HARNED, USCG
NAS CORPUS CHRISTI

New Record

THE RECORD for "stymied aviator of the season" has a contender on the west coast. A combination of bad weather and a restricted aircraft kept Lt. S. J. Guimont 30 days in Seattle after he had flown an SNJ from San Diego to Spokane. He was away from San Diego for a total of 35 days on a trip that had been planned for a long weekend. How stymied can you be!

Salty Talk

ADM. John M. Hoskins' new aide and flag lieutenant learned the embarrassing way that the Navy's salt water lingo just isn't understood at Hickam Air Force Base.

At the MATS headquarters, Lt. Gordon Stanley, USN, called Air Installations to report plumbing difficulties in his newly-occupied living quarters. He explained to the Air Force stenographer that "my head doesn't work right because it can't be turned off."

"Would you repeat that, sir?"

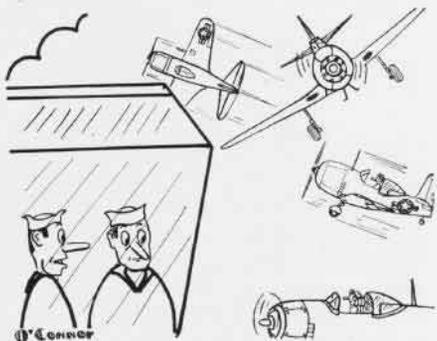
"I said my head doesn't work right, and it has to be jiggled to make it stop!" Stanley told her.

The gal was mystified and started seeing red because of this "joker". "If there's something wrong with your head, why don't you call the dispensary?" she asked.

Finally, Miss Artie Cartledge, the Admiral's secretary who's been exposed to Navy jargon for several years, came to the rescue. She informed the confused Air Installations girl that a "head" is to the Navy what a, uh, er "latrine" ('pardon the expression) is to the Air Force.



PILOT TO NAVIGATOR—WHAT'S ON LORAN?



IT'S ALWAYS THIS WAY ABOUT 1630

BOMBING AREA LIKE KOREA

COMFAIR, JACKSONVILLE—Using live bombs and rockets, pilots of Carrier Air Group 4, commanded by Cdr. Larry Geis, conduct tactical air control operations in realistic Korean fashion, using a new bombing-impact area at Pinecastle.

Located 10 miles southwest of Lake George, in the Ocala national forest, the area gives as nearly as possible conditions existing in Korea. A landing strip was constructed in the heavily-wooded area. On the strip and adjacent area, abandoned vehicles and planes were parked to serve as targets for Fleet Air Jacksonville pilots. Fake gun emplacements heighten the effect of actual combat.

Most of the targets are heavily camouflaged and pilots of attacking aircraft are guided onto the targets by an air control group with ground radio. A detachment of Tactical Air Control Squadron 4 directs aircraft fire, with a forward air controller, an aviator, stationed with ground forces.

At Pinecastle, this man rides in a radio jeep close to the bombing range. He assigns targets to attacking pilots and gives them firing approach data. In a control tower, some distance from the target area, others in the control group observe and evaluate the strikes. Value of this close liaison between air and ground forces has been proved many times in Korea.

The Pinecastle area offers the closest possible approach to a realistic impact area to be found on the east coast, according to Lt. (jg) William M. McDonnell, air intelligence officer of the ground unit. The Navy has another such area on the island of Culebra off the Puerto Rican coast.

The U. S. Forestry Service cooperated in making the Pinecastle area available. Firebreaks were constructed in the woods surrounding the target to stop fires from spreading. A standby plow

team is available to cut new firebreaks if needed. Cdr. Geis routed all planes flying to the area over river and uninhabited swamp areas as a safety measure.

GCA Unit Sets Precedents

Dramatic "Saves" Recorded at Corpus

The Navy's Ground Controlled Approach Unit 16 at NAS CORPUS CHRISTI recently logged its 40,000th approach with a touch of dramatics. The plane that logged the approach set a precedent since it was the first time an F7U-1 *Cutlass*, the Navy's newest carrier-type jet, had ever made a GCA approach.

One of the more dramatic "saves" recorded at Corpus occurred when two



CUTLASS JET MAKES ITS FIRST GCA APPROACH

TBM *Avengers*, following the radio range signal, called in for landing instructions with GCA Unit 16. The first plane was having radio trouble and was not able to hear the radio range signal. However, he could make contact with ground units at the air station.

The planes had an estimated hour's fuel supply left when they reported in over the field, but the GCA operators couldn't pick them up on their radar scopes. Two other radar units on the field were called upon to help locate the planes thought to be south of the field. The unit at the seaplane area finally located them about 20 miles north of Corpus and controlled them toward the

field where GCA observers could pick them up.

The TBM's were flying at 6500 feet, on top of the overcast clouds, while the ceiling over the station was reported at 500 feet. This meant they had to come down "blind" through 6,000 feet of cloud formations. Taking the planes one at a time, GCA-16 with the aid of the seaplane unit brought both pilots in to a safe landing.

The planes had only ten gallons of fuel left after landing.

Photo Shortage Is Reported

Negatives Should Be Shipped to NPC

NAVAL AVIATION NEWS in its March issue featured a seven-page article on *Pilot Survival*. Twenty-six photographs were used to illustrate it, compiled from air stations or activities from Korea to Miami.

When the article appeared in print, several press associations, newspapers and photo agencies requested the photographs so they could reprint the article. The Office of Public Information, however, had difficulty in providing the pictures—only two of the 26 pictures had official Navy numbers which meant the negatives were on file in the Naval Photographic Center, Washington, D. C.

The above example is typical of the problem Navy public information has in supplying extra prints of pictures appearing in NAVAL AVIATION NEWS. Squadrons, carriers and stations supplying photos to the NEWS frequently hold the negatives, instead of sending them to the Photo Center, as directed by the *Manual of Navy Photography*.

The NEWS has been asked to remind its photo contributors that there is a constant demand for intelligence, publicity, training and historical pictures. In no case, the *Manual* says, should a command or activity retain completed photography for more than a month "unless it is essential to present operations, tests, further study or unless the command is on an extensive operation."



TWO VERSIONS of the utility helicopter being produced for the Navy by Piasecki, the HUP-1 on the right and the new HUP-2, left. By eliminating the tail stabilizers, the new model cuts down its weight by more than 100 pounds. The HUP-2 is the first production helicopter with an automatic pilot installed. Later versions will be equipped for ASW operations.



WHEN Lt. James O. Eckert, cycloramic instructor at NAAS Whiting Field, went to work one day, his first student was his brother, Ens. Richard H. Eckert, a Naval Academy grad now in basic flight training.

CODFISH LINE CARRIES HOT CARGO



STRIPPED DOWN TURKEY MAKES EFFICIENT TRANSPORT FOR SEVENTH FLEET IN KOREAN WATERS

THE NAVY'S *Codfish Airline* is not in the business of hauling fish by air. Its torpedo-bombers turned transport fly something much more important—emergency supplies from the southern tip of Japan to the carriers operating off Korea.

Nickname of the airline run by VR-23 is derived from its official title: C.O.D. (Carrier-on-Board-Delivery). Enlisted men of the VR-23 detachment that runs the service dubbed it the *Codfish Airline* and the name stuck.

Codfishers also fly "hot" cargo to the forward area air strips in Korea where their best customers are the men

of the First Marine Division. Their loads generally consist of whole blood, plasma, critical parts, special technicians, air mail and VIP's.

The problem of delivering critical material to the Seventh Fleet and the Marines in Korea quickly was solved a year ago by stripping down six torpedo



COD MEN MULL OVER DETAILS OF LOADING TBM



OFF TO JAPAN GOES F. W. THIEL VIA "COD"

planes and converting them to transports. Upon conversion they were designated TBM-3R's. The airline averages 20 flights a week from their base at Itazuke, Japan, so it is one of the busiest airlines for its size in the world.

Codfish was the brain child of Cdr. O. V. Wallgren, formerly TF-66 Logistics Officer. Its inaugural flight was made 5 January 1951. Skipper of the nine officer pilots and 23 enlisted men of the VR-23 detachment is now Lt. Gale Watt of San Diego, California.

Most distinguished VIP to travel the *Codfish* route was Senator Homer Ferguson of Michigan. He was flown from

Korea to the USS *Valley Forge* for a two-day visit.

Because of the *Codfishers'* ability to land on short runways, they have been called upon to fly spare parts and even food to many of the small islands in the Sea of Japan where radar stations are maintained. At times, the small boats that normally supply these islands are prevented from doing so by rough seas. Then *Codfishers* take over the job. On islands that do not have runways, *Codfish Airline* has, in emergencies, supplied them by means of parachute drops.

WHEN THE detachment first arrived at Itazuke last year, the only equipment available in setting up their base was one-third of a dilapidated quonset hut and a rusty pot-bellied stove. But in the tradition of the "white hat" all over the world to scrounge and make-do, the enlisted men soon had "borrowed" enough material to remodel the hut into an operation office. Lumber from napalm bomb crates was used to make desks, chairs and tables. A radio receiver-transmitter set which they had brought with them was installed—and *Codfish Airline* was ready for business.

Morale is high. The men are not only proud of their small base which they literally made with their own hands, but are also proud of their excellent safety record. They have never lost a passenger, a crewman or a pilot. They lost one plane because of engine failure, but the pilot, the only man in the aircraft, walked away from the crash. Their record is remarkable in light of the fact that the unit operates almost entirely from carriers and emergency-type airfields in all kinds of weather.



TBM'S ENGINE IS CHANGED AT ITAZUKE, JAPAN

★ 'NOT JUST A NUMBER' ★

"NOT JUST a number"—that was the cry of pride and relief in the hearts of the parents of a boy who crashed with his instructor in a training SNJ at Whiting Field.

It happened the very last day of January, only a few short weeks after he'd been home at Christmas.

At that time Clay K. Taylor, Jr., had said to his father, "Daddy, there's no way for me to get fatally hurt as long as I do what they tell me to do. We have the best officers, instructors, equipment, quarters and food in the world."

Then came the fatal eighth flight of young Taylor. The plane he and his instructor were in was thrown out of control in a mid-air collision. Death came early for the air cadet.

It might have been only the final act that closed his days, a grief to be shared by his shipmates, his friends in Lott, Tex., and his own family who could never forget.

But it became much more than that. In a world hardened by grief and loss, uncertain of life and often afraid of death, there came such an expression of faith and devotion to this country on the part of Mr. and Mrs. C. K. Taylor, Sr., as to suggest that love of country, which makes this country great, still holds sure in adversity.

Clay's parents were to write to VAdm. J. H. Cassady, DCNO (Air) and Capt. L. C. Simpler, commanding officer of Whiting, not only their deep appreciation of the escort and the personal appearance of a honor guard at the service in Texas, but also an expression of their abiding faith in the service in which their son lost his life.

In the letter to Capt. Simpler, the quiet words of grief and loss and pride and faith are deeply moving: "It is with pride that we are writing you concerning the death of our son, Clay K. Taylor Jr.

"Although we are at great loss, there is no bitterness or ill will in our hearts toward you or our Government. Our son died doing what he chose to do for his country and with great pride he wore the uniform of the U. S. Navy.

"We know that neither you nor your program was negligent in any way, causing his death. Especially we appreciate the personal appearance of Cdr. Blair and his honor guard in our behalf.

"We cannot praise enough the personal service rendered us and Clay by his escort, Cadet Montgomery.

"We deeply appreciate the fact that our son was not just a number as proven by your personal actions in this case.

"Please extend our sentiments to his



classmates as he thought them the best men on earth."

The same proud, tender spirit sustains Mr. and Mrs.

Taylor in their letter to Adm. Cassady:

"We personally wish to acknowledge your kind expression of sympathy with grateful appreciation.

"We were very proud of our son for he felt that he was in the greatest part of the service, and it was such an honor to have him there. If it was to do over, we would want him back in this same service for he was very proud and happy.

"We have two more boys, Richard, 13 years old, and John, two years old, and we hope . . . when it is their lot to serve their country they will be qualified to meet the high standards required by the Navy as Clay was.

"Although it has taken him away, we have no bitterness toward this service. There will always be many beautiful memories for us. And this branch of the service was to us the highest honor that we or he could have had."

The deep, steady conviction of Clay's family which is shared by the U. S. Navy is that he died for his country as truly as if he had completed his training and fought on a foreign shore. The cost of training is part of the cost of war, and sometimes Death collects the price ahead of schedule.

Sailor Is Plane Commander Is Believed First Transport Top Pilot

There's a bluejacket in the port seat.

Edward F. Spencer, aviation machinist's mate first class, is believed to be the first first-class enlisted plane commander to fly the RSD *Skymaster* in fleet logistic service.

Many Navy enlisted pilots fly single and multi-engine aircraft, but Spencer has gone them one better in assuming the heavy responsibilities of plane commander in the four-engine aircraft popularly known as the DC-4.

