NAVAL AVIATION

NEWS

Hurricane Hunters

Warfare in Korea

NavAer 00-75-R3

DECEMBER 1950

HURRICANE, WARNING!

CREW TURNS *up engines while aerologist, co-pilot and navigator discuss last minute plans to scout through an oncoming hurricane.*

PHOTOGRAPHER *K. G. Riley, AFC, at his "hurricane station" aft points his hand-held aerial camera at a turbulent storm scene.*

SHIPS AT SEA *often give first tipoff of suddenly-brewed hurricanes, sending radio data to Weather Central at NAS* MIAMI; *in an hour's time planes from* VP-23 *can be winging out to track it and keep Central advised as to direction, strength of impending storm.*

HURRICANE, WARNING!

BULLETIN: Sudden hurricane sweeps southern Florida. Flotilla of pleasure yachts trapped, 500 drown. Hundreds lost along Miami beaches.

THAT'S ONLY a figurative news item, but it could happen. The Navy's weather reconnaissance squadron at Miami, VP-23, battles into the center of hurricanes from June to December to keep just that kind of news from happening.

Without warning that a hurricane was approaching, thousands of persons could be endangered by the 120-mph winds and high waves. Back in 1900, a sudden blow took 6,000 lives at Galveston, Texas.

Scouting suspicious bad weather areas in the Gulf or Caribbean is not a one-squadron job, however. VP-23's nine PB4Y-2's team up with Air Force hurricane hunters for daytime flights into the eye of storms. When they get within 300 miles of the mainland, VX-4 pinpoints them at night by powerful radar.

Unlike a policeman's beat, the hurricane "badlands" are not patrolled on regular schedule. If a ship as sea or land stations on islands report unusual winds, pressures or rain, aerologists at the Joint Hurricane Advisory Center at Miami get busy. Suspicious areas then are scouted by recco planes.

At this center the U. S. Weather Bureau, the Navy hurricane weather central and Air Force weather service office all work together to keep track of the hurricanes as they move toward Florida or other Gulf areas. They meet once a month, together with airline weathermen, to exchange information and plan how to track down dangerous hurricane activity.

HURRICANE, WARNING!

WHEN SOME ship or weather station in the Caribbean reports a hurricane forming, Joint Weather Central goes to work. Capt. P. R. Drouilhet, officer in charge at NAS MIAMI's central, determines if a reconnaissance flight into a suspicious area is necessary. If he thinks so, he orders Cdr. Lewis D. Tamny, skipper of VP-23, to send one of his *Privateers* to investigate what is cooking. Within an hour, a plane is on its way to the area.

These reconnaissance flights are made at low levels, near 500 feet, to remain VFR below the cloud bases. Here the aerologist is able to observe closely the water surface and can obtain surface wind direction and velocity.

These two factors are all-important to the navigational dead-reckoning track, and to establishment of storm structure and position. In addition, this low flight level, while often extremely turbulent, avoids the prolonged vertical accelerations that may be encountered at higher levels. The pilot can fly "visual" most of the time, permitting observation of sea and swell, which is another aid in tracking down the storm.

Many times the weather plane finds the storm in an "incipient" stage of development. In such a form, perhaps, there is no circulation yet established on a part of the periphery. Or perhaps there is weak circulation but as yet an immature cloud structure. These conditions require criss-crossing through variable weather, mostly bad, relying on radar and visual observation to picture the phenomenon that is disturbing the normal wind and weather patterns.

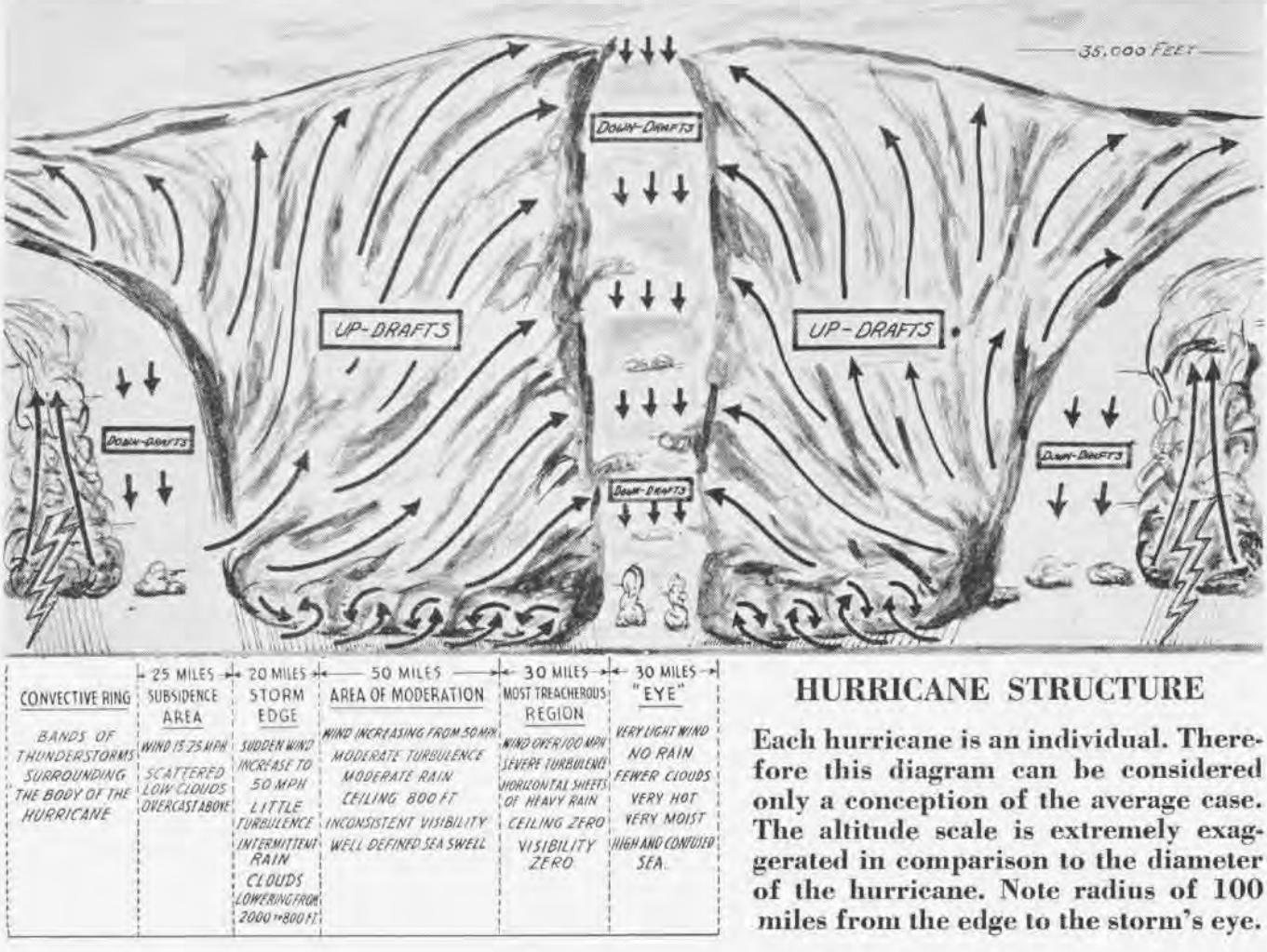
Or perhaps the hurricane hunter stalks the suspicious area to encounter a full-fledged revolving storm with mountainous walls of swirling rain and clouds encompassing an area of a hundred or more miles in diameter. This monster must be circled to measure it, and probed to establish its intensity and locate its center.

Circling usually is done outside the heavy weather, traveling downwind which, generalizing, involves tail winds of 55 to 60 knots. Probing for the eye at the center is an art which requires from the team highly specialized knowledge, skill and teamwork—and a rugged multi-engine airplane.

PENETRATION to the eye consists of entering the heavy weather from the western side of the storm, which sometimes is the weaker side in terms of wind and weather. The aerologist calls for an easterly course that places the counter-clockwise cyclonic winds so as to come out of the north and strike the plane perpendicularly on its port side. The plane then "crabs" sidewise with ever increasing drift as it plows toward the eye and encounters increasing winds near the center.

As this drift blows the plane into the southwest quadrant of the revolving storm, course must be altered frequently to the left in small increments to keep the wind always on the port beam of the aircraft. Sometimes the desired track is abandoned momentaily to avoid a heavy patch of swirling weather located by the radar operator. Eventually, the pitching and yawking ceases as the plane enters the awesome phenomenon called the "eye."

Here in the eye, turbulence ceases, light and variable winds blow, sunlight filters through and the weather clears to where one can see perhaps 10 or 20 miles, all the way across the peaceful cylinder bounded by black walls of moisture-laden clouds driven by 190-knot winds.



HURRICANE STRUCTURE

Each hurricane is an individual. Therefore this diagram can be considered only a conception of the average case. The altitude scale is extremely exaggerated in comparison to the diameter of the hurricane. Note radius of 100 miles from the edge to the storm's eye.

HURRICANE *recco crew gets last-minute briefing before takeoff; Capt. Drouilhet talks to PPC Baker, Killian, Stafford, and Illgen.*

TEAMWORK OF *crew is vital: Lt. Bates outlines flight to Kerr, Shreve, Brzenski, Pieschel, Bornmann, Forbes, Einolf, Madden.*

The crew relaxes at this point of the flight. While Navy coffee is brewed and poured, the aerologist, navigator and radioman catch up on work delayed by the wild ride just completed. If gasoline and time allow, the plane orbits in the eye at various levels from 500 feet up to 10,000, taking radar pictures and collecting data.

Patches of blue generally are visible through the thin curtain of white stratus above. The sea below is mountainous and confused, with spume tossed wildly in all directions as the waves toss and clash—no place for a rubber life raft down there.

At last and with reluctance, the plane must depart the tranquility of the eye for the violence of the homeward bound leg. The aerologist supplies the course and selects the point of penetration into the ominous surrounding wall of weather. Again the weaker west side is selected and the plane fights its way out, with tailwinds to assist in the hasty exit, emerging on the south side of the storm. Another successful flight into a hurricane has been accomplished—mission completed.

Pilots normally assigned to a squadron that "flies the hurricane" are not hand-picked. They are no different from any other VP pilot. Duty is hazardous but the information obtained and the glow of satisfaction that results makes the risk worth the taking. Achievement is its own reward.

A complete pre-hurricane season ground training program is carried out. All pilots and aerologists are checked out in the art of hurricane tracking. We will outline a few pertinent rules and procedures normally used in flying the average hurricane tracking mission. Even though all hurricanes are essentially the same, each has its own peculiarities.

Low level flight, usually from 800 to 1800 feet, occasionally as low as 400 feet, is mandatory to maintain VFR for an accurate dead reckoning. It is rare that both pilots are on instruments at these altitudes for more than a few minutes at a time. It would not average more than 25% at the most while circumnavigating the storm.

When penetrating the eye, instrument conditions may increase to 50% and for periods up to five minutes. This low level flight is possible by constant use of the radar altimeter (SCR-718). With a rapid decrease in pressure near the center of the hurricane, constant reports of the true altitude to the pilots by the aerologist are mandatory. VFR must also be maintained to facilitate observance of surface wind, sea conditions and hydro-meteors.

Counter-clockwise circumnavigation is commended at any point on outside perimeter of central storm area, usually at the 60-knot wind circle or isobar. Some cases alter this, such as when a storm lies east of the point of take-off and it is necessary to expedite a fix on the center.

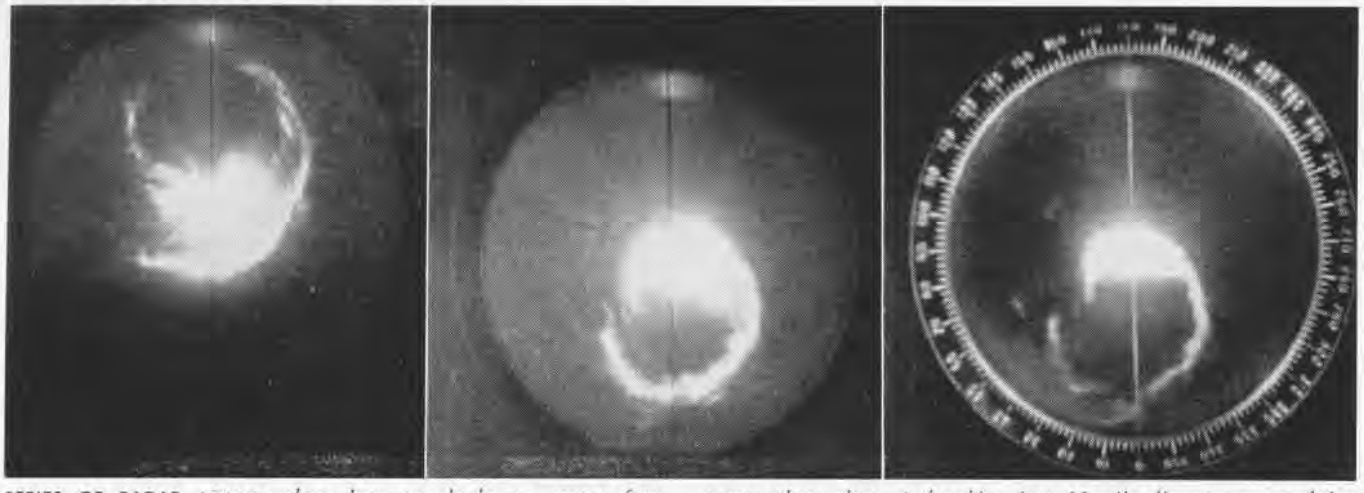
In this case a course is set directly but just to the north of center. Penetration is commended immediately. Of course,

YOU NEED *engines in hurricane flying so Williamson, Barber give one last check.*

LT. (JG) KILLIAN, *aerologist, observes wind force and direction from plane astrodome.*

ON HOMEWARD *trip, Royal, AOC, prepares steak dinner for crew aboard* PRIVATEER.

HURRICANE, WARNING!



SERIES OF RADAR *pictures show how eye looks on scope; first photo shows plane just at edge of eye in 120-knot wind buffetting. center photo shows it breaking into 15-mile diameter eye and last one shows it flying across the calm center area of the hurricane.*

if the storm lies in the vicinity of land masses with mountainous terrain, great care and planning must be taken in choosing the point of circumnavigation or partial circumnavigation and point of penetration into the center.

The usual procedure is to circumnavigate about 30 miles out from the center with surface winds of 60 knots commencing in the south-eastern quadrant. To maintain the proper course, the wind is kept fine on the starboard quarter. When the aircraft is estimated to be due north of the eye, and wind is about 060 degrees—60 knots—penetration into the western semicircle is commended.

At this time the wind is placed and kept on the port quarter until it has backed to 020 degrees. When the wind is from 020 true, a course change should be made so that the wind will be kept on the port beam. The wind should then increase rather rapidly and back to 000 degrees. At this time, the aircraft should be within a few miles of the edge of the eye.

If further penetration is desired into the eye of the hurricane, the wind must be kept on the port beam and a break through into the eye will occur within a few minutes. During this brief period, the winds will back still further to near 320 degrees with a rapidly increasing wind velocity and a tremendous drop in barometric pressure. Entry into the eye is at the pilot's discretion. Further penetration toward the eye is unnecessary whenever the radar indicates the eye on the scope, which can be picked up from 15 to 20 miles from the center and under optimum conditions 30 miles.

DEPARTURE from the storm at anytime when weather becomes too rough, or other reason, can be made by turning slowly to the right (flat rudder turns), maintaining altitude and attitude. An attempt is made to avoid heavier weather by visual observation and radar. A turn to the right is continued until the wind is just abaft the starboard beam making course adjustments to keep it there until out of heavy weather or turbulence.

Departure from the eye or center of the storm should be made only after a thorough investigation of the wall of the eye, both visually and by radar. A climb of 5,000 feet should be sufficient in most cases for this "look." Departure is normally made out of the southwest quadrant at low level.

A wide berth of the northeast quadrant is recommended. Many times a wide berth of the south sector is advisable when the storm is not isolated and is still under the influence of the inter-tropical front, easterly wave or a trough condition usually found in the south part of a new hurricane. Considerable turbulence and gusty winds are found.

RADIOMAN H. R. *Ferguson,* AL2, *sends back a report to Weather Central on what the reconnaissance plane is finding over sea.*

IN THE EYE, *navigator Ens. F. M. Glazier takes a loran fix; if it checks with DR, he knows that his wind estimates were accurate.*

THIS IS WHAT *the eye of a hurricane looks like; patches of clouds, blue sky, calm air are deceptive at storm center but trouble's there.*

RADAR PLAYS *a vital part in hurricane scouting; J. D. Dinkins, AL2, runs the "tilt" up to scan formation of high cloud near plane.*

Rapid acceleration of storms can occur north of 30 degrees latitude. Great care must be exercised in planning flights into or around these storms. If circumnavigation is considered, sufficient fuel must be aboard to allow for the rapid acceleration of the storm and possible high head winds going home.

Penetration into or near the center of a full-blown hurricane is not recommended except into the western semicircle, even though breaks may occur to port while on the eastern side of the storm. These are only temporary breaks usually, and should not even be investigated since one gets in too deep on the eastern side and has to beat his way back out through the treacherous northeast quadrant.

Radar can determine whether a break to port is a false alarm or not while on the eastern side. A climb and the resultant instrument flight while inside the 60-knot wind level is not recommended. If investigation of the storm is desired at high altitude, a return to the outside perimeter of the main storm area and climb to altitude, maintaining VFR before setting course toward the center, is advisable

Hurricanes are tropical cyclones which occur in the Atlantic, Caribbean and Gulf. They are called "tropical storms" until wind exceeds 65 knots. Typhoons and hurricanes are the same, differing only in location. Typhoons occur in the western Pacific. Other names for tropical cyclones are "baguios" in the Philippines, "willy-willies" in Australia, and simply "cyclones" in the Indian ocean.

A tropical hurricane will cover about 200 miles in diameter, with winds and clouds up to 40 to 60 thousand feet. The eyes average about 14 miles in diameter.

Highest winds ever recorded in a hurricane was 186 mph at Milton, Mass. during the hurricane of September 1938. Over water winds as high as 200 mph occur. Winds in a tropical hurricane are about 120 mph just outside the eye, tapering off to 40 mph at the outer edge of the storm. Hurricanes move about 10 to 20 mph, but in temperate latitudes may go as fast as 50 mph.

Flooding is by far the greatest danger in hurricanes. More than three-fourths of all deaths in tropical cyclones have been due to sudden inundations.

During the hurricane season, there is an average of about seven tropical storms a year. Apparently there is no cycle in hurricane frequency, for as low as two and as high as 22 tropical storms have occurred in previous seasons.

VP-23 the past season has featured in many publicity programs on radio, television and in the newspapers, as hurricanes began coming thick and fast over Florida. On one flight a *Privateer* carried a radio station tape recorder which played back an interview with the crew while they were in the storm, chilling even veteran hurricane hunting crews. Officers of the squadron have given lectures at local organizations, on how they track storms to protect people.

THUMBS UP FOR *turnup shows LCdr. W. R. Meyer, squadron exec, getting ready for another round with "nature's heavyweight."*

ON THE WAY TO *storm area, equipment is checked by aerologist Kerr, pilot E. J. Bates, co-pilot Shreve and navigator Brzinski.*

GRAMPAW PETTIBONE

Take Off Emergency

The student pilot of an F4U that crash landed in a wooded area after engine failure on take-off writes:

"My first field carrier landing pass resulted in a wave-off to the right; the engine coughed and sputtered with the application of full power. Throttle was retarded immediately to 30", then prop pitch to about 2050 r.p.m. There followed a radio transmission from the LSO authorizing immediate normal landing if in trouble, during which time engine operation smoothed out.

"My reply indicated that now I believed the engine to be functioning normally and that I would attempt another pass. I continued to gain altitude during this conversation but at its close experienced a definite but smooth loss of power and began to descend immediately from an estimated altitude of 250 feet.

"I pushed the prop pitch forward and checked gas and gauges but found no indication of the source of the trouble. I shifted attention to raising the landing gear lever and flying the plane straight ahead for the landing. Just above treetop level I began raising the nose for the flare-out. The plane hit hard; I remember no details of the crash until I found myself stepping through a hole in the fuselage onto the wing and clearing the plane.

"I have no memory of cutting switches or unfastening my safety belt. I walked some distance from the plane and sat down, leaning against a tree and facing the plane. Assistance arrived promptly.

"Conclusions I have drawn from the accident:

"My concentration on the problem at hand—my check flight—made me reluctant to admit that the engine was actually failing, a situation aggravated by the smoothness with which the engine lost power, and left me a shorter interval of time to execute emergency procedure and exercise good flight judgment in the actual landing.

"Henceforth I will enthusiastically engage in any safety forum, lecture, or emergency procedure review class, especially the latter, as often as it can be repeated at the squadron and flight levels, so that these procedures will be instantly and completely available to my mind for application in the few seconds that exist for action in an emergency. The problem is not one of acquiring safety knowledge but of keeping it right at the fingertips.

"If I had worn an anti-buffet helmet, I would not have received my head injuries. Secure shoulder straps and seat belt prevented more serious injury.

"The cardinal rules of a low altitude emergency: (1) Maintain flying speed (2) Retract wheels, and (3) Land straight ahead, were observed automatically as a direct result of CQTU-4 training."

ALL GRAMP WANTS FOR XMAS IS MORE SAFETY!

Grampaw Pettibone Says:

That's what I call taking a good, intelligent, backward glance at your actions in an emergency. Sure, you were a little slow in admitting that you had an emergency and were thus crowded for time, but you didn't forget the important things!

I wish that there were some way we could train Guardian Angels to shout, "FLY STRAIGHT AHEAD" and "KEEP FLYING SPEED" in emergencies right after take-off . . . 'cause my files contain over a hundred cases where pilots were killed when they tried to turn back to the field.

P. S. As Winchell used to say, "An orchid to CQTU-4." When a pilot does the right thing automatically, it shows that his training was plenty sharp.

Dept. of Utter Confusion

A Reserve Lt. (jg) with a total of 2.6 hours of recent flight experience in *Corsairs* joined the *Caterpillar Club* the other day when he found himself unable to recover from an inverted spin and bailed out at about 3000 feet. His statement indicates that he had some very droll ideas on aerodynamics and that he didn't know the first thing about inverted spin recovery in the *Corsair*.

To begin with, he nosed over and attained an airspeed of about 270 to 280 knots and started his loop at 8000 feet. He says, "When the plane was almost at the top of the loop, I felt by the controls that it would not have sufficient speed to complete the loop, so I attempted to roll it out in an Immelman. This attempt failed and the plane started into an inverted spin.

"I immediately applied opposite rudder, but the plane continued to spin in its inverted attitude. I applied pressure to the stick but was unable to move it. During the short period of time the plane was spinning violently and losing altitude very rapidly, and I decided to abandon the plane."

Grampaw Pettibone Says:

This statement makes about as much sense as saying, "I was in a normal climb with my wings level when I felt that the plane was about to stall, so I immediately commenced a steep nose high turn to prevent the plane from spinning."

How a fellow could accumulate 1000 hours of flight time and not know that it takes more speed to do an Immelman than to come on around in a loop is beyond me. When you're on your back at 9000 feet, the easiest and simplest way to get some more speed is to let the nose fall through.

No wonder he couldn't recover from the inverted spin. He forgot to retard his throttle, and that is one of the most important steps in recovery from an inverted spin in the *Corsair*.

Looks to me like this lad could have used a little briefing on basic fundamentals of flying and some specific instruction on spin recovery before being allowed to check out in a *Corsair*.

The Other 2% Are Liars

Here's our comforting thought for the month:

"There are two kinds of experienced Naval Aviators:

(1) Those who have been lost.

(2) Those who are liars.

"If you're an expert navigator, you may avoid both categories for quite a while.

"If you do become lost, you have accomplished nothing unique. You're not even in danger provided you know your lost plane procedure. Just use it and come on home and lie about it!"

Fire Blasters

Proof that there are more ways than one to put out a fire turned up in two unusual accidents:

Case No. 1

Pilot was trapped in a burning airplane after a landing crash. Two jets were waiting for take-off nearby. When the pilot made no attempt to leave the burning aircraft, the jet pilot closest to the scene taxied his plane so that he was about fifty feet behind the cockpit of the burning craft. He then spun his jet around, held the brakes, and opened the throttle.

The blast, which is not dangerously hot at a distance of fifty feet or more, was so great that it blew the flames back and away from the cockpit, enabling other pilots and the fire chief to reach the unconscious pilot and remove him from the wreckage. The pilot of the crashed plane escaped with only a slight concussion and minor back injuries.

Case No. 2

The pilot of an F4U-4 experienced detonation during a carrier take-off. He retarded throttle slightly in an effort to stop the detonation, but neglected to jettison his external gas tank.

He had retracted his wheels and brought his flaps up to 30 degrees when the engine backfired loudly and quit. At this time he was about a mile ahead of the carrier and at an altitude of about 200 feet. The pilot spent a few seconds trying to locate the trouble and the *Corsair* quivered as it approached a stall. The pilot nosed over to regain control, and was able to keep his wings level but hit in a nose down attitude.

The plane and pilot appeared to sink immediately. Gasoline from the full belly tank ignited and covered an area with a radius of about 50 feet. When the pilot escaped from the plane and came to the surface he was surrounded by burning gasoline.

He ducked under water and started to swim out of the flaming area. At about this time the helicopter arrived at the scene and the blast from its rotor appeared to blow the flames away from the pilot as he came up for air. He was picked up in the sling and returned to the carrier in a matter of minutes.

The pilot suffered second degree burns on his face and hands. He was not wearing gloves because he had lost his and had not yet been issued a new pair.

Grampaw Pettibone Says:

Both of these pilots were extremely fortunate in having rescue facilities close at hand and in the first instance the pilot of the jet certainly deserves credit for exceptionally quick thinking in a pinch.

Gosh, I wish there was some way that we could impress every pilot with the importance of wearing gloves. Despite all the letters, orders, and cajoling that has been done on this subject, every few months I run across another accident where a pilot's hands are needlessly burned because he didn't wear his gloves.

Over The Sea Wall

The PBM got in this embarrassing position when a crew gave it a morning turn-up without securing the brake handles on the beaching gear or making sure that it was chocked on both sides.

During the mag check, the plane started to move. The thrust was too much for the tail tie down lines and they parted. The PBM continued over the sea wall and suffered major damage to the bottom of the hull and the port float.

Grampaw Pettibone Says:

I hear that just after this happened a huge neon sign lit up right in front of the PBM. The crew wouldn't tell me what it said, but I imagine the flaming letters spelled out the same word that pilots say right after a wheels-up landing!

Fetch the Aspirin

The pilot of an F7F-3N departed from MCAS CHERRY POINT on an IFR cross country flight to Tinker AFB in Oklahoma at 0528 EST. On his clearance form he had estimated that his true air speed would be 220 and that the mileage to destination was 900. He gave an estimated time enroute of 4 hours and stated that he had sufficient fuel for a 6 hour flight.

At 0800 EST he reported over Nashville, Tennessee at 10,000 feet in accordance with his flight plan. Nashville radio informed him of 40 knot headwinds at 10,000 feet and that the wind conditions were more favorable at lower altitudes. Inasmuch as VFR conditions prevailed over the balance of the route, the pilot cancelled his IFR plan and descended to 4000 feet.

At approximately 1015 when 70 miles east of his destination, the pilot switched to his reserve fuel tank with the gas gauge indicating 80 gallons remaining. He had drawn gas from each of the other tanks until the fuel pressure dropped.

About five or six minutes later the fuel gauge flickered and indicated 40 gallons. The pilot realized that he would be unable to make Tinker AFB and headed for the nearest airport which was about 20 miles to the northwest.

At this time he was paralleling a highway, and he decided that it was suitable for an emergency landing. After instructing his passenger to tighten shoulder straps he landed on a clear, straight, stretch of highway. Just as he started his flare out, he struck a half-inch power line which he had not observed. The line, however, did not interfere greatly with his landing, and he rolled to a safe stop on the highway.

Additional gasoline was brought by truck from Tinker AFB and the pilot received permission to fly the plane off the highway as there was no practicable way of getting it to an airport. The F7F landed at Tinker AFB shortly before dark.

Grampaw Pettibone Says,

Fetch me another aspirin tablet! Let's take a look at the findings of the Accident Board in this case. First of all they note that the correct distance from Cherry Point to Tinker AFB is 1005 nautical miles instead of 900. Second, the 825 gallons of fuel aboard was sufficient for only 5 hours and 15 minutes of flight at the most economical power settings instead of the 6 hours as stated by the pilot.