Spencer flies over Pacific ocean routes with Naval Air Transport Squadron Five. He is 34 years old. He joined the



EDWARD F. SPENCER IS HAPPY IN PILOT'S SEAT

squadron in August of 1950 at Moffett Field.

While flying the airlift to Japan and Korea as co-pilot he logged the necessary flight time for plane commander and fulfilled qualifications.

He was ordered to NAS CORPUS CHRISTI, to take the plane commander's course. Upon completion of the course he returned to Moffett Field from where he completed route checks and was recommended for the PC designation to Commander, Fleet Logistic Air Wing Pacific.

Spencer is now flying the Alaskan-Aleutian run and is being checked out in the R6D (civil DC-6) aircraft.

Spencer started flight training in 1943. After receiving his wings in 1945 he accepted a commission as Ensign, USNR. In order to remain on active duty in 1947, he returned to his enlisted status in the regular navy.

Old Canopy Gets New Look

Device Fights Respiratory Diseases

When is a *Bearcat* canopy not a roof for a fighter pilot? When it's converted into a combination oxygen tent and humidifier to help Navy doctors fight respiratory diseases.

Although the infirmary at NAS QUONSET POINT is well equipped with oxygen tents, it lacked a combination oxygen tent and humidifier for application of aerosol medication and steam inhalation. Lt. Richard E. Leuhrs, flight surgeon, went browsing around Quonset's huge O&R shop and found some idle F8F plexiglass cockpit hoods which fitted the bill.

Gordon Bratton, Civil Service plastics worker, and Lt. Chester M. Trossman, pediatrician at the infirmary, worked out



"INVENTORS" SEE INFANT GETTING TREATMENT

the specifications and Bratton came up with a reasonable copy of a "croupette." It has already been used successfully in infant cases and will be extended to feed medicants to Navy fliers floored by pneumonia or other respiratory diseases.

Two more combination oxygen tents and humidifiers are now under construction and are expected to be in full-time use during the months ahead.



AM DUPONT SERVES COFFEE TO FRENCH GUESTS

AM Speaks English, French Flight Orderly Acts As Interpreter

NAS, ALAMEDA—"Votre attention s'il vous plait" came the voice over the public address system.

Eighty-nine French officers and midshipmen aboard the *Constitution* came to attention as they heard the sound of their native language. The soft natural voice continued, giving them an indoctrination lecture in French. Looking forward the visitors saw the flight orderly talking to them over a microphone from the orderly's station.

At the end of his lecture, flight orderly AM Joseph DuPont asked if there were any questions. The visitors from the cruiser *Jean d'Arc* had many questions. Some of them had never flown before and here they were aboard the Navy's largest land type aircraft. The R-60 was enroute to San Diego on a round trip flight that would be broken by a day at sea aboard one of the Navy's big aircraft carriers. Few of the participants spoke English so the orderly answered their queries in French.

After the initial rush of questions had been answered, one of the officers asked, "Where did you learn to speak the Old French?"

DuPont explained he had been born in a French family in the French speaking community of Manchester, N. H. The language was his native tongue until he started to school and learned English. He continued to study both languages until his graduation from high school.

After graduation AM DuPont joined the Navy. He is now attached to VR-5, Moffett Field. He became a flight orderly in July, 1950. His most memorable trip to date is this round trip San Diego-Alameda flight when he served as interpreter as well as orderly.

• NAS GROSSE ILE—Six officers attached to WS-73 recently underwent a special training program for Naval Reserve Air Intelligence officers aboard this station.

RESERVE PILOTS WANTED

NAVAL Reserve aviators can again obtain active duty flying in naval aviation. Hundreds are needed. Volunteers are desired from Ensigns, Lt. (jg)'s, Lt.s., and LCdrs. Date of rank for LCdrs. can not be earlier than 1 Jan. 1951.

Shortly after the outbreak of fighting in Korea the list of volunteers hit an all-time high. Now it is almost depleted. Many of those on the list were ordered into the active military service and, having served their tour, are returning to inactive duty.

There is no time limit on active duty during the present international situation. Reserve officers have the misconception that a volunteer is allowed to serve only the maximum time of either 17 or 24 months, depending on the program they are in. At the present time the Navy is allowing Reservists to remain on active duty beyond the stated period if so desired.

Currently Organized Reserve officers must serve 24 months. Volunteer Reservists serve 17 months if they have had 12 months of active duty between 7 December 1941 and 2 September 1945. Otherwise they must serve the 24-month period required of the Organized Reservists.

Some Reservists think that the current emphasis is only on fliers with carrier experience. That is wrong; the Navy needs naval aviators of all types.

There are also a limited number of billets for helicopter training and flying. Those returning to active duty who are interested in flying helicopters should state such preferences on their active duty requests.

Naval aviators returning to military service from the Volunteer Reserve program are given a chance to dust off the uniforms and ease into flying again. All Volunteer Reservists are sent to refresher courses. Refresher stations are

Dallas, Memphis, New Orleans, Atlanta, Miami, and Grosse Ile. When Organized Reserve officers return to active duty they are allowed a 30-day refresher period at their local Reserve activity.

Pilots who desire detailed information concerning the return to active duty may contact local Reserve activities if in the Organized Reserve. If in the Volunteer program, they may address questions to their Naval District Commandants or directly to the Chief of Naval Personnel. Officers who previously submitted requests need not resubmit.

They're Not Horses Anymore Navy Chaplains Ride Modern Circuit

USS *BAIROKO*—In olden days the circuit-riding parson would saddle up his old "hayburner" and head for the hills, making his rounds of his flocks. But those days will soon be gone forever—at least in the U. S. Navy.

An exchange of chaplains recently between the *Bairoko* and the ships of her screen was reminiscent of the circuit-riding preachers, but their mode of transportation was different. The *Bairoko's* helicopter took her chaplain, Lt. D. H. Humphries, over to the destroyer escort *Monroe* after he had held Sunday Protestant services aboard his own ship. Then Rev. George Hart, Chaplain, Royal Canadian Navy, was brought over to the *Bairoko* from HMCS *Cayuga* for Catholic Mass. Chaplain Humphries wanted to hold Protestant services aboard the *Cayuga*, but was unable to do so because of a delay in her arrival from a night patrol.

It was the first helicopter ride for the Canadian chaplain from Vancouver. Rev. Hart thought that flying straight up and down was a jolly sensation. He commented that flying the circuit was a novel way to be taken to and from a Mass service.



FOUR AIRCRAFT carriers, a sight seldom seen since the Pacific battles of World War II, gathered in the Japan Sea recently for a day of replenishment. In the foreground, the *Philippine Sea* takes on ammunition, in the middle the *Essex* has a fleet oiler alongside. At the top of the picture the *Antietam* and the *Valley Forge* await their turns. Another oiler and two destroyers from Task Force 77 operating off Korea's coast complete the picture.

RESERVE AIR GROUP MANS 'TERRIBLE T'



CHECKING Med operating area, left to right: Cdr. Fly, LCdr. Moot, Cdr. Hathorn, LCdr. Pulford, LCdr. Price, LCdr. James



IN READY room aboard the *Tarawa*, LCdr. James and Cdr. Hathorn show graph of group landing interval progress to RAdm. Doyle

RESERVE squadrons of CAG-8 are now conducting their tour with the Sixth Fleet in the Mediterranean. They are the only Reserve group in the Atlantic Fleet. Activated on 1 February 1951, VF-671 from Atlanta, VF-921 from St. Louis and VA-859 from Niagara Falls are manning the USS *Tarawa* along with VF-22 as Air Group 8.

Two other Reserve squadrons, VF-742 from Jacksonville and VF-916 from Squantum, are also part of CAG-8, but they were left stateside to be reequipped with jet *Panthers*.

The Reserve squadrons aboard the "T" began to feel at home almost as soon as they were assigned to the carrier, since they found themselves working for their old Reserve boss, RAdm. A. K. Doyle, who formerly was CNA-ResTra and is now ComCarDiv 4.

In the year that these squadrons have been on active duty, they have been a mighty busy group. They have undergone squadron and Air Group training at NAS JACKSONVILLE, participated in "Lantflex 52" and started their tour in the Mediterranean.

The Air Group has joined forces with the ship's company whole-heartedly to make the recently reactivated *Tarawa* an efficient ship and a happy home. Aviators have taken every opportunity to stand watches on the bridge and the group has members on all boards and committees. Their active participation in shipboard life has sharpened the interest and improved the morale of all "Terrible T" men.

All hands are getting top-notch operating experience with a fast carrier task force during their periods at sea.

They are thoroughly enjoying their in-port periods too. Some of them have had the opportunity to observe members

of the French Foreign Legion first hand. They are unlimbering their French, Spanish and Italian and, for the first time, finding that the long hours they spent on studying these languages really have some practical value.

When the *Tarawa* heads westward again, they will be speaking the foreign languages in a fair imitation of the natives. However, they are firmly convinced that they will still be able to converse effectively with Georgians, Missourians and New Yorkers.

Coast Guard Reserve Training Opens

Aviation training for Coast Guard Reserves is now underway with units planned for all districts of the continental United States. Aviation personnel will be trained with the Navy at Reserve NAS's and NARTU's. Forty-eight drill periods a year are authorized in addition to two weeks' active duty for training each year.

Preference for this aviation training is given to former Coast Guard and Navy personnel, but former members of other services are being considered. Pilot vacancies are open to former Coast Guard, Navy and Marine pilots (officer and enlisted). Officer billets exist also in ground specialties such as engineering and aerology. Some SPAR officers can qualify in the latter specialty.

Enlisted personnel are being drawn from former Coast Guard aviation ratings and strikers, both male and SPAR, from men who are former members of the Marine Corps, Navy, Air Force, or Air National Guard, and from men without previous military service. SPAR rated personnel or strikers are being accepted for petty officer billets of aerographer's mates, link trainers, parachute riggers, yeomen, and storekeepers. Males

with military experience are sought for all aviation ratings. Ratings are also open to personnel without previous military experience, if they have had aviation training or experience.

Movie Star Selected By Reserves

The movie hall at NAS NEW YORK was packed to the rafters recently when Capt. Ben Scott Custer, commanding officer, presented a scroll to Miss Marion Marshall, nominating her as "Miss Weekend Warrior of the Floyd Bennett Naval Air Station." The curvaceous blonde made a personal appearance simultaneously with the screening of the motion picture *Sailor Beware* in which she plays the part of comedian Jerry Lewis' WAVE girl friend.

The pretty star received a taste of "swabby" dancing ability when she was "mopped" around the dance floor at the NCO club by no less than 15 men. With her hair hanging in front of her



CURVACEOUS Marion Marshall receives scroll from Capt. Custer during visit to New York

eyes and between long gasps of breath after her ordeal, Miss Marshall explained, "After dancing with Jerry Lewis, I can take anything."

Turnabout Is Fair Play

Rising tempers and strained relations in some business offices are created by the question of who is really boss. But two members of NARTU MEMPHIS don't quibble about it. Instead, they take turns.

Ens. Virginia Battle of Arlington, Tennessee is undisputed boss when Air Wing Staff 79 drills each month. Chief Storekeeper Ralph D. Adams of Memphis renders the customary respect and courtesies due a naval officer from an enlisted "Weekend Warrior" while they are in uniform for their monthly drills.

The rest of the month, however, their roles are reversed because Adams, in his civilian capacity, is chief clerk in the disbursing office at NAS MEMPHIS where Miss Battle is employed as a military pay clerk.

Both take their dual capacity in stride and each agrees that no difficulties have arisen from it.

Reserves Get Taste Of Sea Duty

A cruise for CV Type Training Officers of NARESTRACOM was conducted in the Pensacola area during February for carrier refresher training. CNARESTRACOM Air Task Unit One (ATU-1) was organized from training officers of 26 Reserve air stations and NARTU activities. They climaxed the cruise with operations aboard the carrier *Monterey*.

LCdr. C. A. Collins of NAS GROSSE ILE acted as commander of ATU-1 with LCdr. M. Falmler of NAS WILLOW GROVE and LCdr. R. W. Dittrick of NARTU MEMPHIS commanding the fighter and attack squadrons respectively.

Upon completion of their training, the group returned to their home bases



"CHECK this list," says Ralph Adams and Miss Battle follows instructions promptly



"HERE are your instructions," says Ens. Battle and Chief Adams listens to his boss

refreshed in gunnery, rockets, bombing, navigation, type and inter-type tactics and the latest techniques in carrier operations.

Reserve Roundup

- NAAS SANFORD—FASRon-821, a former New Orleans "Weekend Warrior" outfit, recently completed its first year as a full-time operating Navy service outfit. The unit has set a remarkable record in maintaining and servicing the aircraft of CAG-3 which has been based at Sanford since return from Korea. Starting out with approximately 125 New Orleans Reservists, the unit now consists of nearly 300 men and can boast of having men from almost every state in the union. As men are being released from active duty every month, the FASRon replenishes its complement with regular Navy men from the various Navy schools and boot camps or from transfers from other squadrons.