Third, the estimated time en route, based on wind information available to the pilot, should have been five hours instead of four hours.

Fourth, if the pilot had taken the time to compute these items correctly he would have realized that he couldn't file an IFR plan in accordance with CAA regulations, because he wouldn't have had sufficient reserve fuel to reach his alternate, let alone have the required 45 minutes reserve.

Last of all the board felt that the pilot showed poor judgment in flight in relying too heavily on his fuel gauge readings. The gauge checked out all right when flight tested and bench checked after the accident. However, the fuel readings on this type of instrument are known to fluctuate under varying conditions.

In the last five years I guess I've read 50 or more statements written by pilots who have run out of gas. It's a funny thing, but they all have one paragraph which reads pretty much the same. That's the one where they describe how fast the needle moved towards the zero mark during the last twenty or thirty minutes that they were airborne. Give yourself a break. Allow plenty of reserve fuel.

They're sounding taps
For Lieutenant Jones
Who rested his ears
By removing his phones.

NAVY AIR POWER IN KOREA

First Combat Ejection

First pilot to save his life by using his ejection seat during the Korean war is Lt. Carl C. Dace of VF-111. He is the first American to make such an ejection in combat, it is believed.

While flying over North Korean territory in his F9F-2B, Dace's aircraft was hit by AA while strafing at 400 knots at about 2,000 feet altitude. The hits sustained knocked out the fuel system and reduced his supply to 50 pounds in a short time.

With throttle full on, he got only 85% power. However, he pulled up to 6,000 feet and pulled the pre-ejection lever to get rid of his canopy. It moved aft but refused to jettison, probably due to battle damage, and finally had to be pushed off by hand.

Dace then pulled the face curtain on his ejection seat and was catapulted from the airplane while going about 200 knots. His wingman said the small stabilizing drogue parachute on the seat did not operate, so that the seat and pilot tumbled in the air. Dace let go of the curtain with one hand to unfasten his safety belt which held him in the seat and the free end of the curtain flapped in the slipstream. The nylon rope handle hit him in the eye. Had he let go of the curtain with bo h hands, it would have retracted.

Unfastening the belt, he kicked free of the seat and immediately pulled his ripcord. One panel was torn out of the chute but it functioned despite the damage and he descended into the water.

Breaking out his PK-2 pararaft, he got in and spent the next seven hours in the water waiting for rescue. It finally came in the early hours of the morning when a destroyer picked him up.

Night on the Mudflats

While attacking the Seoul area, a *Corsair* piloted by Ens. E. A. McCallum of VF-54 was hit by AA fire. He succeeded in flying the crippled plane to the western shore of Korea before the engine failed, forcing him to ditch about 20 miles south of Inchon.

The plane sank immediately, carrying with it the life raft and survival gear. Ens. McCallum swam to a small island while fellow pilots orbited his position. Lt. (jg) Bryant and Ens. Parse proceeded to the AFB at Taegu with dope on the crash and requested immediate rescue attempt by AF search and rescue facilities.

A *Dumbo* was dispatched but darkness set in before a rescue could be effected. The protective combat air patrol was forced to return to ship because of darkness and lack of fuel, leaving the pilot to spend a hectic night evading Communist patrol surface craft which soon began to circle the island in an attempt to locate him.

Their calls of "Hey, Joe!" failed to trick McCallum and he remained silent, planning what to do in his next move.

A second threat was the rising 26' tide which threatened to flood the little porch and sweep him ashore on the strong current. His luck held, however, and the tide came to a standstill a scant three feet from the level of the island, depriving circling sharks and North Korean Communists of a victim.

The British destroyer *Cockade* appeared at the first light of dawn in the morning, drove off the enemy patrol boats and picked up the harassed pilot. He rejoined the squadron when the force put into port for supplies, full of praise and gratitude for his British benefactors—and their "refreshments."

Pilot Collects Own Bomb

Airmen who drop lethal bombs for a living often collect some of their own destructive force.

In a mission to knock out an important enemy-held railway bridge east of Seoul with 1000-pound GP bombs, one VA-55 pilot had an accident from which he was lucky enough to return.

The accident occurred just after he was pulling out of his third bombing run in an AD-4. The pilot *felt* and *heard* a rather sharp explosion which threw the plane into a steep bank.

Normal reactions being what they are, the pilot was more than somewhat surprised to find that he had *no* aileron control and very little hydraulic pressure. Keeping his wings level by using rudder, the pilot returned to his ship and after one wave-off made an excellent carrier landing.

Upon inspection, it was found that two large pieces of shrapnel had struck the aircraft. One had traversed the port stub wing damaging the hydraulic lines; the other had entered the bottom of the fuselage, severing hydraulic lines, electrical wiring and the aileron control bar and penetrating the seat to imbed itself in the parachute.

Welcome Mat Is Out

During a recent flyover of a certain Far East airstrip, the following conversation between plane and tower occurred. (A fictitious tower designation is used for security reasons)

Plane: Mako tower from Victor 2946. Request permission to circle your field twice at 1500 feet.

Tower: Veectour 764. Pee Too You, you are cleared to land. Wind is from the *north*.

Plane: Mako tower from Victor 2946. Negat landing. Negat landing. Desire to circle your field.

Tower: Pee Too You, Pee Too You, you are cleared to land. Wind is from the *south*.

Plane: Mako tower, this is Victor 2946 I say again. No landing. No landing. I do not wish to land. Over.

Tower: Pee Too You, Pee Too You. You no like wind? Wind is from the *east*. You are cleared to land.

Plane: Mako tower, this is Victor 2946. Departing for Kalung at 36. Over.

Tower: Pee Too You, Pee Too You. You are cleared to land.

Seems like the tower operator was determined to bring to Pee Too You (P2V) in for a landing. Maybe he wanted company. Actually, the surface wind was a steady 20 knots from 270.

As the plane disappeared in the distance, the now plaintive voice of the operator followed more faintly, "Pee Too You, Pee Too You, cleared to land . . ." The above incident was reported by VP-1.

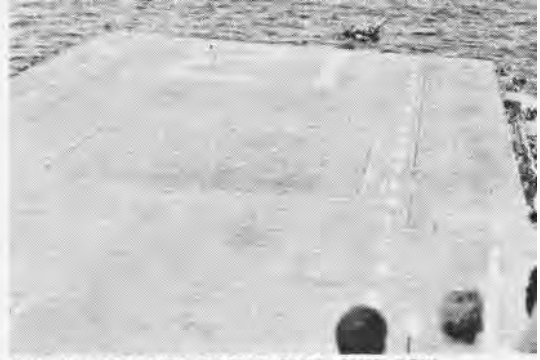
Heroism in Korea

His plane loaded with bombs and napalm, LCol. Richard W. Wyczawski, skipper of a Marine fighter squadron in Korea, had just taken off from Kimpo air field. He noticed his *Corsair* was leaking oil, so he immediately turned back to the field.

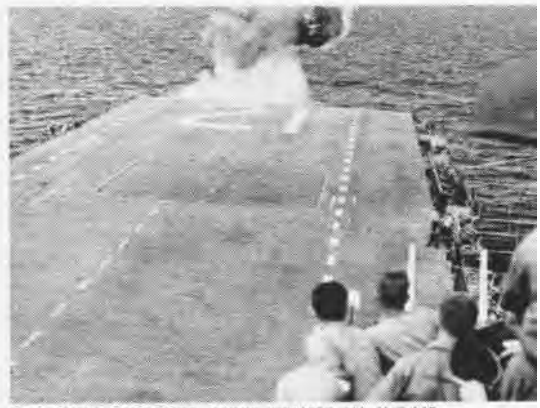
The crash crew and emergency ambulance were alerted. Flames shot from the plane when it still was airborne. The pilot crash-landed and jumped out of the burning fighter, managing to get several feet away before he collapsed.

It appeared the flames would touch off the rockets and napalm bombs under the plane and the surrounding crowd scattered. Navy Hospitalman Third Class Charles B. Stalcup, disregarding warning shouts, rushed to the burning *Corsair*. He pulled Col. Wyczawski up on his back and carried him out of danger.

They made it just in time. A few seconds later the napalm bomb exploded along with some rockets. The plane was consumed in a few moments. One Marine, ducking for cover nearby, was hit by a piece of shrapnel. Stalcup was a member of the Dallas, Texas, Reserve fighter squadron that was called on active duty on August 1.



ENS. JIM BROGAN'S ENGINE FAILS OVER BOW

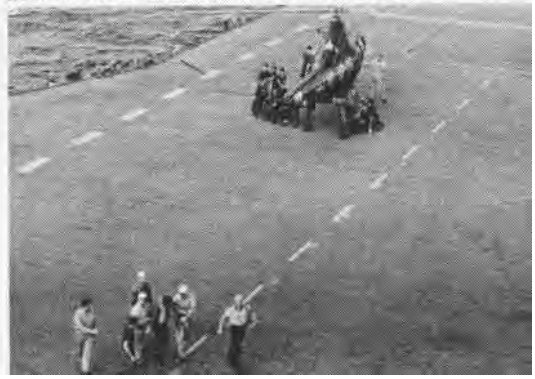


GAS TANK EXPLODES: NOTE HELMET IN MIDAIR

SMOKE FROM BLAST ENVELOPES FLIGHT DECK

LT. HAINES IN HELICOPTER HEADS FOR BROGAN

IN 3 MINUTES BROGAN IS BACK ON FLATTOP



MARINES ON KIMPO AIRFIELD SET UP FIELD KITCHEN BESIDE RUSSIAN TYPE IL-3 AIRCRAFT

OIL REFINERY AT WONSAN IN NORTH KOREA GETS PASTING FROM CARRIER-BASED NAVY PLANES

He Went For The Ride

A rescue helicopter pilot of the First Marine Aircraft Wing in Korea lowered his plane deep in enemy Korean territory near dusk to pick up a Navy pilot who was forced to crash-land in a small valley.

As the helicopter churned and maneuvered for a landing, its crew saw the downed pilot waving at them to pull up and get away from the area. The pilot pointed to the hills with his pistol, trying to warn the men in the pinwheel that the hills were full of Communists.

Almost too late, the helicopter pilot, Lt. (jg) Charles E. Jones, realized he had flown into a trap. Then the hills seemed to blaze with rifle fire and Jones pulled the helicopter into the sky.

With the lieutenant was Marine Corp. Lawrence G. Whittall who had gone out to a Navy carrier for a shower and shave and volunteered to go along on the rescue flight.

In a short time, Jones detected the helicopter had been hit several times by rifle bullets. They were forced down by a hit in the gas tank and landed on an island in the Han river. In pitch darkness another helicopter from the Marine observation squadron, piloted by Capt. Victor Armstrong, picked up the men on the island.

In another rescue operation, a helicopter piloted by Lt. Robert Longstaff on a reconnaissance mission over Seoul heard a radio message for help from three pilots down behind enemy lines.

Braving a storm of flack, he hovered over the crash scene while the pilots hoisted themselves aboard to safety. He won the Silver Cross for that one.

Legal Flat-hatting

Lt. Vernon Bruce, Marine *Corsair* pilot, knows now how it feels to fly through a powerline and not get gigged for flat-hatting. He didn't see the 350-foot high electric lines over the Han river as he flew into the sun.

After he hit he continued to fly his fighter mission, destroying a truck with rockets and machine gunning North Korean troops hurrying along a road. On their return trip they saw four downed wires from the power line lying along the sand of the river bottom. When he got home, he found the wires had gashed his wing, tail and engine cover. There also was a bullet hole in his extra gas tank. Luckily, 'twas empty.

No Kick Coming Here

LCol. Max J. Volcansek, commander of a Marine F7F squadron in Korea, owes his life today to a lusty kick on his stick and a quick-opening parachute.

He tried to drop his right empty wing tank but it jammed between the right engine and the fuselage. Airspeed and control of the plane were lost.

After fighting vainly to control the plane, he decided at 1,000 feet to jump. He pushed back the hatch cover and attempted to crawl out but the slipstream of the plunging plane was too strong. He put his foot on the stick and gave a desperate kick. The plane nose-dived and he plummeted out of the cockpit, pulling his ripcord at 500'.

The chute opened just seconds before he hit the ground. The *Tigercat* crashed 75 feet away. A rescue helicopter soon picked him up and took him back to Kimpo airfield. Pilot of the pinwheel, making his fourth rescue of the war, was Lt. Gus Leuddecke.

The sequel to this story came a few days later when Volcansek went back to the village to thank personally old Ujong Chi, a South Korean peasant, and give him a present of two boxes of rations. Curious men of the village swarmed around to watch the ceremony. They and others had helped carry wrecked parts of his F7F up to the village's democratic center, Ujong being the first to greet Volcansek after he

CHAPLAIN SALYER CONDUCTS CHURCH SERVICES ON CARRIER ELEVATOR

MARINE PILOTS IN READY ROOM GET BRIEFED FOR CLOSE AIR SUPPORT

FIREFIGHTERS RUSH TO A CRIPPLED CORSAIR ON 'SICILY' OFF KOREA

ORDNANCEMEN LOAD BUNDLE OF ANTIPERSONNEL BOMBS ON BOMB RACK

landed in his chute.

The Marine flier wanted his ripcord ring, so half a dozen children went with him to hunt for it, even though they didn't know what they were looking for till Volcansek drew them a picture of it. One then dashed off and ran back with the souvenir.

As he left the hamlet, Volcansek was presented with a dozen eggs carefully wrapped in rice straw.

Darn Clever, These Marines

This is a story of handerchiefs, socks and chartreuse-colered tracer bullets in Korea.

A two-man Leatherneck aerial sporter team noted suspicious activity in a valley below. Maj. Vincent J. Gottschalk, skipper of a Marine observation squadron, and Capt. Edward Hammerbeck, went down for a closer look. They saw a group of Communists deployed over a hill from Marine infantry.

Hammerbeck quickly wrote out a warning message to drop to the front line Marines, but he could find no message drop container. So he wrapped the message and two pistol bullets for weight in a handkerchief and dropped the message.

Down the line they saw more enemy troops. This time Hammerbeck took off one of his shoes, stuffed the message and bullet in a sock and dropped the second message.

The pair then flew their *Grasshopper* into another valley. The enemy opened up with .30 and .50 cal. weapons. "This was the first time I've ever seen them use greenish, chartreuse tracers," Maj. Gottschalk said.