- NAS NEW YORK—The late Ens. Curtis L. Smith, first Reservist from this station

to make the supreme sacrifice in Korea, was commemorated recently. Capt. Ben Scott Custer dedicated a newly-erected 45-foot steel flagpole in his memory.

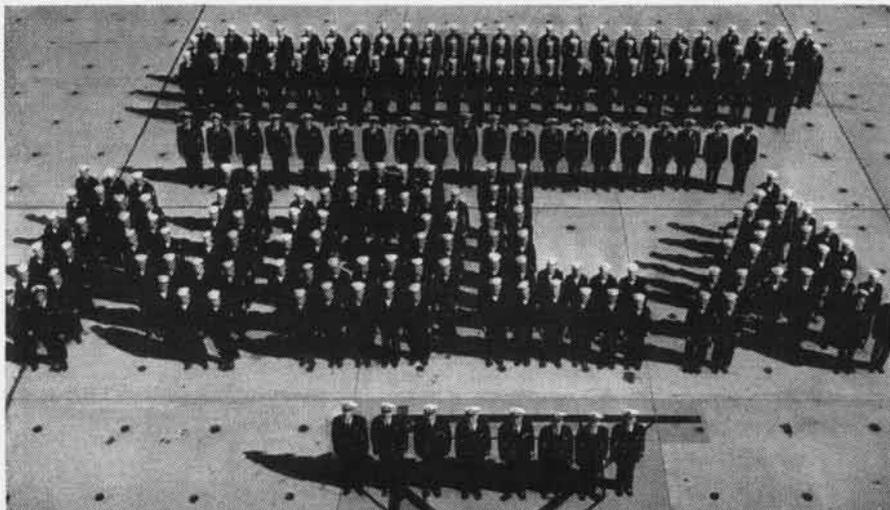
- NAS LINCOLN—Even though he is accustomed to all of the problems encountered in the procurement of NavCads, the procurement officer thought the disbursing officer had gone a bit too far. The latter issued a Transportation Request to an "incoming NavCad" which read: "from Aberdeen, South Dakota to Lincoln, Nebraska via *Coyote*, *Jackrabbit* and *Greyhound*." Buslines, that is, son!

- NAS BIRMINGHAM—While in transit in November of 1949, Ens. Frank C. Bonasinga of VC-22, NAS NORFOLK, stopped at NAS BIRMINGHAM. Shortly after take-off, Ens. Bonasinga lost his bag of personal effects from the bomb bay of his TBM. Two years later, almost to the day, a searching party looking for an aged woman lost in the woods in the Alabama mountain country, found the Ensign's lost belongings.

- NARTU MEMPHIS—Approximately 150 officers and men recently underwent two weeks' training at separate Eastern Seaboard bases. VS-972 went to NAS MIAMI and VR-971 to NAS NORFOLK where it engaged in cargo airlift operations between Norfolk and NAS KEY WEST during the cruise.

- NAS MINNEAPOLIS—VA-812 and VS-811 were cited recently for outstanding performance by the commanding officer of the USS *Monterey* during their recent two weeks' tour of duty in the basic training command. The Minneapolis Reservists qualified 24 pilots, making 181 landings and 24 catapult shots aboard the carrier in three days of operations.

- NAS NIAGARA FALLS—An engineering contract has been awarded by the Navy to a local engineering concern to prepare the necessary drawings and engineering specifications for the construction of some two and three-quarter million dollars worth of improvements, including three new buildings. Construction should be completed by the end of March 1953.



RESERVISTS of FASRon-821 spell out their home station in honor of first year on active duty. Immediately above are men who joined squadron since its recall



HEY, TAXI!

EVERYONE is familiar with AVIATION SAFETY (we keep telling ourselves) especially as applied to NAVAL AVIATION. However, judging from the ever



In the AIR

increasing number of accidents which occur on the ground, it is possible that we have neglected to direct properly not only the attention of all pilots but ALL GROUND PERSONNEL as well to the ever-increasing hazards of modern day operations of aircraft on the ground.

While air accidents have been materially reduced, aircraft accidents occurring on the ground have steadily increased.

In the old days of "steel men and wooden props", airport hazards were not nearly so numerous, and "accident prone pilots" were practically non-existent. Following an accident in the old days, the pilot usually remained prone but with a covering of some six feet of earth, not to mention the floral decorations. It was hardly noticeable and he was no longer considered a hazard by his fellow men.

In the good old days, you never in-



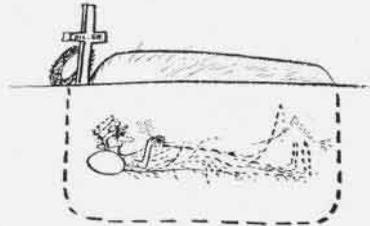
On the ground

advertently retracted your wheels, jammed on the brakes, forgot to lock your tail wheel, etc. There just weren't any such gadgets. You never taxied into the field lights for the same reason that you never taxied off the runway. Such luxuries were also non-existent. You didn't taxi into drums either. As a rule there was only one drum on the field at a time and it was particularly well protected, mainly perhaps because you and your fellow pilots had paid for that gas with your own money.

In the pre-gadget days before the

advent of the retractable landing gear, brakes, lockable tail wheel, flaps, variable pitch propellers, radios, off-the-shoulder dresses and bikini bathing suits, there just weren't the distractions that are offered by our modern world.

Today you fly through the air with the greatest of ease, providing the pilot and ground personnel cooperate and are sufficiently alert to permit the aircraft to reach the runway intact, avoiding the many pitfalls and gas pits enroute. Upon completion of your flight the same alert



procedure and cooperative spirit should assure you of reaching the sanctity of the chocks without the necessity of turning off your hearing aid to eliminate the peculiarly horrible, rasping noise of grinding metal and raucous profanity always attendant at the scene of a taxi accident.

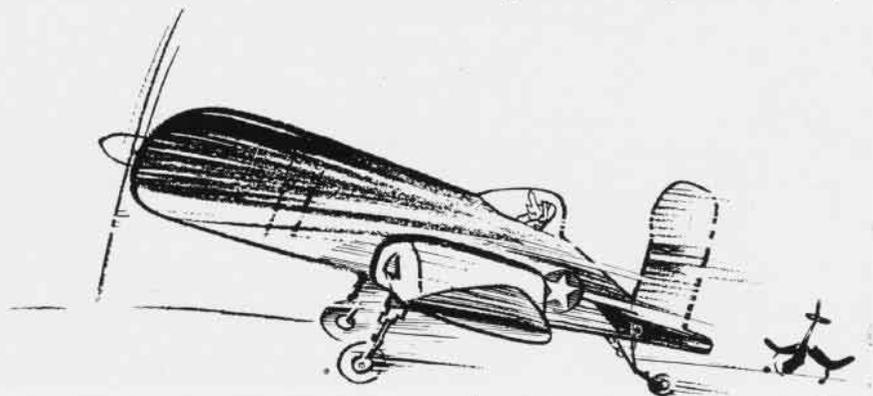
While taxiing an aircraft is a relatively simple maneuver, it still requires skill and DEMANDS YOUR FULL ATTENTION.

During the past six months, 33 aircraft were damaged without getting off the warm-up apron. An additional 171 accidents occurred while aircraft were attempting to taxi out or return to the line after a flight. There were 35 colli-

sions between taxiing aircraft, but that was only the beginning.

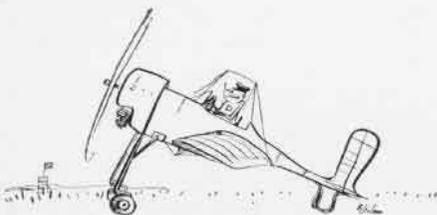
The "innocent by-stander", as usual, came in for his share. Taxiing aircraft struck impartially at the standard airport accouterments, such as work stands, lights, bowsers, etc., then ranged far afield to declare open season on pedestrians, cranes, concrete mixers, saw horses, air compressors, fuel drums, jeeps, autos, trucks, tractors, and last—but not least—a nice, big, new sign reading, and we quote—STAY ALERT AND STAY ALIVE—unquote.

The unique practice of incorporating Cross Countries into the taxi pattern remains with us and continues popular despite the embarrassment which is bound to result from taxiing into piles of construction materials, getting stuck in the mud and disappearing completely from view of the tower by taxiing into an open ditch. Perhaps even a more curious practice is the nefarious one of standing an aircraft on its nose in the middle of the field. Yet this inutile maneuver occurred with monotonous regularity 18 times in the last six months. Seventeen pilots nosed up. The occupants of one aircraft even had the effrontery to perform this evolution—"NO HANDS"—each assuming that the other was at the controls. Then we have one pilot (indubitably a gent who previously attended one of our institutions of higher learning) who ignominiously breaks 40 years of naval aviation tradition and custom by NOSING DOWN. Incidentally, the accuracy of his description in no way re-



SLOW UP! SLOW DOWN!

MISHAPS DOG SKIJUMP EXPEDITION



duced the damage to the aircraft nor did it have any affect in alleviating the findings of that austere body reverently referred to as the P.D.B.

A review of the 200 odd accidents (and we use the term "odd" literally) involving aircraft operating on the ground proves but one thing—100 per cent were avoidable, while 99½ per cent were INEXCUSABLE.

THE PILOT IS STILL RESPONSIBLE FOR THE SAFETY OF HIS AIRCRAFT. At times there may be extenuating circumstances but weak brakes, crosswind, congested areas and inexperience are not valid excuses. In fact these and other hazards should act as a constant reminder to the pilot that he must operate with extreme caution at all times.

There is no magic formula for preventing taxi accidents. The same old basic procedures still hold and prove extremely effective when observed:

REMAIN ALERT, PROCEED WITH CAUTION, "S" TURN.

Utilize ALL of the aids placed at your disposal, especially at night and on strange fields. If in doubt, don't proceed blindly but *stop* and contact the tower for instructions. Take full advantage of the assistance that may be rendered by the line crew and taxi signalmen, but don't place yourself at their mercy.

In closing, we suggest that, having complied with all rules and regulations and having further observed all known safe practices, you refer to the motto on the two-bit piece just below the chin of George Washington.



● **NAAS CABANISS FIELD**—A new unit bombing record was set recently by seven students of ATU-4. They dropped 245 bombs an average of 130 feet from their intended target. None of the students had previous bombing experience.

● **NAS WHIDBEY ISLAND**—The millenium has come—the cost of living is going down here. Haircuts were reduced to 25¢, with 17¢ of that returning to the welfare fund. The reduction was made possible by having service barbers replace civilians.



R4D, SHOWN LEFT, WAS ABANDONED WHEN NEPTUNE RESCUE PLANE CAME FOR NINE PASSENGERS

OPERATION *Skijump II*, the Navy's polar scientific air group, met with ill luck late in March and early April.

First, one of the R4D *Skymasters* which landed 400 miles south of the North Pole and 700 miles north of Point Barrow, Alaska, was wrecked when it tried to take off. Aboard were nine men, two civilian and seven Navy. A P2V *Neptune* which went to the rescue cracked a ski on landing, but was able to take off two hours later after material was transferred from the R4D. The ski held for the takeoff.

The *Neptune* had only 2500 feet of rough Arctic ice for a landing strip, for that is all the marooned men had been able to clear in four days of heavy work. Piloted by Cdr. V. J. Coley, the *Neptune*, accustomed to a 4500-foot runway, made it and settled down just 10 feet short of an 8-foot ice pressure ridge.

On 6 April both *Neptunes* headed for the North Pole. Both landed on the ice island T-3 near the pole where an Air Force group was already camped. One *Neptune* developed engine trouble there. The other departed and flew to the Air Force Base at Thule, Greenland. As NANews went to press arrangements were being made to fly maintenance men to the ice island to change the engine. All men were reported well equipped and plenty of food was on hand.

The R4D, now a stranded derelict, was abandoned at a point 700 miles north of Barrow, Alaska and 400 miles south of the North Pole. Despite the setback which the loss of the R4D spelled, *Operation Skijump II* will continue minus the oceanographic survey. The polar mission will include arctic operations and tests, a landing at the North Pole,

and an investigation of a floating ice island in coordination with the USAF project now being conducted under the direction of ICol. Joseph C. Fletcher.

'Mighty Mouse' In Combat Planes Carry Them In Greater Numbers

A Navy-developed, aircraft-launched rocket has seen its first use in Korea.

Nicknamed the *Mighty Mouse*, it was first fired at the enemy by Marine pilots flying F9F *Panthers* and AD *Skyraiders*. It may be fitted with a variety of high explosive heads to suit the type of mission being flown.

Technically termed the FFAR, it is 2.75" in diameter. Although smaller than the 5" rockets long used in Korea, it is more effective because a greater number can be carried and launched in greater concentration by the attacking aircraft.

The "mice" are carried in pod-type, multiple-tube launchers, suspended beneath the wings of the plane.

The *Mighty Mouse* is the result of extensive design, development and testing at the Naval Ordnance Test Station at Inyokern, California. It is a cooperative development in which the Navy's Bureaus of Ordnance and Aeronautics, the Army Ordnance Department and the Air Force all contributed.

Although intended primarily for air-to-air combat to destroy enemy aircraft, its present use in Korea is expected to prove it for the secondary purpose of air-to-ground attack, suitable for destruction of many types of targets.

Under the direction of the Navy's BUORD, it is being produced in quantity for use by the Air Force, Navy and Marine Corps against the enemy.

CDR. McCOY ENDS AVIATION SAGA



AIRPLANE SHELTER, ANTARCTIC STYLE, DIDN'T KEEP PLANE ENGINES FROM ICING BADLY

THE ADVENTUROUS career of Cdr. James C. McCoy, one of the first enlisted naval pilots, was ended recently with his retirement after 30 years of active duty.

He joined the Navy in 1921 when he was 17 and began his aviation career five years after, enlisting with flight training at Pensacola. During his basic flight training, he became interested in experimenting with aerial navigation aids. As a result of several improvements he later initiated on the aircraft pelorus, drift-sight and octant, he earned a commendation from Henry L. Roosevelt, then Assistant Secretary of Navy.

After flight training, his designator was changed from BM-2 to aviation pilot and he was assigned to the *Saratoga*. When the famous massed flight from San Francisco to Honolulu was flown in 1934, Cdr. McCoy was assistant navigation officer for the group. For his participation in the operation, which was flown in P2Y-1's and took close to three times as long as it takes today, he was commended by the President of the United States.

Selected for the Antarctic expedition in 1939 partially on the strength of his experiments with aerial navigation aids, he was appointed head of the aviation section and executive officer of Little America II. This visit was made for exploratory purposes and lasted until war became imminent in 1941.

Recreation was definitely limited during the expedition. Cdr. McCoy recalls that he saw Irene Dunne in "Love Affair" 17 times.

Last exploratory flight before the men returned home in 1941 came close to disaster when the port engine blew the master cylinder out through the cowling and the plane caught fire. The fire was extinguished in the air but Cdr. McCoy was forced to land on an ice cap about 115 miles from the base. The base was raised by radio before setting down, however, and rescue was accomplished within 12 hours.

Granted a commission shortly after Pearl Harbor, Cdr. McCoy was assigned during most of the war to instructor billets at various naval air stations.

On the next Antarctic trip, Cdr. McCoy was again executive officer of Little America and personal pilot to Adm. Byrd. This trip was made during the summer and temperatures were much higher—usually up around zero. Two helicopters were included among the equipment, along with R4D's, JA's and OY's and proved invaluable during operations.

Little America II was buried under about 10 feet of snow but was made accessible through tunnels and found just as it had been left. There were steaks frozen hard as steel which they thawed and ate. Cdr. McCoy found a magazine by his old bunk which he had been reading years before.

While this second expedition was for cold weather training purposes and the first was for exploration, Cdr. McCoy made his first trip over the South Pole on 16 February 1947 with Adm. Byrd in the co-pilot seat and continued on for



ANTARCTIC SOUVENIRS ARE NOVEL IN FLORIDA

several hundred miles into the "Unknown" on the other side before turning back.

At the time of his retirement, Cdr. McCoy served with the Staff of ComFAirJax. Now, after a full share of adventure and having had the privilege of being in with the growth of naval aviation, Cdr. McCoy intends to confine his activities to becoming a full time student at the University of Florida. His subjects will revolve around business administration and public speaking.

"First, though," he stresses, "I have to pass the entrance exam."

VR-3 Drops Hay for Cattle

'Operation Haylift' Saves Snow-Bound

VR-3, MOFFETT FIELD—Snowstorms which isolated Nevada farmers and cattle in deep drifts gave this transport squadron a chance to use *Operation Haylift II* and fly fodder to the freezing, hungry cattle.

Ranchers whose livestock were snow-bound and out of feed asked the Navy to help after Nevada's Governor Russell on March 21 declared a state of emergency. Center of operations was set up at Elko, Nev.

At noon Friday, Capt. W. W. Hollister, commanding officer of VR-3, was asked if his squadron could provide planes for the haylift. By 8 a.m. Saturday, four R5D's were ready to go. Three went to Lovelock, Nev., and took aboard 3½ tons of hay. The fourth picked up newsmen and cameramen at Hamilton AFB and then flew to Elko.

VR-3's planes were first to arrive at that city and first to drop any hay to the snow-bound cattle. At Elko, each plane picked up a rancher who spotted herds and showed plane crews where to drop the hay. Planes made runs at altitudes of about 40 feet, dropping a few bales at a time until the load of 3½ to 4 tons was exhausted.

Some of the ranches were difficult to reach from the air because they were in narrow canyons surrounded by mountains. Hay was dropped near barns or isolated groups of cattle. Crews spotted many starved cattle from their vantage point in the air.

Only sour note of the Operation came from Wave Orderly Edna I. Leon. "The flying was swell, but I am allergic to hay," she complained.

● **USS PHILIPPINE SEA**—While in Japan, crew members established a "Fujiko Fund" of \$2,776 which will help two Japanese girls complete their studies at a Kentucky college and then return to Japan for missionary work.

● **NAS MOFFETT FIELD**—VR-3 has organized a flight orderly training school to indoctrinate flight orderlies in the proper methods of performing their duties.

AIR RESERVES ARE ACTIVE IN INLAND EMPIRE

WHEN THE site for NAS SPOKANE was selected, it was virtually set in the middle of "God's country."

This region is truly the sportsman's paradise of the Pacific Northwest with its numerous mountain lakes and primitive areas. Famous Lake Pend Oreille is 45 miles northeast of the station and Grand Coulee Dam is 90 miles to the west. Air Reserves view the scenic splendors of the area every weekend as they take off on training flights.

The city of Spokane is known as the "Heart of the Inland Empire," a vast agricultural region which includes eastern Washington, northern Oregon, northern Idaho and western Montana. Some Reservists who are members of the Organized squadrons at NAS SPOKANE travel distances as great as 300 miles to attend monthly drills regularly, coming from such remote sections of the inland empire as Great Falls, Montana and Boise, Idaho.

The foundations for a future NAS at Spokane were laid early in 1948 when a group of Reservists and Navy, veteran and civic groups interested Rep. Walt Horan (R-Wash), and Senator Warren Magnuson (D-Wash) in establishing a Naval



CLOUDY SKIES and rainswept runways didn't keep planes on the ground during this weekend drill. Reservists are shown securing the line at the close of operations

Air Reserve Training Unit at Spokane. In a short time, CNO approved establishment of a Naval Air Reserve Auxiliary of NARTU SEATTLE, providing adequate facilities could be found.

Two hangars and five buildings at Geiger Field, which was an Air Force Base during World War II, were made available to the Navy by the Spokane City Council. On 1 May 1948 NARA SPOKANE was activated. An AVUA was commissioned and equipped with seven planes. The fledgling unit proceeded to show the Navy that they needed more planes and an enlarged program. They flew five SNJ's and two SNB's to an all-time high of 41.6 hours per aircraft per month over a four-month period.

The Navy Department was convinced. Following a meeting between Navy representatives and Spokane city officials, the activity was increased in size to eight

city blocks, three hangars and fifty buildings.

On 1 September 1948 the 24th Reserve naval air station to be established in the U. S. was commissioned at Geiger Field under Cdr. Waldo C. Grover.

WITH AN active duty complement of 142 and an Organized Reserve allowance of 570 officers and men, a \$250,000 renovation program was launched to whip the new station into shape. On 20 November NAS SPOKANE'S first Organized Reserve squadrons were commissioned.

By the end of July 1949 the first annual training cruise was completed with real results. In 12 operating days, 24 pilots logged 1177.4 hours of flight time. Reports showed 60% accuracy in bombing and gunnery exercises.



A LIKELY fish story! All work and no play might have made the boys dull so squadron members took five during Astoria cruise



LINE operations at Clatsop County Airport during 1951 training cruise kept Reserves busy and proved men could do the job



THE INNER secrets of parachute construction are being explained to a group of recruits by Bert Stanford, PRC, of VS-901



PUTTING their Navy-learned skills to practical use are these Organized "metal-benders", W. H. McCartney and R. C. LaFore

ONE OF their achievements was the annual training cruise last summer. The training and ability of the Organized Reservists were put to the acid test at Clatsop County Airport (a former NAAS) in Astoria, Oregon. The airport actually had to be reactivated for the cruise. Except for a few structures adjacent to the aircraft parking ramps, the buildings had been unoccupied since the end of the war and had received little or no maintenance. There was no water, no power and no air-to-ground communication facilities.

Two months before the cruise date, stationkeeper personnel began the arduous task of readying the base. Power,

mined in advance by the station, working closely with the Naval Station at Tongue Point, NAS SEATTLE and NSD SEATTLE. Personnel berthing and messing facilities were provided by the Naval Station.

On 3 August a convoy of required station vehicles departed for Astoria. On 6 August 330 squadron members were airlifted to the airport. Because of over-taxed berthing facilities at Tongue Point, 30 recruits were left behind to conduct their training. Squadron pilots flew station aircraft the 400 miles and flight operations began early next morning.

The whole show was run by Reserves with an absolute minimum of stationkeeper supervision. As a whole, the cruise was a great success. Capt. Patrick H. Winston, commander of WS-90, said, "It was a successful operation and a novel one. As far as we know, this is the first time that a Naval Air Reserve unit has moved in and reactivated a station that has been out of commission. When we got here, there was nothing but half a hangar and an airstrip. In

some respects, it is even more difficult than if we were setting up our own station."

When it comes to aviation safety, NAS SPOKANE is proud of its record. Geiger Field is ideally situated on a plateau with no serious hazards to flying within the immediate area. The concrete runways are lengthy and level, the longest being slightly over 8300 feet. The climate is generally mild and weather conditions present no problems to operations, except during the winter months of December and January.

Only two fatal accidents have occurred since the station was commissioned. One minor accident, because of mechanical failure, during the cruise ended a 16-month period of accident-free flight operation.

This high degree of safety is attributed to several procedures required by the training officer. These include pre-flight briefing, when all the latest safety directives are discussed, and post-flight briefing, when all flight errors and dangerous practices noted during flight are discussed by the flight leader.

DURING fiscal 1951, 5715.6 hours of flight time were logged. In a representative period of six months from 1 January to 30 June 1951 a total of 40,186 man-hours of instruction were given enlisted personnel.

In addition to a well-organized flight syllabus, pilots are receiving intensive training in administrative duties. A concentrated effort is also being made to qualify them for instrument ratings.

Ground officers are being utilized as instructors for pilots and enlisted personnel. They, in turn, receive instruction from station personnel on the latest developments and technical data.

The recruit training program is unique in that a man may enter the current course of training at any phase and graduate after a cycle of six months'



PHOTO OF the month shows tired Adran Blake taking doll home on return from cruise

water and aviation fuel contracts were secured and operating spaces renovated. Air-to-ground communications were established in the abandoned tower. This alone was a real accomplishment since the tower had literally been stripped of all electronics gear. During the cruise, the power was supplied by a station MBS communications van.

Logistical support necessary was deter-



ARMED FORCES Day Queen, Nadene Guyer, is crowned by BGen. Bondley of 57th Air Div.

instruction. These new men are then tested to determine their level of training. Those who successfully pass these examinations are assigned to the squadrons for in-service training.

An in-service training program for enlisted personnel assures both attendance at classes and effective utilization of instruction time. Definite training assignments are made and attendance and training accomplished by each trainee is reported to LCdr. Nelson White, AvTech Training Officer, by the in-service training instructors. A master graph shows an up-to-date record of each enlisted person's progress.

GOOD PUBLIC relations with the local community and the surrounding area is the watchword of the station. NAS SPOKANE has an active sports program and its teams often travel to nearby smaller towns to play complimentary games which aid in raising funds for local causes. A color guard of stationkeeper personnel is provided for important sports and civic events.

Station officers are often called upon by civic organizations to deliver speeches and lectures on the Naval Air Reserve and NavCad programs. LCdr. T. C. Durkin, Training Officer, regularly provides fly-overs for air shows and historical events. Open house is held often.

The public maintains a keen interest in naval affairs. The station cooperates with the community by placing at the disposal of schools, churches, and civic groups and organizations a library of interesting films for public showings. When necessary, a projector and operator are provided.

In observance of Armed Forces Day 1951, the several military activities in the Spokane area conducted a contest, under sponsorship of the Chamber of Commerce, to elect an Armed Forces Day Queen. A month earlier, Miss Nadene Guyer was selected as "Miss Naval



AMMUNITION makes interesting pattern as R. Rosenbom lines up 20 mm shells on cruise

Air Station", so it was no surprise when the pretty miss was selected over 12 other candidates as Queen.