They high-tailed out but on returning to base they found eight bullet holes in the tail of their plane, one a fraction of an inch from a main control cable.

Chain Reaction

There is more than one way to wreck a convoy of Korean trucks, Capt. William Parker, a Marine observation plane pilot, found.

Spotting a fleeing convoy of trucks near Seoul, he called in some *Corsairs*. The lead plane scored a rocket hit on the first truck, and the other nine trucks is a combined chain reaction accident, piled into the knocked-out truck. They soon were polished off by the remaining planes in the flight.

Pals Wreck Korean Post

Two Marine buddies—one on the ground and the other in the air—teamed up to slip two rockets through the windows of a North Korean command post in Seoul containing 2,000 troops.

Capt. Robert B. Robinson, forward ground-air observer with the Marine troops, saw the Communists going into the building. He called for a strike by an F7F fighter overhead and proceeded to "talk in" the planes.

The pilot in the plane, Capt. Frank Lang, recognized the voice as belonging to Robinson, an old friend of his. The two had been together in a night fighter squadron in World War II and since then were together in a 1st Marine air wing night fighter outfit.

After firing a burst to locate the target, Lang got the word from Observer Robinson that he was "on." On his second pass, Lang dropped to treetop level and put a rocket through one of three windows in the building. On his next pass, he put a rocket into another building. Both burned when the rocket exploded inside.

Eight To Go

Capt. Kenneth T. Dyke's *Tigercat* fighter used up one of its nine lives when it returned to Kimpo airfield in Korea with a hole in its wing big enough to drop at St. Bernard dog through.

The photo pilot was shooting bridges and ferry sites north of Seoul, diving his F7F down to about 2,000 feet when North Korean 40 mm hit his right wing. When he got back to Kimpo he found a hole two feet wide and four feet long.

"This is enough to give a man a case of the willies," he observed.

Doubtful Honor

When USAF jets began pounding the enemy from a recently liberated field in South Korea, their first casualty, almost, was a Marine. Capt. Leslie E. Brown, USMC, joined an F-80 fighter-bomber squadron at a Japanese airbase a few weeks ago. He became the first Marine to fly a jet in combat as well as the first to fly with Air Force units in combat.

While attacking an antiaircraft position, he scored two rocket hits but his plane took a shell in the air intake. He landed at his base on two tires and a wheel drum, all that remained of his right landing gear.

'CONSOLATION CAKE' FOR 27,999TH LANDING

FIRST MARINE TO LAND AT KIMPO IS GREETED

WARDROOM CARD GAME HELPS PASS THE HOURS

CARRIER WAR OFF KOREA

VF-51, KOREA—Just as Valley Forge, a hamlet near Philadelphia, was the focal point of the drive to push the enemy out of America in Revolutionary War days, so the carrier *Valley Forge* has been the nucleus of Task Force 77 which played such a big role in defeating the North Korean invaders.

When the carrier left San Diego on 1 May, Carrier Air Group Five was looking forward to a pleasant six-months training cruise. She was sailing from Hong Kong to the Philippines when news came of the North Korean crossing of the 38th parallel on 25 June. The *Valley Forge* hastened to Subic Bay to pick up a heavy cruiser and several cruisers, then to Okinawa to join the British carrier *Triumph* and on to Korea, arriving early on 3 July.

Flying F9F *Panther* jets, F4F *Corsairs* and AD *Skyraiders*, CAG-5 began a series of raids which were to account for almost 700 trucks, 50 aircraft and some 200 locomotives in three months. The first day saw the pilots shoot down two *Yak* fighters, catch 40 or 50 aircraft on the ground at Pyongyang, destroy hangars and other facilities on the same field and damage the railroad bridge which crosses the Taedong river at the North Korean capital.

Real fireworks were added on the Fourth of July, when the planes again worked over the 10 or 15 remaining aircraft at Pyongyang, and exploded 17 enemy locomotives. Strikes the next 10 days added flags under all targets painted on the Air Groups scoreboard on the carrier above the flight deck. Those raids saw 77 trucks, 39 locomotives, 4 bridges and more than 30 enemy planes destroyed. At the top of the list went the almost complete destruction of the Wonsan oil refinery, whose fires sent huge pillars of smoke up to 10,000 feet.

In that first month of operations, prior to the arrival of the CV *Philippine Sea*, the pilots learned Korean geography and topography like a book. The road south to Seoul to Pyongtaek became known as "Wreckage Row." The skipper of VA-55, LCdr. Hodson, never was able to fly farther south than Pyongtaek before expending all his ammunition in adding to the 100 to 150 wrecked trucks and tanks strewn along that highway.

Pilots, prior to strikes, began to discuss the observed habits of the enemy by locality. "In Suwon, they hide their vehicles in back yards of houses." "Pyongtaek, yeah, that's where they drive right into the buildings."

Briefing pilots before strikes became constantly more simple, as they became more and more familiar with the peninsula. Enemy hiding places were mentally cataloged by all fliers, and soon no enemy transportation was safe from their attacks.

Missions in close support of friendly ground troops introduced the ground-air coordinators to the AD and left them astonished at the devastating load it carried. A single engine plane, the AD, could make run after run on enemy installations and still have enough load to handle all targets in the area.

Then, with the newly-arrived *Boxer* and the now veteran *Philippine Sea*, the *Valley Forge* sent its planes in support of the Sept. 15 amphibious assaults on Inchon. Leaving the beach defenses of Wolmi-do and Inchon virtually picked clean, they flew inland to catch any attempts to reinforce the enemy. On the 15th alone, *Valley Forge* aircraft destroyed 87 trucks, caught in a staging area six miles east of Inchon at Taejong. Still non-believers, the enemy came out and lost 27 more trucks the following day.

The ship and her pilots watched as the all-out offensive pushed up to the 38th parallel in three weeks, then pushed north. Though both pilots and planes were worn and tired, deck crews worked around the clock to keep each day's scheduled strike on schedule. With more carriers reporting to the battle area all the time, the *Valley Forge* and CAG-5 still stand as the examples toward which all newcomers look.

• VF-22, VIRGINIA BEACH—In an exchange program, this squadron operated at MCAS CHERRY POINT for a month while VMF-211 moved into this squadron's spaces at Oceana to study how the Navy operated.

NOT TO BE *outdone by Grampaw Pettibone riding on an F9F on our cover, Santa Claus in this shot selects an F2H Banshee for a steed. Note the unique bridle he is using.*

Veteran Carrier 'Joins Up'

Bairoko Set Mileage Record In War

U.S.S. BAIROKO—With a crew 75% composed of Organized Reserves called up to duty, many of them World War II veterans, the escort carrier *Bairoko* has been recommissioned and joined the Pacific fleet.

Just 27 days after her reactivation was announced on 17 August, the *Bairoko* was recommissioned, with Under Secretary of the Navy Dan A. Kimball officiating. At the ceremonies, VAdm. George D. Murray, Commander, Western Sea Frontier, recalled that the ship had traveled more nautical miles in one year than any ship in the Navy.

Skipper of the new carrier is Capt. W. F. Raborn and executive officer Cdr. M. C. Reeves.

Marines Top High Overcast

Banshees Up 46,500' to Get Above

VMF-122, CHERRY POINT — This squadron has been going in for some high flying lately in its new F2H-2 *Banshees*. Weather penetration flights have penetrated solid overcasts measuring as much as 36,000 feet with tops at 41,000 feet.

Two flights broke out on top at 46,500 feet. These penetration flights are a step in training squadron pilots toward efficient operations from dawn to dusk in any kind of weather.

DO YOU STILL THINK YOU WEREN'T LOW?

Low-Flying Cycle Dangerous

Transport Squadron Has Men Hurt

VR-24, LONDON—Motorcycles have proven to be a curse upon the squadron. During September, two men were seriously injured while operating the two-wheeled menaces while on liberty or leave.

One man on leave in Texas sustained serious head and neck injuries. One man in London sustained serious leg injuries, which may necessitate possible low level amputation, while flying his cycle at low altitudes. Liberty and leave accidents have far exceeded occupational accidents in the squadron and have resulted in loss of many man-hours plus the extra expense to the government.

ORIENTAL AIR EXPRESS

R5D'S GOT GLIMPSE OF THE GOLDEN GATE BRIDGE AND MARIN COUNTY ON JAUNT TO FAR EAST

MILITARY AIR TRANSPORTATION is a relatively recent innovation. When World War II started no military air service existed. Not until three months after the conflict began did the first Naval Air Transport start scheduled operations.

In the first days of the recent Korean campaign, retreats made headlines simply because the boys ran out of ammunition. But supplies DID arrive—first in dribbles, but enough to hold on; then in a steady stream—enough to stop retreat; then there were stockpiles—enough for attack.

Who is to say how narrow is the margin of defeat in the early days of a campaign? How close was it in the Pacific? How close in Korea?

Two months after the fall of Bataan, the Army Air Transport Command came into being. Whether or not air transportation could have furnished sufficient logistic support during the primary phases of the Pacific war, had it been available, to change the pattern of defeat there, will never be known.

Air logistic support is necessarily limited as far as tonnage is concerned. But battles are won and lost by that one last bullet; by one last meal; by one millimeter difference in the size of a field piece. And battles win wars.

In the final reckoning, it is the troops on the firing line who win wars. Nevertheless, they must have the goods with which to fight. Supplies arrived in time in Korea because the Air Force and Navy units of the Military Air Transport Service, the Navy's Fleet Logistics Squadrons and Marine transport squadrons were organized and ready.

When action began there, supply lines had to stretch 5,000 miles. That's two weeks in the fastest surface transport and 24 hours by air.

When the North Koreans began their push southward, Navy and Air Force components of MATS were already making regular scheduled trips to Japan. Within 72 hours after the conflict began, air cargo was arriving in Japan which had been loaded in the U. S. *after* the campaign had begun.

In a short time the capabilities of air transport had multiplied many times through speeded-up schedules and the addition of civilian units. Had there been no military air transport, this could not have been, but the skeleton was there on which to build. In a matter of three months, MATS headquarters was able to announce that not only was there sufficient airlift available but that civilian units were being cut down in 10 and 20 percent increments.

On the other hand, three months after the start of World War II the number one Naval Air Transport squadron was just making military air transport available. It was a matter of many months before it was capable of handling cargo marked "critical" in that war. Even in 1944 it was a major decision that allowed air transportation to be utilized for evacuation of wounded from the Pacific area.

THE SKELETON WAS THERE ON WHICH TO BUILD

Not so this time! Days after the opening brush in Korea, air transport was evacuating wounded. Newspapers noted some cases where troops left the west coast for duty in Korea and returned to the point of embarkation 11 days later as air evacuees. Such an incident points up the grimness of the Korean struggle. It also emphasizes the capabilities of air transportation. The medical and hospital facilities required in the front areas were kept to a minimum.

In modern warfare, where mobility and speed are absolutely essential to a successful operation, air transportation is an accepted necessity. Only the continuous rapid flow of essential materials can keep up with the demands of a campaign whose planning is predicated on speed. Air transport has become reliable enough so that it can now be incorporated into planning just as men, guns and food are.

The Korean picture was abruptly reversed when the second front was established at Inchon, to prove that present armies are effective only when moving. Wars cannot be won sitting behind fixed lines of defense. Behind the planning of this operation was the stockpiling of material in Japan. Most of it had to come by ship, naturally, but certain items were needed faster than surface transportation could deliver them.

ON 7 SEPTEMBER A VR-6 PLANE CREW GATHERED

Here is how a portion arrived—in time.

On 7 September, around 2000, a Naval Air Transport Squadron Six plane crew gathered at the operations office of Westover Air Force Base in Massachusetts. They were scheduled for takeoff at 2200 for a regular flight to Germany.

After the crew had all arrived, the

(Drawings by Woodrow A. Jackson, JOSN)

QUALIFIED AS THE DIVISION'S WORKHORSE

squadron duty officer informed them that the flight had been cancelled and that five "specials" were being made up for a trip west.

VR-6, the Navy component of the Atlantic Division of MATS, had been at Westover for a full year. During this time the squadron had qualified as the division's workhorse. The outfit was flying 1500 to 2000 hours a month with its nine planes. Well over a third of the 1600th Air Transport Group's operations were carried by VR-6; a good 25% of the Division's total time each month was logged by Navy R5D's. Many of the unit's pilots had logged their 100 missions in the Berlin airlift.

After receiving the go signal 9 September, VR-6 aircraft waited on the end of the runway with the ceiling 600 feet and visibility one-half mile. The first plane got off at 0900 without a load. Its cargo was located at Olmsted AFB, Pennsylvania. The other planes, loaded at Westover, got off at five minute intervals ITEM FOX ROGER, Westover to Fairfield Suisun, Calif.

About 1030 Bureau Number 6522 landed at Olmsted. Two hours later Lt. Stang, plane commander, called "gear up" and nosed into the overcast. The R5D had 8000 pounds of material aboard.

Four tons of supply stuffs is very little when laid alongside the requirements for the Inchon-Wolmi landing. Even 20 tons or the hundreds of tons carried every day by air is small. Measured in terms of critical need, however, it can spell the difference between failure and

'FOR WANT OF A NAIL, THE SHOE WAS LOST'

triumph—ammunition, when the last bullet has been fired; blood plasma, when men are dying for want of a little blood. Nowhere is the aphorism more applicable, "For want of a nail, the shoe was lost, for want of a shoe, the horse. . . ." Air cargo furnishes the nails.

Upon arrival at Fairfield Suisun, the plane was gassed and the crew stoked up at the lunch counter. The flight then cleared to Hickam Field in Hawaii.

At Fairfield the air was filled with war. Hundreds of troops lounged in the terminal, were bivouacked on the ground adjacent to the operations building, waited patiently on the loading ramp. Planes lined the runways and loading was continuing through the night.

Occasionally a landing aircraft was followed in by fire and rescue equipment. These were the air evacs. Ambulances waited at the head of the ramp for the unloading—stretcher cases coming home.

When 6522 put its gear down over Waikiki Beach for the landing at Hickam, the sun was already high in the sky. The crew hit the rack for their first rest after more than 24 hours in the air.

In the initial approach, the plane had passed over NAS KANEOHE BAY, now in an inactive status. The swimming pool was dry and the windows were boarded up. At Barber's Point, even though it was Sunday, P2V's were landing and taking off, and on the field R5D's of VR-21, VMR-352 and VMR-152 filled a large area by the hangars. Marine

NAS KANEOHE BAY IS IN AN INACTIVE STATUS

squadron 152 and Navy squadron 21 make the run the rest of the way from Hawaii to the Orient.