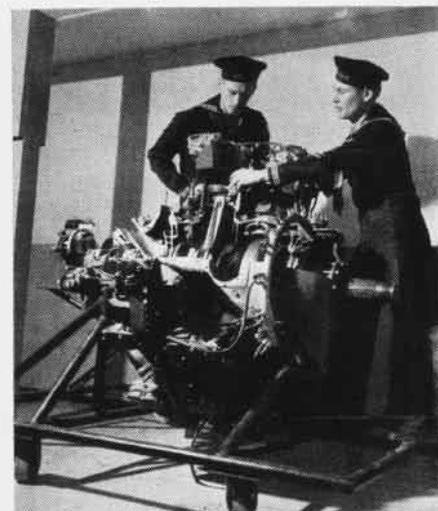
The occupations of Spokane's Reservists are many and varied. Capt. Winston, who is a prominent Spokane attorney, served during World War II as planning officer for the draft system under Gen. Hershey. Many have highly responsible jobs; for example, Lt. Dave Holmes of VS-901 is a chemist at the Hanford Atomic Works.

U. Sherman Blake, AFC, spends one weekend a month in the Photo Lab. The rest of the month he chases fire engines and ambulances as a photographer for a Spokane newspaper. Two years ago one of his scenic was a prize winner in the Graflex competition, and last year his feature of a crippled girl was tops in the nation.

LCdr. Russel P. Bone, CO of AAU-901, has a first-hand knowledge of the Russians. In 1943, while a member of VB-135 at Attu, his PV-1 was attacked by 12 Jap *Tony's* 80 miles east of Kamchatka Peninsula. With one engine shot out, he

reached Petrapavlovsk and made an emergency landing. He was interned by the Russians and transported across the USSR to Teheran where he was turned over to the U. S. in February 1945.

Present CO of NAS SPOKANE is Capt. James A. Peterson who has long been associated with the Naval Air Reserve. He reported aboard on 8 June



STATIONKEEPER plank-owner H. J. Kirkwood explains aircraft engine to recruit R. Perry

1951 from NAS MINNEAPOLIS. His executive officer is Cdr. D. E. Herrold.

The station has done its share in contributing "Minute Men" for the Korean emergency. Two officers and 56 enlisted men answered the first call to active duty and NAS SPOKANE stands ready to contribute more when needed.

Organized Reserve Squadrons

WING STAFF-90—Capt. Patrick H. Winston, Cmdr.; LCdr. R. W. Jackson, Asst. Cmdr.

FASRon-901—LCdr. Ted H. Neutz, CO; Lt. O. L. Terril, Exec.

VF-901—LCdr. Harvey E. Wick, Jr., CO; Lt. D. A. McPherson, Exec.

VS-901—LCdr. Ray J. Koep, CO; Lt. C. B. Humphrey, Exec.

AAU-901—LCdr. Russel P. Bone, CO; LCdr. Edward A. Cabler, Exec.



VOLUNTEER aviators—LCdr. Sanders, Lt(jg) Stanley and Lt. Volkman—plan familiarization flight during training cruise



READY TO board their TBM prior to departure for Astoria cruise are Lt. Humphrey, Ted Rooks, John Magan and Stanley Heath

CAG-5 Finishes Korea Tour

Battle Record Boasts of Many Triumphs

NAS SAN DIEGO—When the famed battle carrier *Essex* came back from Korea in March, she brought with her Carrier Air Group Five, one of the Navy's best known outfits.

CAG-5, commanded by Cdr. Marshall U. Beebe, turned in an impressive war record, reporting 2,617 troops killed and 3,139 cuts in the North Korean rail system.

In addition, it claimed 219 bridges destroyed, 306 boats, 38 locomotives, 485 railroad cars, 303 trucks and 710 buildings and factories. It also damaged about twice that many in each of the above categories. Cdr. Beebe, the only *Essex* pilot flying both jets and prop-driven planes, racked up more than 70 combat missions himself.

CAG-5 was the first air group to conduct *Panther* jet carrier operations, off the *Boxer* in September, 1949. On July 3, 1950, the air group launched the first Navy air strikes against the invading North Koreans and that same month flew the first Navy jets used in combat.

Navy Has Mink Trouble Too

Mama Minks Are Sensitive To Aircraft

The mating season of the mink

Is more important than you think.

Noise of the engine, whirling prop.

Make the whole darned thing a flop.

So pity the farmer, pity the beast,

Don't fly low 'til the season has ceased.

Each year about this time the reserve fliers operating from NAS MINNEAPOLIS, located at Wold-Chamberlain



Planes Blamed for Mink Deaths

Navy planes flying at low altitude caused the death of \$1,415 worth of young minks, a Minnesota mink rancher charged in a suit against the government filed in St. Paul federal court.

Roy W. Glockmer, owner of a mink ranch 15 miles south of Bemidji, said planes flying at 150 to 200 feet caused older minks to become excited and kill their kits.

field, to the outlying base at Bemidji 210 miles to the northwest in the Paul Bunyan country where they do bombing practice, encounter a unique problem.

It seems there are mink ranches along the route and mink mamas are peculiarly sensitive creatures. Any time they are disturbed by loud noises while still with their young, they are apt to eat the little ones. This makes mink raising a fascinating and jittery enterprise.

Starting in 1947 claims were made to the government for losses incurred

through mink mamas being disturbed by the reserve aircraft. Inasmuch as Navy public relations in the upper midwest was at stake, a thorough and impartial investigation was made.

The situation has simmered since then. Results of the first and subsequent investigations have not been announced, but steps have been taken to make sure that no plane even gets near a mink ranch during this season. Witness the pictures above.

Navy Changes Plane Titles

Lockheed Aircraft Will Carry Only V

Like the old gray mare who wasn't what she used to be, the Navy has some airplanes that aren't called by the same names anymore.

After going through many war and post-war years with the title of PB4Y-2, the lumbering *Privateers* recently dropped the "B" from their names and from now on are known only as P4Y-2's. Bombing is no longer one of its missions. The PBM was not changed.

The confusion over the use of the letters "O" and "V" to designate Lockheed-made planes also has been done away with. From now on, all Lockheed planes will carry the V, as in P2V. The following changes in designations of planes which formerly carried the "O" were announced:

The R7O *Super Constellation* will be the R7V, the TO-1 *Shooting Star* jet will be the TV-1, the TO-2 trainer jet will be TV-2. The PO-1W early warning plane will be the WV-1 and the PO-2W the WV-2. Those big *Constitution* transports, the R6O-1's, will henceforth go as R6V-1's.



SHIP HOMECOMINGS are always big events at San Diego, Norfolk or whichever port the ship comes in. When the carrier *Essex* returned from the Korean theater with CAG-5 aboard, dockside scenes furnished photographers a field day. Take, for instance, Bobby Mackey, 3, sleeping at the post while he waits for his dad, Lt. W. A. Mackey, VF-51, to debark. The center photo shows the



Essex being welcomed by the Marine Corps Recruit Depot band. Families make it easier for sailors aboard to find them in the crowd by carrying big signs, as in the right photo. Mrs. Alfred Castillo and Mrs. Raymond Maddox, wives of enlisted men with VF-51, displayed a big one. The sign says "sits" but the principles are all standing, one small tot is sleeping (in the front row).



SON GEORGE PINS LCDR. LEAVES ON HIS FATHER

Son Pins Leaves on His Dad Hurricane Hunter at Patuxent Promoted

FAIRWINGS, ATLANTIC—When the Navy promoted Ellis B. Rinard to lieutenant commander, he received plenty of congratulations on his 22-year rise from apprentice seaman. But those he treasured most was from his 21-year-old son, George, hospitalman at the Portsmouth naval hospital.

LCdr. Rinard was weatherman on the staff of RAdm. Richard F. Whitehead. He was a charter member of the first hurricane-scouting squadron formed by the Navy in 1946. During the past two years he has ridden herd on hurricanes in the Caribbean, Gulf and Atlantic seaboard areas aboard the PB1W *Flying Fortresses* of the unit at Patuxent River. He reported to the *Oriskany* in April.

Men Study Guided Missiles Program Training Future Instructors

Twenty-eight men from the Air Missile Test Center, Point Mugu, are attending a guided missile training course conducted by Bell Aircraft Corporation. The program, first of its kind undertaken by Bell for the Navy, is being held at their main plant in Buffalo, N. Y.

The training program will consist of classroom instruction and on-the-job training in the theory, functional operation, maintenance and launching of guided missiles. The curriculum will include the study of servo-mechanisms, telemetering, electronics and propellants for missiles. Methods of launching will also be studied.

When the first phase of the training program has been completed, some members of the unit will be assigned for advanced training at MIT, Bureau of Standards and elsewhere. The remaining members will continue under instruction at Bell.

Heading the unit are Lt. Paul Fulkee and Lt(jg) John Eddy. Other members are a CPO and 25 petty officers. While in the Buffalo area, the group will be under the cognizance of Cdr. Philip E. Page, Inspector of Naval Materiel.

NAVY MEN LICK 'ARCTIC'

COMFAIR, JACKSONVILLE—From the sunny breezes of Florida to biting sub-zero winds of the Colorado Rockies and back in two weeks was the recent experience of three Fleet Air Wing Jacksonville pilots.

They were Lt. Meredith Shaw of VP-741, Ens. Larry Emigholtz of VF-13 and



KIRKLIGHTER, SHAW, EMIGHOLTZ IN 'UNIFORM'

Lt. James Kirklighter of CAG-4 staff at Cecil field. They were not survivors of an air disaster, but rather students at the Air Force Strategic Air Command's advanced survival school at Camp Carson, Colo.

The local pilots joined 21 other Navy and Marine pilots and enlisted men to form one of the largest Navy classes at the school. Purpose of the 15-day course is to teach survival techniques of an emergency bailout over uninhabited sub-Arctic areas.

Four days is spent in classroom lecture and 11 days in the field. Students were given two small boxes of pemmican, which is 60% dried beef and 40% tallow, and a few dehydrated vegetables. They carry a 35-pound pack in the mountains, containing two sleeping bags and equipment needed to live off the land, such as rabbit snares.

Their welfare for the 11-day ordeal depends on their skill and ingenuity in snaring small game for sustenance and strict observance of survival techniques to prevent freezing.

"Practically everyone suffered from frostbite," Lt. Shaw said. "It was so cold most of the time a canteen froze solid before we'd gone half a mile. Despite the freezing weather, only one man out of 13 caught cold. They lost about 10 to 15 pounds.

"When pilots stop talking of flying and women and talk of nothing but what kind of food they like best, then you know they are hungry," he observed. First thing he had to eat upon return to Camp Carson was a big chocolate sundae. "It was so rich it almost made me sick," he said. Others longed for pizza pie, and another, steak and onions.

"It is really something to look back on. I enjoyed the course, but I wouldn't go through it again for \$5,000," he said.

VR-6 Men Visit Far North Guests of Royal Canadian Air Force

A maintenance crew from VR-6 recently returned from a trip to the Royal Canadian Air Force Station at Frobisher Bay, Baffin Island, Northwest Territories, Canada. This station is situated at 63° North latitude, or farther north than the northernmost point of Alaska.

The crew, led by VR-6's engineering officer, LCdr. Chester E. Perkins, performed all work outside in temperatures that ranged as low as 47° below zero. In the eight days that they were working



IN WINTER GARB, MEN LOOK LIKE ESKIMOS

on Navy and Air Force aircraft, the crew used 1100 gallons of gasoline in heaters.

The men from VR-6 were given fine accommodations by the RCAF personnel, and they reported the food excellent.

Names of the men who went to Baffin Bay and are shown in the picture are:

Front row, kneeling 1. to r., H. R. Bielewicz, C. J. Rogers, R. G. Thomas, K. K. Kitson, G. O. Sherwood, L. D. Rogers; and rear row, 1. to r., LCdr. C. E. Perkins, V. S. Spychalla, L. M. Schware, J. L. Cummings, R. E. Homewood, C. C. Stanley, C. L. Sidwell, F. E. Selby, A. Haas, E. Pitzsenry, A. J. Hundt, and F. K. Bregnel.

R. C. Massel is not in the picture. He was in the barracks on watch.



"FLYINGEST" car pool of Basic Training Unit 1, north of NAAS Whiting Field, consists of Lt(jg) Essert, Bueler, Smith and Lt. Nance. Each has flown over 1000 hours accident-free, and each has been chosen as an Outstanding Instructor of the Month.

CAB OR COCKPIT—HE'S AT HOME



O'MALLEY GETS GREEN LIGHT IN ENGINE CAB

THE DREAM of most little boys—and big boys too—of being a railroad engineer or an airplane pilot is fulfilled doubly in the life of LCdr. Robert J. O'Malley.

"Go" is his word, the first one he ever spoke, and he's been doing just that ever since. LCdr. O'Malley is one of the leading plane commanders of VR-5 and is on leave of absence from his regular job as an engineer for the Grand Trunk Western Railroad at Battle Creek, Michigan.

Twice the Reserve officer has laid aside the togs of a railroad engineer to grab up the headset and flight suit of a naval aviator and report for active duty. The colorful Irishman is equally at home in the cab of a fast engine highballing through the night or the cockpit of one of the four-engine transports his squadron flies over Pacific, Alaskan and Aleutian airplanes.