At Hickam there was a conglomeration of C-97's, C-74's, C-54's, R5D's, C-46's, C-47's—planes from the Atlantic, Pacific and Continental divisions of MATS, in every stage of loading, unloading and maintenance. Billeting was crowded and at the snack bar and bowling alley, combat troops wandered in and out.

Early on 11 Sept. the plane headed westward again for the 2000 mile trek to Wake Island. Weather was "field grade"—ceiling and visibility unlimited.

Traffic at Wake was heavy—*Flying Tigers*, Navy Fleet Logistics, Marine and MATS transports waited in line for gas. The rusted hulk of a ship beached off the Coral island and the empty shells of two Japanese light tanks reminded one of the U. S. lives lost in a vain effort to retain this decaying Pacific outpost.

Several engine repairs had to be made. Complete engine checks were scheduled at Haneda Airport near Tokyo. The crew was anxious to get off Wake because of the rain and high humidity. Service on the field by civilians working for Pan American was fast

WARS CANNOT BE WON SITTING BEHIND FIXED LINES OF DEFENSE

and efficient.

The night flight to Haneda was made in instrument weather. The landing was made shortly after midnight. It was now early 12 September. The cargo picked up less than three days before was near where it could be used, available when needed.

Still loaded, 6522 joined a line of aircraft. Activity of other way stations was multiplied several times at Haneda. This was the end of the funnel which at the other end spread the length and breadth of the U. S. and on the way sprawled from the Aleutian chain south to the equator and finally spouted into several fields in the Tokyo area. Traffic was thick enough on the field to justify "ramp busses" which carried passengers and crews from incoming aircraft. Even though it was the middle of the night, the field had the appearance of an international air Grand Central Station. Uniforms of a dozen airlines and services of several nationalities crowded every section of the terminal. Billets for the night were in the station gymnasium.

The crewmen remained on the field, but the pilots bummed a ride downtown, counting on taking over the beds of friends at the Tokyo Electric Hotel.

TRAFFIC WAS THICK ENOUGH ON THE FIELD

They got them, about dawn, as flights began to leave early in the morning.

During the early phase of the Korean action, Air Force components uncovered a shortage of trained navigators. Inasmuch as all Naval Aviators are qualified navigators, a call went out to Navy MATS units for navigators. Sixteen pilots from VR-6 were transferred on temporary duty to the Pacific division of MATS. These were the "friends" whose beds were borrowed.

In return for their beds, these boys received some good news. MATS headquarters had just announced that all TAD people would be returned to their individual commands within 30 days. The information was received with *gusto*. Navy pilots navigating for Air Force Crews, regardless of the circumstances, didn't seem very fitting to the lads who had to go. It was a job which had to be done, but they were glad it was almost over.

TOKYO IS A BOOM TOWN. THE SIDEWALKS ARE CROWDED WITH PORTABLE SHOPS

The rest of the VR-6 contingent arrived during the night. Twenty tons of critical material had been delivered over 7000 miles in three days.

Tokyo is a boom town. The sidewalks are crowded with portable shops filled with good and bad silk, china and ivory gimmicks. It was full of combat-booted soldiers—Australian, British and American.

Lt. Tietjen, copilot, discovered on the 12th that the Haneda engineering gang was snowed under with work. He put on a pair of dungarees and gave the crew a hand on the turn-around maintenance of 6522.

As the early morning sun appeared on 13 Sept. all VR-6 crews were ready to go. No. 6522 got started first with a cargo for Guam. At Guam, it picked

THE PILOTS BUMMED A RIDE

up a new load for Fairfield Suisun.

Next stop was Kwajalein as dawn broke. After the crew had a shower and shave, the plane departed for Hickam, where another 24 hour rest was enjoyed. There was time for a visit to Waikiki beach where a tourist atmosphere ruled. Tanned swimmers rode surfboards, and there was a goodly sprinkling of pulchritude.

While the crew slept, a task force shelled Wolmi island and Inchon. Then waves of amphibious craft churned toward the shore. Twenty tons of supplies were aiding the operation.

On the 16th the plane was unloaded at Fairfield Suisun, and the crew took another rest.

After stops at Ogden and Tinker AFB, the plane pulled into Westover on 18 September, nine days after takeoff there.

On the other side of the world on the following day, the first plane of the airlift arrived at the recaptured Kimpo airfield near Seoul. A new aerial supply line was in business. On 24 September, assault troops were under heavy pressure around Seoul. Troop carrier aircraft began landing re-inforcements at Kimpo. Sometime between 19 and 24 September, the material that 6522 and VR-6 aircraft delivered to Haneda was enroute to Kimpo. What was carried was classified, but it can be said that it arrived at Kimpo shortly after the field was reopened. The VR-6 crews, reading the news, then knew what they had carried was really "critical."

Strategy, both on the ground and in the air, has undergone revisions in the Korean campaign. The foot soldier, Marine and Army, still did the fighting. Navy guns were not obsolete, and

AIR TRANSPORT HAS PROVED ITSELF

air tactical support proved its worth. No one member of the United Nations combat team could claim it alone was instrumental in turning the tide of battle.

Tonnage delivered by air was meager compared with surface transportation, but it filled in the vital items. The shaped charge for aircraft rockets was an example. They were developed by the Navy after the conflict began, and the first production articles were delivered to Air Force, Navy and Marine ground support squadrons by air. North Korean tanks suffered thereby, and the tide of battle was turned.

Air transportation has lived up to the expectations of United Nations leaders. A bunch of little guys fighting a war on a rocky peninsula for the United Nations have benefited from it.

For the people in the Military Transport business, Navy, Air Force, Marine and Army, air transport has proved itself capable of worthwhile achievement.

TYPHOONS CHASE TENDER

U.S.S. SALISBURY SOUND—Fighting a war in the western Pacific involves almost as much fast footwork to dodge typhoons as it does shooting at North Korean enemies. Take this seaplane tender's record for September, for instance.

Typhooning is the ancient Asiatic dance of "is yo is or is yo ain't going to evacuate?" A great deal of the month was spent hot-footing it around Japan and Okinawa, just two dance steps ahead of the typhoon sisters *Jane, Kozia* and *Ozzia.*

First word of typhoon trouble came on 3 September when seven *Mariners* and three RAF *Sutherlands* arrived in Buckner Bay to dodge a typhoon in Japan. By midnight the trouble had passed, and the planes were sent home next morning.

Kozia reared her ugly head on the 9th when the ship was in western Japan helping search, rescue and patrol in the Korean invasion of Inchon. Plans were made to evacuate 23 USN and RAF seaplanes and all flyable aircraft went to Okinawa.

When the planes got off, the *Salisbury Sound* and *Gardiners Bay* got underway for Kure to ride out the typhoon in that favorite haven of Jap battlewagons in World War II. Moored to an 18-ton buoy which was secured by three 8-ton anchors and steadied by a 15-ton mushroom, the tender could only yaw as the typhoon passed 90 miles away. Winds reached 55 knots in the bay.

The next day was spent clearing the seadrome of logs, drifting boats and debris so seaplanes could land. By dark all planes were back again without casualty.

A third typhoon, *Ozzia,* was sweeping up the China coast at month's end, and a squadron of PBM's was evacuated to safer quarters.

Smokeless JATO Produced

Lighter Bottles To Cut Plane Loads

A new JATO aircraft booster rocket, which uses smokeless powder and weighs considerably less than present models, has been developed for the Navy.

The Army and Air Force also contributed funds for development of the new JATO units, and all three services will use them. The rocket was developed by Allegany Ballistics Laboratory, Cumberland, Md., under BUORD contract.

Although it is lighter, the new unit turns out an amount of thrust equal to present bottles. Use of smokeless powder will be valuable aboard carriers where clouds of smoke given off by units may hamper operations. Smokeless powder has been used for some time as a propellant for artillery and naval guns.

FLYING WING *on each other are two of the Navy's newest antisubmarine aircraft, products of Grumman Aircraft Co., the AF-2S (left) and the AF-2W. The former carries a powerful searchlight under its left wing and an APS-30 radar under the right, while the "W" version packs a big radar guppy on its belly. Both planes have triple vertical stabilizers, the trade-mark of the antisub plane, for better flight characteristics. Powered by a P&W R-2800 engine, the AF has 10' more wingspan than an AD and weighs 5,000 lbs. more.*

15 Exchange Pilots Selected

Navy Fliers to Join Air Force Jetters

Fifteen naval aviators, the second quota of men selected for a year's duty with Air Force jet squadrons, began their new duties on 1 October, replacing 15 who had completed their "exchange duty." An additional 10 men will be replaced in February.

Navy pilots who "joined" the Air Force in October were:

LCdr. P. E. Pugh, VX-3, to Langley AFB.

Lt. (jg) J. A. Marsh, NAAS WHITING, to Williams AFB.

Lt. G. Boice, VF-21, to Hamilton AFB.

Lt. H. S. Pachard, NAS PATUXENT, to Selfridge AFB.

Lt. (jg) G. N. Veling, NAAS WHITING, to Selfridge AFB.

Lt. J. W. Ellis, Jr., NAS PATUXENT, to Langley AFB.

Lt. S. Evans, Jr., NAS PATUXENT, to Langley AFB.

Lt. (jg) F. M. Lavelle, VP-49, to Hamilton AFB.

LCdr. H. P. Wirth, VP-34, to McDill AFB.

Lt. J. E. Davis, NAS CORPUS CHRISTI, to Las Vegas AFB.

Lt. (jg) T. P. Morgan, NAS CORPUS CHRISTI, to Vance AFB.

Lt. G. H. Seaman, NAS CORPUS CHRISTI, to Lubbock AFB.

Lt. (jg) P. E. Cunningham, NAAS CORRY, to Randolph AFB.

Capt. J. O. Lynch, USMC, VMF-224, to Hamilton AFB.

Capt. E. P. Holt, VMF-115, to Hamilton AFB.

• NAS EL CENTRO—Usually September is a cool month, but on 1 September this station had a temperature of 123½° recorded. Nearby Yuma had 123, highest in 59 years of weather records, enough to fry eggs.

SCENE OF THE MAIDEN EFFORT OF THE AJ-1'S OF COMPOSITE SQUADRON FIVE ABOARD AN AIRCRAFT CARRIER WAS THE USS CORAL SEA

AJ'S LAND ABOARD CARRIER

Successful trial landings have been completed by the Navy's biggest plane designed for carrier landings, the North American AJ-1.

Scene of the hook arrested landings was the battle carrier *Coral Sea* operating off the Virginia capes. Landings were made in the unloaded condition, approximately 34,000 pounds. Gross weight of the plane is approximately 50,000 pounds.

Planes engaging in the trials were those of Composite Squadron Five, based at NAS, Norfolk. Each plane made at least one landing.

Passenger in one plane for a landing was Assistant Secretary of the Navy for Air, John F. Floberg.

The AJ-1 is designed to operate as a high speed attack plane. It has a top speed of approximately 500 mph and carries a crew of three in a pressurized cockpit.

Unique in the design is the power plant. It includes two Pratt & Whitney R-2800 reciprocating engines in wing nacelles and an Allison J-33 turbojet mounted in the after section of the fuselage, venting out the tail. Each piston engine developes 2300 hp and the jet adds 4,000 pounds of thrust.

The plane has tricycle landing gear and has a wing span of 71 feet. It can carry up to 10,000 pounds of bombs and torpedoes. Outer wing panels fold inboard for carrier stowage and the vertical tail folds onto the right horizontal stabilizer surface for clearance overhead on board aircraft carriers.

Plane Recco Manual Grows

Supplement Published, Ship Book Out

A supplement to the *Aircraft Recognition Manual* issued last winter jointly by the Navy, Army and Air Force has just come off the press and is available through distribution centers.

Included in the 90-page supplement are a number of new operational and experimental aircraft of United States, England and Russia, plus some new insignia in color. The supplement, to be issued annually, can be inserted in the Manual, which carries an OPNAV 32P-1200 order number.

Also just off the press is another recognition publication, the *Ship Recognition Manual*, ON1-200. This counterpart of the aircraft manual contains information and photographs of all the major fleets of the world.

TAIL HOOK OF NORTH AMERICAN AJ-1 ENGAGES AS HUGE PLANE MAKES 1ST CARRIER LANDING

Pinwheels Fly Hands Off

First Successful Autopilots Developed

"Hands Off" flight in helicopters, an elusive accomplishment for some time, has been achieved.

Both the single rotor Sikorsky HO3S-1 and the Piasecki tandem rotor XHJP-1 helicopters have been flown under automatic pilot control throughout their speed ranges.

Under manual control, flying a pinwheel is like balancing on top of a ball. With a new autopilot developed by the Aeronautical Instruments Laboratory of the Naval Air Material Center, Philadelphia, the pilot can sit back and relax.

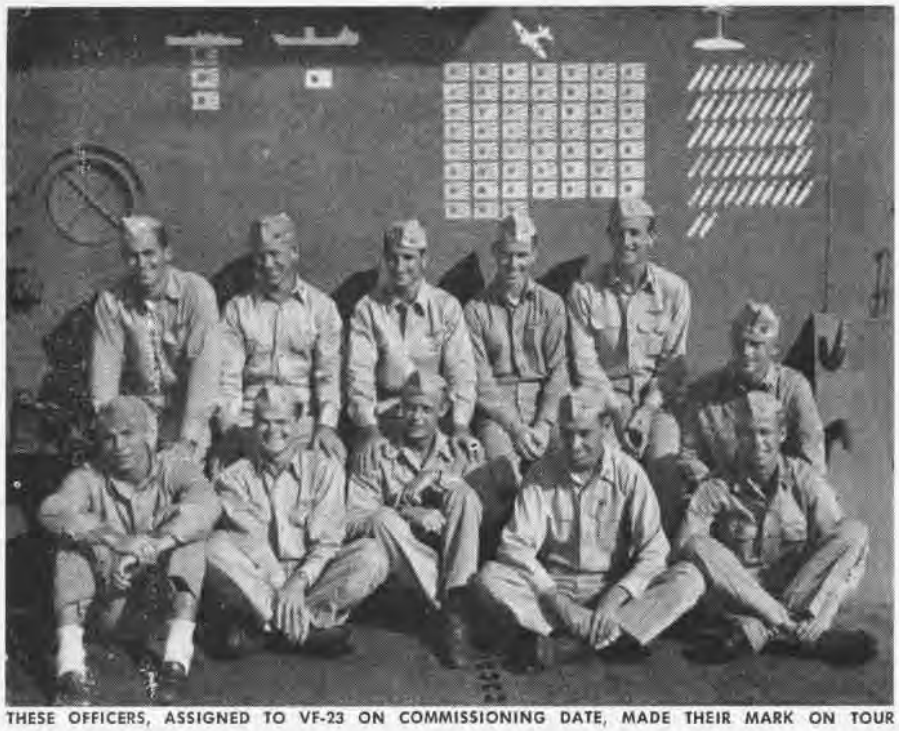
First flights were made in the HO3S-1

GEO. KENNISON, ADC, FLIES HO3S-1 NO HANDS

at Philadelphia. This installation was the autopilot developed by the Aeronautical Instrument Laboratory.

The installation in the XHJP-1 was made by the Sperry company. Satisfactory control was attained.

Because of their lack of inherent stability, it has not been safe to operate helicopters at night or in fog. The availability of automatic flight control equipment, however, greatly increases their utility by permitting instrument flight and relieving pilots of fatiguing chores.



THESE OFFICERS, ASSIGNED TO VF-23 ON COMMISSIONING DATE, MADE THEIR MARK ON TOUR

LT. (JG) BRYNESTAD MADE SPECTACULAR KILL

FIGHTING 23 SCRAPPERS

WHEN FIGHTING SQUADRON 23 was commissioned 16 November 1942 at Naval Reserve Air Station, Willow Grove, rigorous training lay ahead of its pilots who were to make their first contact with the enemy a little less than ten months later. Commanded by LCdr. Henry L. Miller, USN, throughout the first 18 months of its existence, VF-23 became an outstanding squadron.

On 25 August 1943, aboard the *Princeton*, the squadron headed for Baker Island 1,235 miles southwest of Pearl Harbor, to provide CAP until the Army could construct an airfield.

The first contact with the enemy occurred 1 September when Lt. (jg) R. L. Loesch and Ens. A. W. Nyquist took an *Emily* by surprise, shooting it down in ten seconds flat. Two days later, Lt. (jg) T. T. Coleman and Ens. E. J. Phillipe downed another *Emily*.

The Japanese evidently didn't get the word that Baker Island was no place for its big bombers, for on 8 September another *Emily* was spotted by Lt. H. N. Funk and Lt. (jg) L. H. Kerr. Bracketed by fire at a 400-500 yard range, the *Emily* blazed and plunged to the water.

Still aboard the *Princeton* as part of Task Force 15 composed of the USS *Belleau Wood* and the USS *Lexington*, the squadron participated in a one-day attack on Tarawa and Makin the 18th of September. In company with two TBF's from VC-23, Lt. H. W. Crews and Ens. L. W. Godson successfully strafed and set afire three *Emily* float planes moored in the lagoon at Makin and made eight runs over the target area.

Ten other planes of VF-23 escorted five VC-23 torpedo planes and seven VT from the *Belleau Wood* for an attack on Bititu Island, Tarawa Atoll. After flying 92 miles, the planes arrived over the target 35 minutes before sunrise. In the face of AA fire, the flight strafed the assigned targets—AA positions and parked aircraft—and started fires in the barracks area. In action lasting 25 minutes, eight medium bombers and one PT boat were left burning, and many AA emplacements were silenced.

On the same day, at 1413, Lt. (jg) Haynes four-plane CAP intercepted a *Betty* and sent her down in flames. While all four planes participated in the attack, the downed aircraft was officially credited to Lts. (jg) J. W. Syme and J. D. Madison. When the Force headed back for Pearl Harbor, the squadron could boast of having shot down every enemy plane met in combat.

From November 1 to 3, Task Force 15 was occupied with the task of making sure, to paraphrase Admiral Halsey, that Buka no longer contributed to the Japanese war effort.

On 5 November, VF-23 was part of the force that made the first air attack on Rabaul. LCdr. Miller led the squadron, nineteen pilots in all taking off at 0900. As our fighters approached, the harbor was protected with an umbrella of terrific AA fire, worse than any these pilots had ever seen. Thirty to 35 Jap fighters engaged the air group, but not for long! Soon they plunged down.

THEN AT 1250, as the first planes returned to the Task Force, the men on the *Princeton* anxiously counted them. Three VF-23 pilots did not return, but the rest came back to describe the inferno that was Rabaul by the time they left. VF-23 was credited with ten Jap fighters destroyed, two probables, as well as damage to eight other planes.

One of the outstanding feats of the attack on Rabaul was accomplished by Lt. (jg) S. K. Crockett. That Crockett who had been assigned the job of protecting the Air Group Commander of the *Saratoga* ever got back was one of the miracles of the battle. During the attack, Crockett and the Commander were jumped by three Jap planes, and then underwent a series of assaults before they could get away. Crockett's plane was riddled with bullet holes; in all, 268 enemy bullets ripped through his plane, 54 in the cockpit alone. Wounded badly as he was, Crockett remained with the Commander and finally made it back to the carrier.

On 11 November, the squadron made another attack on Rabaul. The planes

took off at 0545, executed the attack perfectly and returned at 1045 with all divisions intact.

A few days out at Espiritu were in order, and then Task Force 15 shoved off to attack Nauru. On the 18th, Air Groups 12 and 23 launched three strikes against the airfield and ground installations. After covering the bombers on their drops, the divisions spent 15 minutes strafing gun positions.

Ens. L. F. McWilliams was believed lost after seven Zeros jumped his outfit. But later he was picked up, covered with oil from head to feet, the result of a 7.7 mm. hit in the oil tank. But McWilliams did not mind the oil or the dunking, because he had bagged his first *Zeke* over the target area.

NOVEMBER 24 to 28, the Task Force gave air coverage to Tarawa. Then the *Princeton* headed for Hawaii and the squadron remained there until 19 January 1944.

Two days ahead of the scheduled D-Day landings on Kwajalein and Majuro, VF-23, again from the deck of the *Princeton*, launched four effective strikes against Wotje island and engaged in four combat air patrols. The squadron attacked battered Wotje the next day and hit Taroa and Maleolap islands as well. On D-Day as our forces landed at Kwajalein and Majuro, the squadron continued its attack on Wotje.

February 3-6 VF-23 devoted itself to a systematic destruction of Engebi Island in Eniwetok Atoll. And *systematic* was the word for it! There were no enemy planes airborne, for the airfield had been completely put out of action. The first phase of the Battle for the Marshalls was successfully concluded. From February 16 to 29th, VF-23 supported the landing operation on Eniwetok with a heavy schedule of attacks and patrol.

On the night of 29 March, the *Princeton* was attacked by Jap torpedo planes. With the tracers providing a brilliant pyrotechnic display, one *Betty* exploded right off the starboard quarter, and another Jap was downed by the *Princeton's* gunners off the stern. One audacious Jap strafed the flight deck, causing spectators to hit the deck and stay put.

VF-23 DOWNED FIRST EMILY OFF BAKER ISLAND

VF-23 ESCORTED RAID WHICH CAUSED JAP SHIPS TO MANEUVER HASTILY IN RABAUL HARBOR

Early the next day, VF-23 led off with a 12-plane fighter sweep (part of 60 VF's from Task Force 58) to knock out airborne planes over the Palau Islands and hit shipping if possible. Immediately upon arrival, LCdr. Miller and Ens. McWilliams knocked down two *Zekes* attempting interception. With this as an opener, the twelve went on to destroy four *Zekes*, one *Betty*, one transport and riddle 10 other grounded aircraft.

On the 31st, the fireworks began early as the same three divisions launched a fighter sweep over Palau. Lt. (jg) Syme shot down a *Betty* enroute to the target with one beautifully executed run. While the divisions were preparing to make strafing runs on Peleliu airfield, 30 to 40 *Zekes* were sighted, and all hands, save two pilots who had to return to the carrier because of engine trouble, turned to engage the enemy. In the one-hour dog fight, 12 *Zekes* and one *Betty* were shot down.

During April, VF-23 made raids preparatory to the landings on Hollandia, knocking out enemy opposition to the landing forces. On the 27th, VF-23 participated in a two-day pounding of Truk. The Task Group went to Majuro on 1 May, the *Princeton* sailing on to Pearl, and the first cruise was over.

Nine months later, CAG-23 returned to the Pacific Theater under the command of LCdr. Donald F. White.

Aboard the *Langley* on 6 February, as a part of Admiral Mitscher's Task Force 58, Air Group 23 set out from Ulithi headed for Tokyo and three months of dramatic action in the great battering offensive of Japan itself.

During the Tokyo operation which occupied the greater part of February, VAdm. Mitscher's box score was as follows: 5,265 carrier sorties which destroyed 728 Jap planes with an American loss of 75 planes; eight enemy warships, 20 coastal vessels, one tug, six luggers and many small craft sunk.

Throughout March, VF-23 aboard the *Langley*, part of Task Group 58.4, engaged in the Kyushu and Nansei Shoto operations. On the 29th, the squadron experienced the most rugged day of combat in its battle-studded history. An eight-plane strike group led by LCdr. Merlin Paddock and accompanied by eight VT-23 planes searched for the Japanese fleet along the west shore of Kyushu. Not finding the fleet after going almost to Nagasaki, they turned to southern Kyushu to attack airfields and installations.

THE SAME day Lt. H. L. Grimmell's division struck Kanoya airfield, damaging the installations with rockets and bombs.

At 1400, Lt. (jg) Charles E. Weickhardt and Ens. Don Henkel were shot down by guns of Task Group 58.4 when they followed a *Judy* into the zone of AA fire. They had flamed the would-be *kamikaze* which threatened the *Yorktown*.

Throughout April, opening with Okinawa D-Day, and well into May, VF-23 with its Air Group was in the thick of the struggle to secure the new base. Highlight of the month was the engagement 7 April with major units of the Japanese fleet off southwestern Kyushu. Air Group 23 was credited with sinking the light cruiser, *Agano*, and damaging two enemy destroyers.

With the ship scheduled to return to Ulithi a day later, VF-23 on 11 April climaxed a successful cruise by destroying five enemy planes and damaging one in a single CAP period over the Task Force. Lt. (jg) A. H. Brynestad's kill was a spectacular one. After being set afire, the *Zeke* pilot attempted to suicide destroyer pickets at the screen. Brynestad followed his victim through intense AA sent up by the DD's and forced the Jap into the deep.

The next day VF-23 pilots headed out of the battle area, and shortly thereafter they were sailing toward the Golden Gate. Victory and home were in sight!

LSO 'TALKS DOWN' ENS. ED JACKSON IN PANTHER; ENS. CROW WATCHES

FLIGHT SURGEON AND CREW LIFT ENS. JACKSON FROM DAMAGED PLANE

JET LANDS ABOARD BLIND

THIS IS the story of the first "blind" jet carrier landing, the breath-taking experience of a Navy pilot wounded on a combat mission.

Blinded by blood, Ens. Edward D. Jackson was "talked" 120 miles to his carrier by his wingman and then "talked" to a landing by the Landing Signal Officer.

It all started when Ens. Jackson in his F9F-2B *Panther* of Fighter Squadron 112 accompanied by his wingman Ens. Dayl E. Crow were out on a fighter sweep. Locale was the Han river just below Seoul, Korea.

Zipping along at 350 knots at 100 feet, Jackson hit a cable strung across the river. The impact smashed the bullet-proof glass and the canopy, and knocked Jackson unconscious for about 20 seconds.

When he came to, he found the plane in a steep climbing turn. Facial lacerations poured blood down into his eyes, impairing his vision almost 100 percent. Unable to keep his eyes clear, he notified Crow by radio of his condition and requested attitude and directional instructions by radio.

He reduced his speed to 240 knots to lessen the terrific wind force in the cockpit and headed back toward home base, the USS *Philippine Sea,* 120 miles away. During the next 30 minutes, the radio channel was filled with "left wing up," "left rudder," and "nose down."

As soon as Ens. Crow directed Ens. Jackson into position on the downwind leg with hook, flaps and wheels down, Lt. (jg) L. K. Bruestle, Air Group 11 Landing Signal Officer, dropped his paddles and picked up the hook spotter's microphone which is tied in with the VHF radio.

Talking at twice the rate of a Carrier Controlled Approach director (seagoing GCA), Jackson was talked to the ramp and given the "cut." The plane landed to right of center and engaged the number 5 wire. The flight surgeon jumped up to the cockpit immediately and stopped the flow of blood. Then for the first time Jackson saw the flight deck.

Seven days later Ens. Jackson was launched for a test flight in his repaired plane, a tribute both to his rapid recovery and the performance of the maintenance crew.

• NAS PENSACOLA—Since taking photographs through submarine periscopes is common practice, photographers mates at the school here are checked out in a dummy sub conning tower on how to take pictures through them.

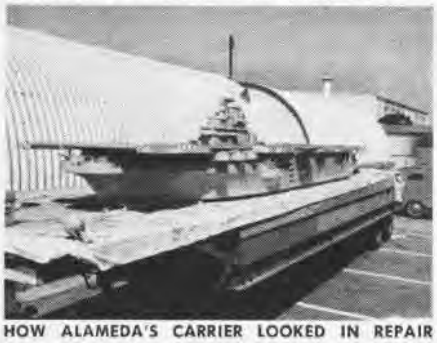
SHIPPING HIGH *priority materials to the Far East is a job for the Marines. But how did Lon Dean, Los Angeles cutie, get on T/Sgt. Clifford Williams' fork lift load of cargo? Marines in Korea are reported to be meeting all planes to see if she's aboard.*

Tiny Carrier Gets Overhaul

Alameda Repairs Float At a Low Cost

NAS ALAMEDA — It costs about $100,000 to take a single carrier out of mothballs, excluding costs of drydocking, alterations, repairs, replacements and shakedowns.

Those excluded costs were handled in miniature at this station for under $100. Project was the overhaul of the U.S.S. *Boxer* float which is used in many parades and exhibitions in the Bay area of northern California. The float, which is



HOW ALAMEDA'S CARRIER LOOKED IN REPAIR

in almost continuous use, was badly in need of overhaul and brightwork treatment; the sea on which it sails was beginning to look more like a stagnant pond and the canvas skirting had a shirred finish.