Like his father and brothers before him, LCdr. O'Malley went to "working on the railroad" as a lad of 16. He worked his way up from boiler-maker helper and by 1937 was pulling the throttle on the big diesels of the Grand Trunk Western Railroad. His experience with airplanes started about the same time he went to railroading. By the time World War II started, he had some 1200 hours in the air.

In August of 1942, LCdr. O'Malley received his first military leave of absence from railroading and joined the Navy as a lieutenant (junior grade).

Among his varied Navy assignments, he best remembers the time spent on supply and evacuation trips into Peleliu of all his 34 months in the Pacific. As a part of an evacuation unit of VR-11, he was ordered from Guam to fly drinking water to the Marines on Peleliu and bring out the "not-so lucky" guys.



"THUMBS UP" TELLS LINE CREW HE'S READY

When he arrived at Peleliu, the invasion fleet was lying to, about 3 miles out, and he received instructions from one of those ships which acted as control tower for the field. Even though the ship couldn't see the air strip, they gave him clearance to land. As a result, coming in on the final let-down leg, he discovered the air strip was under fire. None too happy, he landed toward Bloody Nose Ridge, turned around and took off downwind. They didn't waste any time, and somewhere in the process the plane was unloaded and reloaded.

When LCdr. O'Malley was ordered to inactive duty, he returned to railroading. Back at the throttle of a train, he found he had to ride "familiarization hops" to get acquainted. He walked as much as 22 miles of railroad yards to memorize the system that had changed while he was flying.

He was recalled to active duty the second time in August 1950 from NAS GROSSE ILE where he served as CO of an AVUA.

If you happen to hear an elusive locomotive whistle out in the Pacific and see a smiling Irishman shouting "All Aboard!" you'll know that's Robert J. O'Malley, Pilot-Engineer!

Test High Altitude Firing Florida Unit to Check Plane Armament

A new high altitude aircraft interceptor testing program has been announced by the Bureau of Aeronautics.

Newly developed armament systems will be tested on latest and fastest naval planes at altitudes ranging upward from 25,000 feet.

The tests will be conducted at the Air Force Missile Test Range which extends from Cape Canaveral, Florida to Puerto Rico (see page 1).

How well the electronic computers, gun laying, and firing mechanisms work in conjunction with the machine guns and rockets as a completed system at high speeds and altitudes is one part of the problem the Navy is tackling. The other part is to determine which system will work the most effectively on each of the aircraft under test.

Commander Otho E. McCrackin, is in charge of the Navy test unit based at NAAS SANFORD, Fla.

The Navy program, according to Cdr. McCrackin, has been made possible by Air Force cooperation in providing range personnel and equipment.

The Navy will use aerial tows and radio controlled drones as targets during the tests scheduled for 1952.

Commander's A Commander What's More—He's Always Been One

When his rank was Lieutenant he was Lieutenant Commander.

Now it has been revealed that Lieutenant Commander Commander will soon be Commander Commander.

Confused? We don't blame you.

It so happens that Cecil A. Commander chose the Navy for his military duty in World War II. He entered as a Naval Aviation Cadet, took his flight training at Pensacola, and became Ensign Commander 8 May 1941. After further school he joined VR-1 where he flew until the war's end.

Now on inactive duty and living in Fort Worth, Texas, soon-to-be Commander Commander is skipper of VR-701 of the organized reserve at NAS DALLAS. His name is on a list of naval reserve lieutenant commanders selected for the next higher rank.



THE OLD AND the new in aviation are shown in this picture of Billy Parker's 60 mph 1912 model pusher biplane flying over the California countryside with a 670-mph Sabre flying past him. Parker's 1,000-lb. plane has an 80-hp. engine compared to a 9,000 horsepower rating for the F-86's J-47 jet

721 Planes Lost in KoWar Navy, Marine Casualties Below WW II

Navy and Marine Corps aircraft lost in Korea from the start of the war through 24 February 1952 were 721, according to figures issued recently.

Of these, 407 were operational losses and 314 due to enemy action, mostly antiaircraft fire. Of the 721 lost, 407 were carrier-based planes. Of these 181 were lost to enemy action and 226 were operational losses. Of the 314 land-based planes, mostly Marine, 133 were lost to enemy action and 181 were operational losses.

During World War II, the Navy lost 907 planes to enemy aircraft and 1,982 to antiaircraft fire. Operational losses were not announced, so the score of the two wars by enemy action was 2,889 to 314.

Mars Crew Makes Donation Sends In Pledge Via Overseas Radio

VR-2—The crew of the *Caroline Mars* can truly say that they believe in long range contributions. They probably have set a new distance record for donations.

One night during the recent *March of Dimes* campaign, the plane was en-route from Honolulu to Alameda, 1700 miles from San Francisco. The pilots tuned in on KNBC, San Francisco. The station was conducting an "all night" radio plea for pledges for the polio fund.

A collection was taken among the crew and the pledge was sent over the San Francisco Overseas Radio. In turn the message was relayed to KNBC.

The broadcast station made acknowledgement of the "long-range" contribution.



ONE OF THE Navy's flyingest admirals is RAdm. T. B. Williamson, ComFairHawaii, shown here climbing out of a TV-1 cockpit after a flight over Oahu. Adm. Williamson has 5,500 flying hours in most service type aircraft, his latest solo in the P2V Neptune

NEW BUAER SURVIVAL KIT IN USE

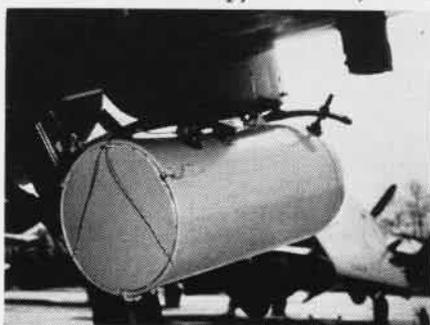
A NEW cold weather survival kit for dropping to downed personnel behind enemy lines, developed by Bureau of Aeronautics airborne equipment division, was put in use in Korea the past winter.

Weighing 90 pounds when filled, the cannister is carried by one follow plane in combat strikes. It has a special nine-foot parachute in the after end which can be used to lower the kit at speeds up to 250 knots.

Squadrons receiving the kits install such items as pyrotechnics, shells



BUAER COLD WEATHER SURVIVAL KIT WEIGHS 90 POUNDS; GOES ON RACK



WIRES RELEASE PARACHUTE STOWED IN AFT END

for the carbine and special intelligence information. A thousand kits have been procured by the Navy, half made by the Naval Aircraft Factory and the rest by commercial companies.

Stock number of the kit is R-83-N-513850. Contents include sleeping bag, winter pants, coat and hat, gloves, heavy overshoes, six pairs of sox, knapsack, knife, ax, carbine, fuel, whisk broom, sunglasses, flashlight, mittens, rations, first aid kit, matches, compass and survival booklet.

3 Squadrons Safety Leaders Atlantic Fleet Champs Have No Wrecks

NAS NORFOLK—Flying more than 20,000 hours the past year without an accident, three patrol squadrons of the Atlantic Fleet Air Wings lead the safety parade for Atlantic fleet aircraft units.

Twelve other squadrons of the ASW patrol plane command, including six FASRons, completed the year with safety records over 96%. VP-3, based at Jacksonville; VP-23 at Miami, and VP-49, operating at Bermuda were top three.

VP-3 flies new P2V's, VP-23 hunts hurricanes with P4Y-2 *Privateers* and VP-49 flies Martin *Mariners*. The other 12 squadrons with good records are VP-44, Norfolk; VP-45 and FASRON-105, Coco Solo; VP-861, Norfolk Reserve unit; FASRON-109, Jacksonville; VP-8 and FASRON-101, Quonset Point; FASRON-108, Brunswick, Me.; FASRON-103, Patuxent; FASRON-104, Port Lyautey, French Morocco; FASRON-106, Argentina, and FASRON-107, Iceland.

Teak Back on Carrier Deck Navy Uses Burma Teak, Douglas Fir

Navy carrier history is repeating itself—teakwood, which was used for flight decks of the first big flattops, is coming back again.

The *Ranger* was the first carrier to receive Douglas fir decking, after it was found the stronger teak was not needed with the light planes then operating off aircraft carriers.

All World War II carriers were equipped with Douglas fir planking until the steel-deck *Midway* class came along. Now heavier planes like the AJ and A2J are coming along and teak has re-entered the picture.

Carriers going into the Navy shipyards for repairs now are being given laminated teak-and-Douglas fir decks in the landing areas. Sea tests showed that decks lasted longer with teak surfaces and cost the Navy less for upkeep and replacement, as well as being more durable. Teak comes from Burma.



NEW VOUGHT CORSAIR, AU-1, ESPECIALLY DESIGNED FOR LOW ALTITUDE MISSIONS IN KOREA

NEW AU-1 CORSAIR MORE AA-PROOF

A NEW member of the famed *Corsair* line of fighters is flying today, but it's an attack plane, the AU-1, built especially to brave the storm of low-level antiaircraft fire in Korea.

Since F4U's were being used by the Marines and Navy only for low altitude combat, the need for a supercharged engine was small. The new AU-1 has a single-stage engine, which resulted in a weight-saving which was used to make the plane more bullet-proof.

This engine eliminated need for the carburetor charge inter-cooler mounted in the accessory section of the F4U-5. The space vacated made it possible to shift the oil coolers from their original exposed position behind the cooler ducts into the accessory section.

With the F4U-5's oil coolers mounted in the wing roots, the cooling air had been taken in at the roots and discharged underneath the wings. In the AU-1, with the coolers located in the engine accessory compartment, the air taken in at the wing root was discharged into the compartment and controlled by a flap on the bottom.

In the F4U-5, carburetor charge air was taken in through two lower side nose cowl scoops and inter-cooler cooling air was taken in at the wing roots, discharged into the accessory compartment and controlled by a bottom flap. In the AU-1, it was possible to take carburetor charge air in at the wing root and nose cowl scoops were not needed.

To minimize changes, it was decided to build the cowling in sections, side-stepping need for changing the entire center structure, thus saving time and expense. The ducts remained in the original position and refairing closed off the open nose cowl scoops, eliminating a drag item in the process.

A major change was involved in the mechanical installation of the engine. Experience in Korea showed that an oil system hit usually meant that unless the pilot received visual warning by having his attention attracted to an obvious leak, the chances were he would not know of impending failure until his oil pressure dropped and he wound up with a seized engine due to oil starvation.

For that reason, in addition to the protection provided by relocating the coolers inside the accessory compartment, a low level warning system was installed so that if a freak hit should be scored on a cooler in its new location the pilot would be able to switch to a line by-passing both coolers.

Vulnerable sections of the F4U-5 had been armor plated and for the AU-1 the number of armored areas was increased to provide additional shielding against fire from the forward position, from the rear and from below. Gaps were filled in and plating provided for the pilot's seat bucket, the cockpit flooring, the underside of the airplane, the engine and fuel pump areas and the fuel tank.

The famous *Corsair* line is still not extinct. There is still another lined up for production—the F4U-7. It is being built for the French government under the Mutual Defense Assistance Program. Similar to the F4U's of World War II, and designed also for higher critical altitude missions, the F4U-7 will incorporate the heavier armor and armament features of the AU-1.

Anti-Snow and Ice Devices

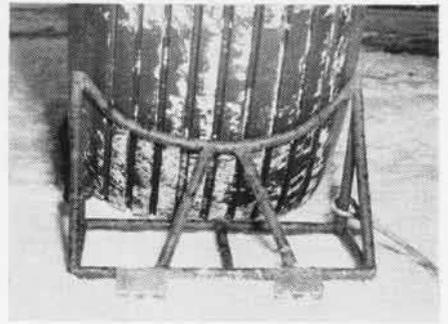
During the winter months in Argentina, Newfoundland, FASRON-106 has developed two pieces of equipment that have proved useful during operations in that northern area.

Snow showers and freezing rain always present a difficult problem to the line and

plane crews in the handling and securing of aircraft. Often the tie-downs on the ramp are filled with ice and covered with ice and snow; and the surface of the ramp is too slippery for ordinary chocks to hold the aircraft safely.

For this reason, FASRON-106 has designed snow and ice chocks which will give positive gripping on ice by lengthening the base rods allowing the cross bar, resting on the surface, to rest snugly next to the aircraft tire. This gives a pivoting action to the chock if any force is applied by the movement of the plane, and forces the chock spikes deeper into the ice for a perfect hold-down.

Ice scrapers aid in locating and clearing



CHOCK FASRON-106 DEvised TO SECURE PLANES

the tie-downs of ice.

In *Operation Micowex-52*, typical bad weather prevailed, and these devices were put to good use by the participating squadrons.



TRACTORS, LINES HELP TRAIN BEACHING CREW

Model Ramp Trains Crewmen

NAS CORPUS CHRISTI—A model PBM launching ramp is used to check out beaching crews at ATU-10, whose job it is to launch and beach the 30-ton Martin Mariners.

Under the supervision of C. W. Fretwell, BMC, with a little ingenuity and raids on local toy shops, the model was constructed to indoctrinate new beach crew men.