Hobby Shop personnel were put in charge of the project and 12 men put in about 500 man-hours. Under their skilled hands, 180 yards of canvas was replaced, 200 pounds of plaster of paris and waste were molded into another ocean, holes were drilled in the 5" guns on the hangar deck for future smoke installations and the whole "show boat" hosed down and repainted.

Californians at the Sacramento State Fair, the Centennial Parade in San Francisco, and county fairs at Solano and Santa Clara have seen or soon will see the taut ship on display as a symbol of the fighting trim of their Navy.

'THE WORD' ON THE SNJ

THE FRENCH CALL THIS A 'CHEVAL DE BOIS,' BUT IT'S JUST A GROUNDLOOP TO DILBERT

THE EXACT date of the first groundloop is lost somewhere in the annals of aviation, but it is a safe bet that it occurred not long after the Wright brothers made their first flight.

Back in 1914 a French aviator watching a fellow pilot perform this unhappy maneuver shouted, "Regardez! Il fait cheval-de-bois!" which was a sort of shortened down way of saying, "Look! He rides the Merry-Go-Round!" The expression stuck and to this day the fledgling flier in France is warned against making a wooden horse of his airplane.

If all the airplanes that have been groundlooped in the intervening years were laid end to end (which is sometimes necessary), it is estimated that they would stretch all the way from Washington to Chicago with a few left over at the western end. Mixed among them would be 7,459 Navy planes that have met this sad fate just during the past 10 years.

The invention of the tricycle landing gear dealt the groundloop a staggering blow. For awhile it looked as though it might be relegated to the role of an interesting historical accident type similar to boiler explosions in early model steam cars.

But, alas, in the Navy the groundloop didn't die as quickly as had been anticipated. One reason for this was the fact that the airplane used most widely in the Navy for training and proficiency flying didn't happen to be designed with a tricycle landing gear. Navy pilots log more than 500,000 hours of flight time in the SNJ every year.

In fiscal 1949 there were 226 groundloops in the SNJ, or approximately four accidents of this type for every 10,000 SNJ hours flown. At long last the decision was made to do something about these costly accidents.

Midway during this fiscal year, SNJ Service Change No. 29 was issued in order to provide a means of locking the tail wheel castor on this aircraft. The change was to be incorporated at the next overhaul for each plane. By the end of 1949, more than 30% of the SNJ's in service were equipped with lockable tail wheels. At the present time Change No. 29 has been incorporated in 60% of all the SNJ's.

The reduction in the groundloop rate for SNJ's has been little short of phenomenal. In fiscal 1950 Navy pilots logged 640,193 hours in the SNJ with only 88 groundloops, or a rate of 1.37 groundloops per 10,000 hours. Of these, only 13 occurred in planes with the lockable tail wheel.

However, 88 groundloops is still too many. Let's take a look at the causes of these accidents and see if we can't manage to reduce the total number of groundloops even further in Fiscal 1951.

The SNJ has certain characteristics which make it somewhat more likely to groundloop than other conventional single engine planes. It has a fairly high center of gravity compared to the distance between the wheels. This condition is conducive to lateral instability in ground turns. Furthermore this condition is intensified by a low oleo strut. Worn or maladjusted oleo struts often cause one strut to stick down upon ground contact.

The SNJ in common with most other planes has a marked tendency to weather vane into the wind after a crosswind landing. If a landing approach is made at too fast a speed, particularly with full flaps, the ground effect during the flare-out causes a noticeable tendency to balloon.

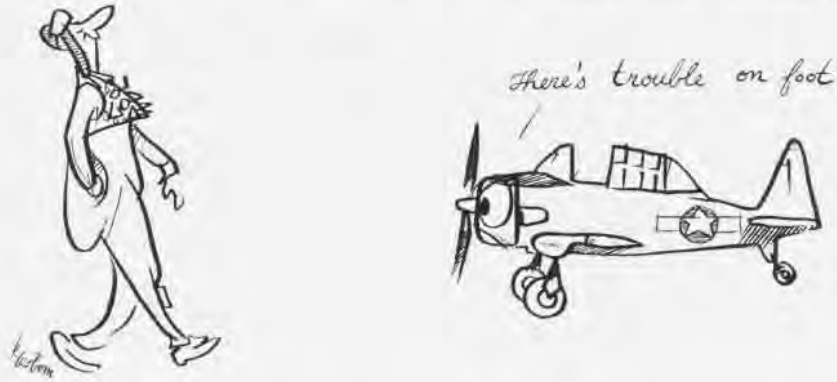
However, there are plenty of instructors in the training command who have proved that the SNJ is not a difficult plane to land if you have THE WORD.

IN THE past year, 112 Basic Training Command flight instructors have received letters of commendation for flying over 1000 consecutive accident free hours of student instruction. Most of their time was acquired with the student pilots in the front seat and the instructors in the rear seat, and the SNJ certainly would not win any prizes for rear seat visibility.

However, since the advent of the SNJ as a primary trainer as well as a basic trainer there has been a steady decline in the accident rate. The windy days when all hands would congregate at vantage points to watch the *Yellow Perils* merrily spinning around on the landing mat are definitely gone.

Several years ago 50 N2S's out of a flight of about 75 groundlooped on landing in about the same number of minutes. Now the entire basic training command does not have fifty groundloops a year.

For example, Basic Training Unit



DILBERT DOESN'T ASK FOR AN SNJ CHECK-OUT BECAUSE OF ALL HIS TIME IN P-BOATS

SNJ ACES—*These eight pilots have a total of 11,571 accident free hours as instructors in SNJ's; Left to right, rear, Lt. D. M. Hanson, Lt. (jg) L. T. McAdams, Lt. D. W. Horne, Lts. (jg) C. L. Hodge, H. G. Lee; front, D. R. Barr, B. A. Cook, L. B. Ware.*

One, the primary training unit of the command, flew the entire month of August (8,276 hours) without an accident of any kind. In the first eight months of 1950, the three Basic Training Units flew approximately 200,000 hours with an all accident rate of approximately 4 per 10,000 hours.

Rugged Instructors' Course

One reason for the declining accident rate in SNJ's in the Training Command is the work of the Instructors Basic Training Unit. This unit takes all newly reporting instructor officers and retrains them in flying the SNJ. No pilot, regardless of his experience, can complete the rugged course given by this unit without having his SNJ flying technique radically changed for the better. The unit not only trains but standardizes both flight technique and teaching methods. Incidentally, in 1949 and early 1950 the unit flew 10 consecutive months, logging 18,445 hours, without a single accident of any sort.

Training methods and operational procedures are constantly being evaluated. Just because a particular method was used last year is no reason for it to continue in the program if a better method of instruction can be developed. Changes are made as recommended by committees made up of the most experienced instructors in the command and approved by the Aviation Safety Council.

A study of last year's landing accidents in the SNJ indicates that a great many of them occurred as a result of an inadequate check-out for pilots whose regular flight duties are performed in some other type of plane. A great many of the accident cards in the SNJ file show pilots with hundreds and even thousands of hours of flight time in other types, but only two or three hours of recent experience in the SNJ at the time the groundloop occurred.

At too many stations, the SNJ check-out for a pilot who has spent the last couple of years in a multi-engine squadron consists in having any available pilot take him out for an hour's familiarization flight in which three landings are made directly into the wind. The SNJ is then taxied back to the operations building and the so-called instructor hops out, tells the chap in the front seat, "Heck, you can fly it better than I can! Go on out by yourself."

Encouraged by these friendly words, the Patrol Plane Commander breezes out for his solo flight. An hour or so later he returns to the field and calls for landing instructions. The tower operator clears him to land on a runway that doesn't have quite as good an approach as the one that was in use earlier. He also warns him that the wind is variable with gusts to 20 knots. A few minutes later the pilot of the SNJ is eligible for the "Royal Order of the Cheval de Bois". Meanwhile the Jay is being carried away to the O&R where it will acquire a new prop and wing and perhaps an engine overhaul.

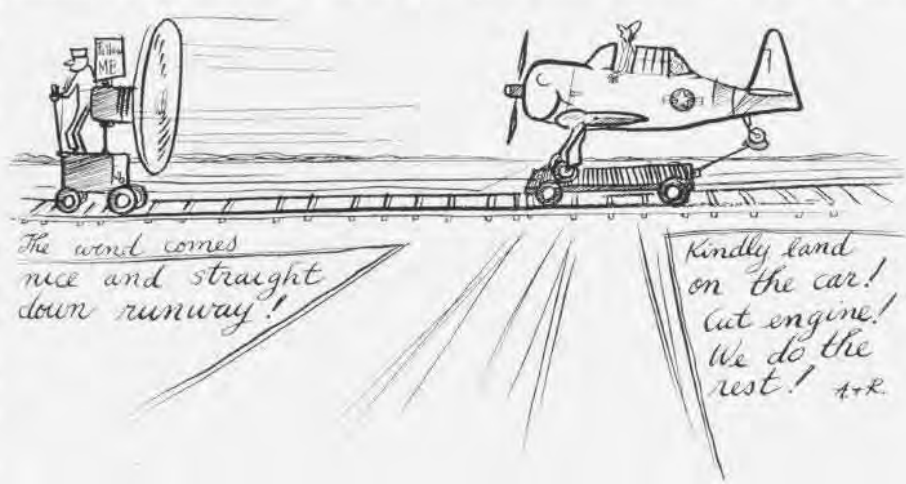
How Not to Land an SNJ

There are lots of ways not to land an SNJ, but the following description of an actual accident illustrates several of the more common errors:

"Lieut. ———— entered the traffic pattern on a routine proficiency flight for the purpose of practicing landings. He had completed one landing and decided to make the second one a 'transport type.' He allowed the aircraft to get a little slow in the groove which necessitated adding quite a bit of throttle. The SNJ hit the runway on the front wheels and bounced about eight feet in the air. The left wing went down during this bounce and the pilot applied full throttle in an effort to go around again.

"The nose of the SNJ came up and the left wing continued down until it struck the runway. The left wing dragged on the runway at the outboard aileron hinge for a distance of about 10 feet, grinding the hinge off and breaking the aileron in half, allowing it to swing free.

"With full power on, the elevator trim tab in the full back position, the plane became airborne again in an acure



THEY FINALLY FIGURED OUT A WAY TO KEEP DILBERT GOING STRAIGHT DOWN THE RUNWAY

nose high stall with the left wing down at a 40° angle. The SNJ continued the roll to port until the wing was at about a 60° angle at which time the nose either dropped or was pushed over by the pilot, and the plane struck the ground in a nose low skidding position. Power does not appear to have been reduced appreciably until after full contact with the ground as evidenced by the deep propeller gouges and the curled condition of the prop. The SNJ came to rest 100 feet to the left of the runway after turning about 150°."

In the opinion of the Accident Board, this crash was caused first by an unsatisfactory approach which resulted in the bounce, and secondly by the failure of the pilot to adjust his elevator trim tab before applying full power after the bounce.

How to Land an SNJ

Here's "THE WORD" on how to land an SNJ. Not right out of the horse's mouth, but from the instructor pilots pictured on this page who have made thousands of landings without even scratching a wing tip. First, let's try a normal landing into the wind:

1. Before entering the traffic pattern complete these steps on your check-off list:

a. Mixture rich
b. Gas on best tank
c. Carburetor heat cold
d. Tail wheel locked
e. Shoulder harness locked

2. Enter the traffic pattern at the prescribed local altitude at an airspeed of 120 knots. Before entering the downwind leg, retard throttle and listen for the landing gear warning horn to blow. When the horn is blowing, press the power push and lower landing gear lever. Listen for horn to cease blowing before adding power. Continue approach at 95 knots until abeam of the intended landing spot. Press power push and lower full flaps. Retard throttle to 17 inches. Place prop in low pitch.

DILBERT TRIES TRANSPORT LANDING IN SNJ

3. Start turn towards the landing line, trimming the plane for a power glide attitude which will produce an airspeed of 80 knots. Start reducing power gradually so that the plane will intersect the landing line at an altitude of about 150 feet with 800 feet of straightway remaining to the point of intended landing.

4. At an altitude of about 30 feet, start raising the nose of the airplane slowly and smoothly. Ease the throttle off as you add back pressure to the stick. Continue this process until the airplane is in a three-point attitude about one or two feet off the ground. Your aim now is to maintain the airplane in this attitude until the wheels touch. Think of the process as trying to keep the plane in the air as long as possible. As the stick comes all the way back, close the throttle completely. If you have done everything right, all three wheels will touch the runway at exactly the same time.

5. During the landing roll out, hold the stick back. Be quick to notice any tendency of the plane to swerve in either direction and correct quickly with rudder and brakes. REMEMBER THE LANDING IS NEVER COMPLETE UNTIL THE AIRPLANE HAS ROLLED TO A STOP.

Cross Wind Landings

Hundreds of pages have been written and millions of words spoken on the subject of cross-wind landings in airplanes with conventional landing gear. For years one of the favorite arguments among instructors in Primary and Basic training was over the relative merits of the "crab" versus the "slip" approach to a crosswind landing.

Experience in the Training Command has shown that the most satisfactory method for correcting for drift in a crosswind landing approach is to lower the into-the-wind wing just enough to keep the plane on a heading parallel to the runway. This will require a little compensating opposite rudder. The stronger the cross wind, the further the wing must be lowered.

This results in a slip and this attitude is maintained throughout the approach, the flare-out, and the landing itself. In a good cross-wind landing the touchdown will be made with the into-the-wind wing slightly low. This will result in the up-wind wheel touching the ground slightly before the down-wind wheel. After the aircraft has been landed, the stick should be held well back to apply pressure on the tail wheel and thus benefit from the directional control afforded by the locked tail wheel.

If your senses tell you that there is a strong side pressure on the tires as a result of trying to keep the plane going straight down the runway, relieve this condition by using rudder and brake to turn the plane slightly further downwind. This is called "arcing downwind," and the Training Command has a 19-page book explaining why it works. If you haven't read the book, just take their word for it. It works like a charm in eliminating the forces that cause groundloops.

AN INSTRUCTOR *under training gets word on the correct landing technique in the SNJ.*

AFTER THE *flight Lt. (jg) D. W. Whitney "debriefs" LCdr. W. J. Ruefle; LCdr. Ruefle is an instructor under training; Rolled sleeves are O.K. on the ground, prohibited in the air.*

PILOT MCDONALD, RYAN, REEDY FLEW GUPPY SKYRAIDER TO RESCUE TBM LOST OVER ATLANTIC

'GUPPY' SAVES THREE MEN

VC-12, QUONSET POINT—A daring night chase by radar to intercept a lost TBM over the Atlantic Ocean brought letters of commendation for three members of an AD-3W crew here.