Equipped with lines, tractors, buoys, plane and miniature hoses the toy model is capable of simulating every phase of ramping and launching. It even shows proper ways to combat salt water corrosion, a big problem in P-boats.

The water section of the model is made from plexiglas to enable instructors to show effects of correct and incorrect teamwork by all members of the beach crew.

● MCAS CHERRY POINT—The Camp Lejeune airstrip known as Peterfield Point was commissioned officially as MCAF CAMP LEJEUNE. As a commissioned field, the facility will be part of Marine Corps Air Bases.



AF'S PORT WHEEL HELD UP BY THE JACK POINT

Jack Point Saves AF Plane

VS-931, LOS ALAMITOS—On a recent cruise aboard the *Bataan*, this squadron found a new use for the landing gear jack points on the AF-2W aircraft.

One of its *Guardians* came in normally, but after the cut, the pilot dropped his left wing. The hook caught #3 wire and the left main wheel eased over the port edge of the flight deck and settled with the jack point engaging the combing.

Had the jack point not been there, the \$100,000 airplane would have gone into the catwalk with resultant damage to itself, the catwalk ship's antenna and possible personnel injuries. As it was, the plane was ready for the next launch.

Darkness No Obstacle Now

No longer will darkness be an obstacle to "hunter-killers" flying P2V-5 patrol bombers and the AF *Guardian*. Both planes have been equipped with the Navy's latest and most powerful airborne searchlight known as the AVQ-2. It produces a beam of light equivalent to approximately 70-million candlepower.

Located on the starboard wing tip on the P2V-5, the AVQ-2 is electronically controlled



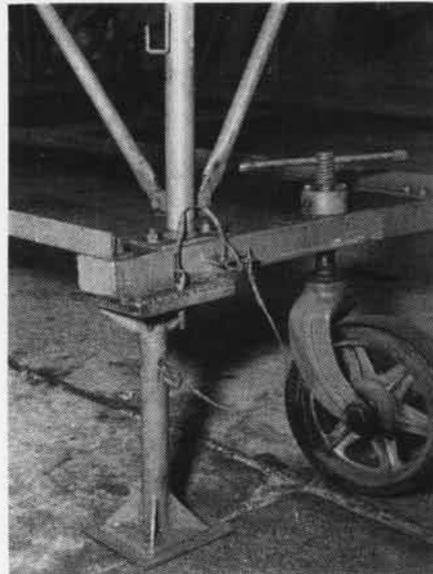
IT WILL BE many a moon before embarrassed Lt. F. Piltz of the *Bon Homme Richard* lands his *Corsair* aboard the carrier *Antietam* again, as he did off Korea recently. The men of the *Antietam* thought his plane needed a little maintenance work done on it, so 50 of them pitched in and worked 15 hours to give it a complete cleaning and repaint job. Even the plane's name, "Betsy"

by the copilot and has an approximate elevation of five degrees, a depression in excess of 38 degrees and can train either port or starboard approximately 25 degrees.

Stand Modification Devised

NAS NORFOLK—A. O. Doxey and Walker B. Floyd have proposed a portable stand for the Wolfe & Mann service and repair platforms now in use. Credit has been given the two men by the Navy Awards and Incentives Program.

The stands get rough treatment when the platforms are pulled by tractors, particularly



NEW STAND FOR WORK PLATFORM IS PORTABLE

if the field is rough. The wheels mire and roll in a hole that will lower the stationary stands on each end of the platforms and damage them.

Now if portable stands are used, these can be taken off when the platform is being moved. As shown in the illustration above, a toggle pin holds the foot stationary. When the foot stand is removed, it can be hung on a hook on the support above it.



was changed to "Terror of the Rice Paddies." In the first photo, Thomas M. Wright, airman, paints a new insignia on the wing. In the middle, ordnancemen clean the guns while in the last one squadron pilots aboard the *Antietam* affix their own insignia on the fuselage. As a final gesture, mechs wrote caustic remarks in pencil on the white star, then put shellac on to preserve them.



ZIPPERED JUNGLE SURVIVAL KIT WEIGHS 44 LB.

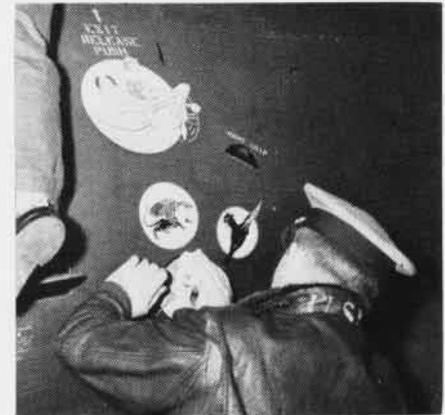
Jungle Kit Made In Hurry

FASRON-8, ALAMEDA—A jungle survival kit for stowage aboard an SNB designed for the naval attaché in Indo-China was put together in short order by W. S. Knight, PRC, to provide sustenance for two men for 10 days.

By combing Army and Navy supply centers in the bay area, he acquired items to stock the 44-pound kit. They were packed in a 24x16" kit, with quick disconnect shoulder harness and foam rubber back pad cemented to aluminum sheeting. A zipper three fourths of the way around made contents accessible.

The kit contained various survival items including axes, glasses, matches, insect repellent, rations, gun, signals, flashlight, compass, atabrine and water purifying tablets. The carrying pack was made under supervision of E. P. Smith, ADC(AP), acting survival officer.

● NAS CORPUS CHRISTI—This station now has "hot mammas"—Waves who have taken the course in advanced fire-fighting techniques, including crash gear and extinguishers. They have proved good students.





AVIATION ORDNANCE

Ordnance Service Engineers

The Bureau of Ordnance is presently training field service engineers for the new Bomb Director Mk 3 Mod 4 and the Aircraft Fire Control System Mk 16 Mod 2.

Within a few months, field service engineers will also be trained in the maintenance and installation of the bombsight Mk 23 all mods, the Gyro Mk 18, the aircraft fire control system Mk 6 all mods, the gunsight Mk 18 all mods, the periscope Mk 41 Mod 3, and all mods of the illuminated sights.

Operation or Maintenance Problem? Any squadron or activity having a problem involving the operation or maintenance of the bomb director Mk 3 Mod 4 should request the Bureau of Ordnance, Aviation Ordnance Branch (Code MA8-1D) to assign a field service engineer to temporary duty with the squadron until the problem is solved.

BUORD will notify all activities as soon as field service engineers are available to aid in operation and maintenance of other aviation fire control equipment.

Chute Flare Ignites in Plane

The high usage of aircraft parachute flares Mk 5 and 6 in the Far East, and a recent accident in which the seven-man crew of a P2V aircraft was lost apparently as the result of the ignition of a flare inside the aircraft, make it necessary to re-emphasize correct launching procedures.

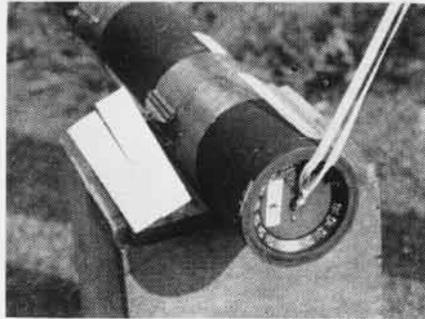
Manual Launching Hazardous. Manual launching of flares from open hatches is hazardous and has been prohibited by the Office of the Chief of Naval Operations. When it is necessary to launch flares from open hatches, great care must be taken that fuzes are on safe and the tear strips left on until immediately before launching.

Stowage in Aircraft. Stowage of flares in aircraft at all times must be such that there is no chance of flares becoming adrift or having rip cords fouled. On flares Mk 5 Mods 8 and 9 and Mk 6 Mods 5 and 6, a pull of only eight pounds on the rip cord will activate the fuze. These same precautions must be taken when aircraft are to be catapulted.

NPG, Dahlgren Reports Hang-Up. The Naval Proving Grounds, Dahlgren has reported one hang-up of a parachute flare as the result of the double lanyard of the rip cord fouling on the fuze setting lock screw. In order to prevent recurrence of this hazardous situation, flares should be so mounted that the rip cord will be led out over the rim of the fuze 180° from the fuze setting lock screw. Also, the double rip cords on new production will be sewn together so that no loops will exist to foul on the lock screw.

New Suspension Bands. The suspension bands provided with aircraft parachute flares Mk 5 Mods 1-7 inclusive; Mk 6 Mods 1-4; and Mod 5 lots 1-17; and Mk 8 Mods 0, 1 and 2 cannot be used with the bomb

rack Mk 55. The suspension hook on this rack will not accommodate the support band apron. These flares can only be used with bomb racks Mk 50 and 51. On aircraft parachute flare Mk 6 Mod 5 lots 18 and above, this suspension band has been changed to a conventional lug type suspension band and can be used with the Mk 55 rack. This conventional lug type suspension band will be incorporated in the flare Mk 5 Mods 8 and 9. Lug type suspension bands are being



MARK 6 MOD 5 WITH FIRING LANYARD FOULED

procured for Mk 8 flares in stock.

Safety Instructions. OP 998, Chapters 2, 4 and 5 and NAVORD OCL AV 7-48 describe the basic safety precautions to be used with aircraft parachute flares and the correct installation methods. Reference should also be made to the pilots handbook for each aircraft and to pertinent BUAER correspondence for the specific installation instructions and limitations applicable for that aircraft in using flares from flare chutes, flare carriers, sonobuoy dispensers, and pneumatic flare tubes. The limiting speeds given for each aircraft must not be exceeded for the slipstream at higher speeds may jam the flare in the tube or possibly rupture the flare case.

Feed Mechanisms Greased

All AN-M2 feed mechanisms manufactured by the Sunbeam Corporation are lubricated with the new "all weather grease", J942-G-562-40 during assembly.

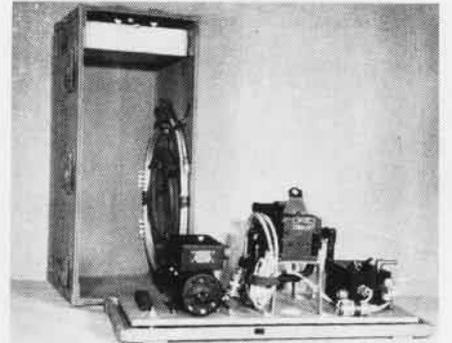
OML GV18-51 need NOT be accomplished on these feed mechanisms.

Container Protects Sight

Bombsights Mk 23 Mods 6 and 9 now coming off the assembly lines are packed in an improved shipping and stowage container which offers greater protection for the instrument. This new container is constructed of aluminum-clad plywood panels and extruded aluminum sections. It is lighter in weight and considerably easier to pack and unpack than old models.

The major components are mounted on a shock-mounted base, just as in the original container, but the base is now mounted on a pallet which forms the bottom of the container. Thus these items are accessible for easy removal. The container is effectively

sealed by a cork-neoprene gasket embedded in the edge of the container base and compressed by a chevron shaped aluminum bead running around the perimeter of the cover. Under test conditions this sealing arrangement has been effective enough to maintain



LIGHTER BOMBSIGHT MAKES EASIER HANDLING

a constant air pressure within the container for a period of 24 hours.

This container is not considered expendable. When no longer required, disposition instructions should be requested from the Bureau of Ordnance under Stock Number J942-B-2691-900.

Mk 3 Mod 4 Bomb Director

BUORD is in the process of producing bomb directors Mk 3 Mod 4. (Page 35 January issue NAVAER (NEWS)). However the standard test equipment for this bomb director, the test unit Mk 44 Mod 0, will not be available until June 1952.

Caution, Mates! All activities are cautioned not to use the test unit Mk 37 Mod 0 with the bomb director Mk 3 Mod 4. Only an interim test unit Mk 37 Mod 1 can be utilized for the bomb director Mk 3 Mod 4. This same test unit can also be used for the bomb director Mk 3 Mod 3.

Only those activities receiving the bomb director Mk 3 Mod 4 will be issued test unit Mk 37 Mod 1.

Torque Meter Calibration

A device for testing and calibrating torque meters used on Jack & Heintz aircraft starter test stands has been developed by William H. Latham, NAS SEATTLE. It has been recognized by the Navy Awards and Incentives Program.

The device is to be used in conjunction with the deadweight pressure gage tester available at all instrument repair stations. Combining the device and pressure gage tester as one unit would be a duplication of existing equipment.

The device consists primarily of a cylinder block containing a piston with an area of one square inch, the end of which is subjected to hydraulic pressure. This cylinder and piston assembly is mounted in a suitable jig to contain a torque meter, allowing movement of the piston to be transmitted directly to the end of the torque meter pressure shaft.

Pounds pressure per square inch in the pressure gage tester is indicated directly in foot pounds on the torque meter since the actuating piston of the device has a pressure area of one square inch exposed to the hydraulic pressure from the deadweight tester.

CARRIER NOTES

BUREAU OF AERONAUTICS—SHIPS INSTALLATIONS DIVISION

H8 Launching Interval

Informal information received from catapult officers on operating carriers indicates that competition between carriers to better each other's catapult launching interval is keen.

The recent catapult modification, whereby the constant pressure valve piping was altered to allow discharge of oil during the brake stroke to the retracting gravity tank instead of the retracting accumulator, increased the volume of replacement oil required for retraction. This increased the launching interval to 45 seconds for one catapult or 22½ seconds when using both catapults.

Attention is invited to the fact that catapulting at an interval less than 22½ seconds when using both catapults can only be obtained by operating the machinery under conditions for which it is not designed, and may result in serious damage.

It has been determined that the catapult launching interval can be reduced by increasing the retracting pump capacity. Higher capacity retracting plmps are now under procurement and will be furnished CV-34 class carriers as soon as available.

Oriskany's Catapults

The USS *Oriskany* (CV-34), first of four vessels now equipped with H8 catapults, recently returned for a yard availability period. To date 2100 launchings have been made with each catapult, and inspection reveals that only minor replacements and repairs are required.

To improve the *Oriskany's* launching pumps, the gravity and sump tank arrangement is being modified by relocating the sump tank underneath the gravity tank. This change provides a gravity head to the pumps under any condition and will be incorporated on all CV-34 class carriers.

Installation of an independent low pressure air supply line has also been authorized for these carriers. This auxiliary system will eliminate the possibility of premature cut-off.

H8 Catapult Switches

The loss of an airplane during a recent catapult launch aboard the USS *Wasp* was attributed to failure of an electric switch contact holder. USS *Wasp* personnel have successfully repaired this switch by replacing the phenolic contact holders with ones made of impregnated fibre. This fix has been approved for all H8 catapults in service.

Instructions for installation of the improved contact holders are being furnished in BUAER H8 Catapult Change No. 3. Additional instructions for proper alignment of catapult electrical switches are also being promulgated in H8 Catapult Bulletin No. 19.

Arresting Gear Data

The following changes and bulletins are currently being promulgated:

Arresting Gear Change No. 20, dated 3 Mar 1952, authorizes installation of a wing retardation barricade in all CVB-41 class, CV-9 class and CV-9 class conversion carriers.

Arresting Gear Bulletin No. 37, being issued, explains the proper maintenance and operational usage of the wing retardation barricade.

Arresting Gear Bulletin No. 39, dated 3 Mar 1952, provides information on a device for limiting the retrieving speed of the Mark 4A control valve in order to keep arresting gear cables from kinking during return to battery position.

Arresting Gear Bulletin No. 41, being issued, provides information on the availability of improved Mark 5 arresting gear accumulator nozzles designed to withstand the effects of high velocity fluid flow.

Barricade Stanchions

The Bureau of Ships has been requested to increase the barricade stanchion upper tensioning height from 11 feet to 12 feet 6 inches. This new height is necessary to aid in keeping the top barricade loading strap out of the open cockpit during a barricade engagement.

All barricade installations except those on the *Midway*, *Coral Sea*, *Philippine Sea*, and *Anietam* now have the new height stanchion. These ships have been advised to insure an upper loading strap height of 9 feet 6 inches by substituting shear pin NAF part 92310-1, for shear pin NAF part 217133-1 until their stanchion height is increased to 12 feet 6 inches under authority of ShipAlt CV-271. Use of shear pin part 92310-1 can produce critical loads on release assembly part No. 49624-1 and may cause occasional failure.

The barricade stanchions being installed on all CV-34 class (27A conversion) vessels have additional support pendant tensioning points suitable for installation of a conventional barrier or barrier adapter if operating conditions warrant.



NO, IT'S 'FASTEN YOUR SAFETY SEAT BELTS'

VR-6 Gets Douglas R4D-8

At Westover AF Base, VR-6 received an R4D-8 on the 19th of February, and the performance of this new aircraft has caused quite a few raised eyebrows since its arrival.

Before accepting delivery of the Super DC-3, Lt. Harry Bigham and J. M. Brown ADC were sent to NAS NORFOLK for a check-out and a two-week familiarization course in the operation and maintenance of the R4D-8.

The crowd which gathered to look at the plane as it parked in front of Hangar 7 at Westover noticed a few changes from the conventional R4D. The most pronounced was the new tail and slightly sweptback wings. Douglas used about 15% of the old DC-3 plane structure and redesigned the wings and tail assembly.

The R4D-8 has two Wright R-1820-80 engines rated at 1475 BHP each as compared to the old R-1830 rated at 1200 BHP. It carries a gas load of 1600 gallons for a cruising range of 15 hours at 190 knots, giving a mileage range of 2800 miles. The new aircraft has operating characteristics on one engine that the old one had on two.

The fuselage has been enlarged to accommodate 35 passengers or 27 litters.

The plane is completely modernized. It has all electric instruments—VOR gear, UHF and VHF voice communications and complete navigation equipment including Loran for overwater flights. It also has similar cockpit configuration to the DC-6 and automatic approach equipment will be installed.

Owing to the wing redesign and higher horsepower, the initial rate of climb at full military power is over 2000 feet per minute, giving it nearly the climbing ability of a piston engine fighter.

Fuel Indicator Bridge Unit

At NAS LAKEHURST, Nicholas L. Salussolia of the O&R Electric Shop has devised a small tool for adjusting the capacitance type fuel quantity indicator bridge unit. It has been accepted by the Navy Awards and Incentives Program. It is of special interest to FASRons operating ZP airships.

The problem Salussolia wanted to solve was this: Bridge units are mounted four inches below and under the A-12 gear shelf aft of gunner's compartment, a very inaccessible location. To adjust bridge unit potentiometers, the unit has to be removed from its mounting or a mirror must be held over the unit so the mechanic can see into the unit to engage a small screw driver in the slot on the shaft of both potentiometers.

The proposed tool is made of dural, two and a half inches long, and consists of a hollow shaft one half inch in diameter and one and a half inches long with a 1/32" pin inserted through the hollow shaft 5/16" from the bottom of the tool. The tool shaft is topped by a knurled handle three quarters inches in diameter and one inch long.

The hollow tool drops over the potentiometer shafts and the pin engages the slot on the potentiometer. Adjustments can be made in this way with a saving of at least two man/hours per unit.

LETTERS

SIRS:

In your March issue, in an article about the retirement of Capt. John R. Poppen, pioneer aviation medical researcher, you say that "he began his Navy career in April 1917 as a coal passer. Three months later he was appointed an assistant surgeon, with the rank of lieutenant (jg)."

How could he advance so fast up the ranks?

A. P. RUSH, LT. (MC)

NAAS CORRY FIELD

¶ Dr. Poppen's career is indeed unique and he did just what we said he did. He was a member of an inactive naval reserve as a fireman while he was studying for his medical degree at University of Michigan in 1917. Came the war. With Poppen only a month away from getting his degree, he was called to duty in April. Michigan authorities agreed to give him his doctor's degree in June. In the meantime he entered the Navy as a coal passer and was both that and a doctor of medicine for a month before he got his Navy commission.

SIRS:

The *Red Rippers* are a clannish bunch and every so often their cohesion for each other becomes public. For some time a minor revolution has been taking place aboard the recently demothballed *Wasp*.

Any *Red Ripper*, old or new, is full of confidence in any other member of this flying fraternity. Consequently when old RR's Cross and Koressel work on the LSO platform, a happy bunch of red noses land.

Lt. Bill Koressel won two air medals flying as a Ripper from the *Hornet* during the war. More recent RR Lt. Tom Cross was a squadron member just a year ago.

But when Lt. Bill Hartung waves, a sad-eyed group of jets land aboard. Our remedy is to force Hartung to wave special Red Ripper paddles or keep off the LSO platform. Cross and Koressel agree, but Hartung continues to be dubious and remains horrified at the idea.

The photo shows Hartung in the middle of Cross and Koressel, sitting on the nose of *Red Ripper* Oberg's jet. Note the paddles in Koressel's hands and Hartung's "horrified" expression.

R. E. COWELL, LT. (JG)

VF-11, WASP



NAVAL AVIATION
NEWS

Published monthly by Chief of Naval Operations (OP-501) and Bureau of Aeronautics to disseminate safety, survival, maintenance and technical data. Air mail should be used if practicable, address to: Chief of Naval Operations, Naval Aviation News, Navy Department, Washington 25, D. C. Direct communication can be made to Naval Aviation News, Room 5D628, Pentagon Bldg., office phones 73685 or 73515.

CALLING ALL WAVES

Toward the end of July, WAVES are heading for Washington, D. C. to celebrate the tenth anniversary of their founding. Their reunion will be held at the Statler Hotel July 26 with the anniversary banquet in the evening. For information, send self-addressed stamped envelope to

Waves' Reunion Committee
Box 4670, Anacostia Station
Washington, D. C.

SIRS:

To settle a small wager, could you give us some straight dope on the armament of the TBF-TBM-type aircraft? Has the TBF or TBM ever been equipped with two .50 cal guns on the fuselage, synchronized to fire through the prop? Did a group so equipped ever operate from the *Princeton* (either CVL-23 or CV-37)?

I don't think such a plane ever existed except for maybe one or two as experimental jobs, but I could be wrong. Please set us straight.

H. S. DILTS, AO3

E. A. ALEXANDER, AO3

USS PRINCETON

¶ BuAer reports the TBF-1 and TBM-1 came out with one .30 cal machine gun in the nose, firing through the prop. The TBF-1C came out with two .50 cal guns mounted in the wing stubs. Grumman Aircraft Engineering Co.'s armament engineer corroborates this. It is possible some squadron in the Pacific might have tried to modify its planes to put in .50 cal in the nose, but this is highly unlikely since it would change center of gravity, require different synchronization and a beefed-up structure to take the heavier gun.

SIRS:

Before the subject grows cold (*Navy Crews Nickname Flattops*), I would like to add one that was overlooked.

During '49 and '50 when it seemed to us in the *Leyte* that we were making most of the Med cruises, *Portrex*, etc., and the *Coral Sea* was spending a good deal of time along side in the Norfolk shipyard, we nicknamed her "Building 43".

CAPT. F. N. HOWE

COMMANDING OFFICER

NAS MINNEAPOLIS

SIRS:

We read of records hung up by various squadrons, mostly VF and VA outfits. This squadron would like to submit its claim to an unofficial record for the highest monthly average flight hours for a six-month West-Pac tour in PBM's.

During VP-731's last tour in the Philippines from 23 June 1951 to 7 August 1951, we flew an average of 778.1 hours a month. Can you confirm or deny our claim or publish it so that any rival claimants may be heard from?

W. T. O'DOWD, CDR.
COMMANDING OFFICER

CONTENTS

Survey by Helicopter.....	1
Korean Air War.....	10
Marines' 40th Anniversary..	15
Poland's Air Force.....	16
Bombing Area like Korea..	20
Codfish Air Line.....	21
'Not Just a Number'.....	22
Reserve Pilots Wanted.....	23
Reserves on Tarawa.....	24
Hey, Taxi!.....	26
McCoy Ends Aviation Saga	28
NAS Spokane.....	29
Navy Men Lick 'Arctic'.....	33
AU-1 Corsair.....	36

● THE COVER

Signaling the HUP-1 aboard the survey ship, USS *Tanner*, is Thomas F. Begley, AD3, member of the helicopter detachment aboard when the ship was surveying Caribbean waters (see pg. 1). He holds a red and green flag, waving the latter in the photo to signal Pilot A. C. Gauthier to take-off. Photo by Naval Aviation News.

● SUBSCRIPTIONS

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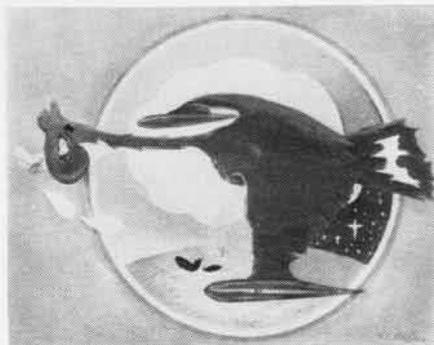
● The printing of this publication has been approved by the Director of the Bureau of the Budget, 31 March 1952.



SQUADRON



INSIGNIA



TWO patrol squadron insignia are presented here, one flying in the Pacific and the other in the Atlantic. Antisubmarine Patrol Squadron Five (top) flies P2V's out of Jacksonville, its sly fox set to hammer submarine periscopes with its sledge, from tropics to Arctic. VP-22 served a cruise in the Korean theatre. Its large blue goose carries wingtip tanks for extra range. In the background, a sub sinks after having been hit by electronic lightning from the patrol goose.





DON'T PLAY
NOW YOU SEE IT
NOW YOU DON'T

NAVAL AVIATION
NEWS

Don't take chances or you'll *never* grow old! One way to become the "oldest living aviator" is to know what you're doing and how. Keep abreast the swift progress of aeronautics by reading *Naval Aviation News* with "all the newest that's fit to print." Beware of shell games. Be in the know!