On the night of July 21, LCdr. Maxwell D. McDonald, pilot, and his crew D. L. Ryan, AT3, and C. E. Reedy, ATAN, rescued three members of the lost TBM-3S while participating in ASW exercises.

Operating off the CVL *Saipan*, the guppy *Skyraider* was on a night antisubmarine flight with four other planes of Task Group 40.7 when the TBM developed a complete electrical failure. Without radio or lights, the TBM flew in a direction away from the task group and became lost.

LCdr. McDonald overheard the unanswered calls to the lost plane by the carrier and immediately began a radar search of the operating area with his crew. Ryan and Reedy sighted the straying plane on their radar scope and tracked the plane for their pilot.

Despite the prospect of exhausting his limited supply of gasoline, McDonald pursued the lost TBM, overhauled it after an 80-mile chase, and then by signaling with his lights led the lost aircraft through bad weather to the carrier and a safe landing.

In his letter of commendation, RAdm. D. V. Gallery praised the men for their initiative, coolness under pressure and in the face of bad weather, for contributing materially to the rescue the three men in the lost TBM-3S. Everyone agreed that McDonald and his crew with their Guppy were nice people to have around when such situations crop up.

Officers and men of VC-12, the "Eyes of the Fleet," operate from all types of carriers during night and day, good weather or bad, and in areas extending from the Arctic Circle to the Equator and as far east as the Suez Canal and the Korean Gulf.

Pine Island Rejoins Fleet

Capt. Simpler Skipper of New Tender

NAS ALAMEDA—Another seaplane tender joined the active fleet on 7 October when the U. S. S. *Pine Island*, flagship of the eastern task group in *Operation High Jump* at the South Pole, was reactivated.

In mothballs only five months, the

BENDETSEN, ARMY LEADER, STEPS OUT OF TO-2

Pine Island is commanded by Capt. Leroy C. Simpler, former skipper of VF-5 and later exec and air officer of the CV *Randolph*. Most of the officers and men on the *Pine Island* reported for duty directly from civilian life. They are members of the Reserves who left machine shops, offices and farms to step into shipboard positions. Most of them are family men.

Principal speaker at the recommissioning was Karl R. Bendetsen, Assistant Secretary of the Army, who flew up from Burbank in a TO-2 piloted by Cdr. R. C. Merrick to attend the ship's exercises.

THESE COULD *be rocket launchers in the nose of this Air Force B-26 plane, but actually they are flash-hiders for the .50 cal machine guns which stud the nose of this heavy-hitting night intruder plane in Korea.*

'HERE WE ARE AGAIN'—*Among the Waves who answered the Navy's call for Reserves to return to active duty were Dorthia Randolph AE1c and Margaret E. Mattson Y2c*

ENS. EARL L. CARTER *climbs into his Corsair at NAAS Cabaniss Field, after completing advanced flight training there. Carter is the first negro student to complete the advanced training for carrier pilots at that field since it was reactivated 15 November 1948. After finishing carrier qualifications at Pensacola, he will be a full-fledged Navy pilot, one of the few of his race.*

New Air Reserve Recall Policy

NOW, FOR the first time since the Korean crisis arose, Naval and Marine Air Reservists are able to chart their course for the future with reasonable accuracy.

Navigation aid in this case is the new policy which Secretary of Defense Marshall set up concerning their recall to active duty. Under this policy a Reservist is to be notified of possible recall at least four months in advance and he is to have at least 30 days between the time he is called and the date he must report for active duty—military requirements permitting.

A Naval Reservist, hereafter called to active duty, therefore, will be allowed the maximum time possible, in no case less than 30 days, between the date designated for physical examination and the date on which he is to report for active duty. While the four-months notification cannot be given to Reservists now under orders or in quotas already assigned, in so far as is practicable, personnel in the quota for the last quarter of fiscal 1951 and thereafter should receive the four months notice.

All Marine officer and enlisted Air Reservists to be called to active duty by 30 June 1951 will have been individually notified by the first of December. Those called after that date will receive the at-least-four-months-advance-notification. Under existing conditions, no more Marine Organized squadrons are expected to be alerted.

The Navy has also announced that Naval Air Reservists, who transfer to or enlist in the Organized Reserve after 15 October will be subject to recall only to the same degree as members of the Volunteer Reserve possessing similar qualifications and will not be liable to the same priority of recall as that in effect for prior members of the Organized Reserve.

REPORTING FOR ACTIVE DUTY—*Air Reservists in FASRon-915, formerly at* NAS SQUANTUM, *are greeted by RAdm. Richard F. Whitehead, Commander Fleet Air Wings, Atlantic Fleet.*

Applications are no longer desired from Naval Reserve aviators, and the need for aviation ground officer specialists has been filled for the immediate future. Priority on future recalls, as far as naval aviators are concerned, will go respectively to: *1.* those released from active duty in the last 18 months, *2.* those currently assigned to Organized Aviation Reserve units who have been so assigned for more than six months immediately preceding recall, *3.* those who possess special qualifications.

The overall recall policy was set up to establish uniform and orderly mobilization and to give both Reservists and their employers definite data as to the probability of call as well as time to make adjustments.

Because of the general uncertainty that prevailed previously, many Reservists were finding employers reluctant either to hire them for new jobs or to advance them to positions of greater responsibility. So widespread was the situation and so serious a threat was it to the whole Reserve program that the

'AND THERE WE WERE'—*Capt. Sartoris, Capt. Priestman and Cdr. Browning recall their early flights at* NRAB VALLEY STREAM, L. I.

'JUST LIKE OLD TIMES'—*say ex-Minneapolis Reserves Tompson, Wiederholt, Rosenquist, Binek, Bathen, Rogers now at Whidbey.*

LEARN BY DOING—*VP-812's Lownau, Brillow, Possis, Steinmetz check wheel section.*

DURING CRUISE AT EL CENTRO—*Denver pilots Walker, Boulware talk with Chief Davis.*

UP AT NAS SEATTLE—*VP-722 Air Reservists Godley and Donahue start to install dome.*

matter was brought to the attention of the Civilian Components Policy Board in the Department of Defense. The Board appointed a committee to study the matter and then reviewed their conclusions. The present recall policy is based on the Board's recommendations.

Serving on the committee were BGen. Melvin J. Maas, USMCR, chairman; Col. Louis C. Friedersdorff, USA; Clayton L. Burwell, special assistant to Asst. SecNav for Air; and Frank T. McCoy, special consultant to Asst. Sec. for Air Force.

In addition to the immediate problems involved in expanding the services, it was realized that many other problems would arise later. The Board, therefore, suggested that another committee be set up to do long-range planning for developing and maintaining a strong Reserve with a minimum of interruption to both the nation and the individual Reservist's normal existence.

Secretary Marshall appointed the following men to serve on this new committee: Edwin H. Burgess, chairman of the CCPB; BGen. Maas; MGen. Leo M. Kreber, NGUS; BGen. Hugh M. Milton, ORC; RAdm. R. S. Riggs, USN; MGen. John T. Walker, USMC; MGen. George G. Finch, ANGUS; and BGen. Robet L. Copsey, USAFR.

Reserve Sets Up 15 New Squadrons

Satisfied that its ex-weekend warriors are continuing to do a good job with the Fleet, the Naval Air Reserve has turned its attention to bringing its Organized Reserve once more up to full strength.

By the end of October no less than 15 new squadrons had been commissioned and a concentrated drive was underway to bring rated Volunteer Reservists and veterans into the Organized fold.

In activating VS-893, VP-893 and VP FASRON-897, NARTU SEATTLE shared first honors with NAS LOS ALAMITOS, which also commissioned three squadrons, VF-784, VF-785 and VP-773. NAS GROSSE ILE commissioned VP-732 and VA-735, while NARTU ANACOSTIA set up VP-662, NAS BIRMINGHAM VP-681, NAS GLENVIEW VF-941, NAS MIAMI VF-802, NARTU NORFOLK VP-862, NAS ST. LOUIS VA-925 and NAS WILLOW GROVE VP-932.

Typical of the new squadrons is Anacostia's VP-662. Its members were drawn chiefly from the NARTU's associated volunteer units located at Baltimore, Hagerstown and Anacostia. Commanding officer is LCdr. H. W. Davis, a consulting engineer in civilian life, who was the former exec of the Baltimore AVUA. F. J. Mueller AMC, who was with the same Volunteer unit since its activation in 1948, is the squadron's leading chief.

In building the nucleus of its new squadron from AVUA members, Anacostia is following the pattern employed by most of the Reserve stations.

On the recruiting front, V. E. Wilde, YNI and W. W. Wood DCI of NAS OAKLAND were leading the field in October. They persuaded 53 Volunteers to transfer to the Organized Reserve.

Commanding Officers Confer

RAdm. A. K. Doyle, Chief of Naval Air Reserve Training, was host to the commanding officers of the 27 stations and units throughout the country under his command when they met for their annual conference at NAS GLENVIEW, command headquarters. Present problems were discussed and plans for the future were outlined at the meeting.

Shown in the picture from left to right are: *top row*, Capt. J. T. Brown, CO NAS DENVER; Capt. Patrick Henry, CO NAS MIAMI; Cdr. N. O. Anderson, CO NAS NIAGARA FALLS; Capt. R. N. Sharp, CO NARTU JACKSONVILLE; Capt. J. G. Howell, CO NAS WILLOW GROVE; Capt. J. B. H. Young, CO NAS COLUMBUS; Capt. J. D. Greer, CO NAS ATLANTA; Capt. G. C. Briant, CO NAS AKRON.

Middle row, Capt. J. P. Fitzsimmons, CO NAS SQUANTUM; Cdr. R. B. Bole, CO NARTU NORFOLK; Cdr. R. C. Gossom, CO NARTU LAKEHURST; Capt. K. M. Krieger, CO NARTU MEMPHIS; Capt. F. A. Brandley, CO NAS ST. LOUIS; Capt. T. O. Dahl, CO NAS GROSSE ILE; Capt. S. M. Randall, CO NAS OAKLAND; Capt. H. P. Burden, CO NAS BIRMINGHAM; Capt. G. L. Kohr, CO NARTU ANACOSTIA; Capt. J. H. Flatley, CO NAS OLATHE.

Front row, Capt. W. S. Harris, CO NAS NEW ORLEANS; Capt. B. S. Custer, CO NAS NEW YORK; Capt. R. M. Oliver, CO NAS GLENVIEW; Capt. M. H. Kernodle, CO NAS LOS ALAMITOS; RAdm. Doyle; Capt. D. E. Wilcox, Chief of Staff to RAdm. Doyle; Capt. A. E. Buckley, CO NARTU SEATTLE; Capt. E. E. Fickling, CO NAS MINNEAPOLIS; Capt. A. E. Loomis, CO NAS LINCOLN; Capt. D. J. Welch, CO NAS SPOKANE; Capt. H. R. Nieman, CO NAS DALLAS.

Reserves Get Break

While many Reserves were finding it tough going in the matter of getting jobs and advancements before the new call-up policy was mapped out, others were getting a good break either from forward-looking employers like Carter Publications Inc. in Fort Worth, Texas, or from aroused civic groups like the Chamber of Commerce in Seattle.

In an open letter to all its *Fort Worth Star-Telegram* "people," Carter Publications Inc., stated that they did not wish

ON ACTIVE DUTY AT NAS SEATTLE—*FASRon-895's Larson, Alley, Halls, Zumwalde, Hultgren, all of Minneapolis, check engine.*

PAPERWORK AS USUAL—*Reservists Mamula, Jarvis and Thompson of* VP-772, *formerly at* NAS LOS ALAMITOS, *set up shop at Seattle.*

any regular full-time employee to lose any company-provided benefits or to lose financially by being in the military service. Accordingly, this company agreed for at least one year to make up any difference between regular company pay and the individual's military pay (including, of course, allowances). In addition, it will protect his rights to retirement benefits, giving him credit for time in the service, allot him a share of any declared Christmastime distribution, and continue to keep his life insurance in effect for one year.

And out in Seattle, when the NARTU informed one of the large metropolitan dailies and the Chamber of Commerce of the difficulty some Reserves were having in regard to employment, the newspaper ran several stories, including two on the front page, to inform the community. And the Chamber of Commerce arranged to have its industrial division assist individual Reservists of all services who have employment problems—a program that still continues.

Reunion in Washington

When Capt. Frederic W. Priestman reported to the Navy Department to take over as Coordinator for Naval Air Reserve to DCNO(Air), he found two Reservists with whom he had served in 1930 at the old Naval Reserve Aviation Base at Valley Stream, Long Island—namely Capt. Harry Sartoris and Cdr. Hays R. Browning.

Back in 1930, the staff at NRAB VALLEY STREAM consisted of Lt. Richard F. Whitehead (now RAdm.) CO; Lt. (jg) Priestman, exec; Capt. Ben Reisweber (now Col.), Marine CO; and Ens. Sartoris, Ens. Browning and 2nd Lt. Paul Young, instructors.

Aircraft included six NY-2's, one O2U-1 and three Curtiss *Fledglings*—a far cry from the jet *Phantoms* that Reserves fly today at Floyd Bennett Field (where the NRAB was later transferred).

Training was given to three Reserve squadrons. And during the summer months about 35 student officers were given elimination flight training.

Reserve Round-Up

• NAS DENVER—Thirty-seven officers and 55 enlisted Reservists from WS-71, VF-711, VF-712, VF-713, VF-718, VA-718 and FASRon-711 completed a successful cruise at NAAS EL CENTRO. Divided into port and starboard wings for part of the cruise, the starboard wing took off at 0330 for three hours of night flying and the port wing took off at 0730 for two two-hour gunnery hops. Ground crews did an outstanding job, working 16 to 18 hours each day to maintain the unit. LCdr. Bruce Bell was in command.

• NAS NORFOLK—When FASRon-915, formerly of NAS SQUANTUM, reported for active duty they were greeted by RAdm. Richard F. Whitehead, Commander Fleet Air Wings Atlantic Fleet, under whom they had previously served when the admiral was Chief of Naval Air Reserve Training. First New England Organized squadron to be called up, FASRon-915 is under the command of LCdr. John W. Erhard, who is shown shaking hands with the Admiral (p. 25).

COMMANDING OFFICERS OF THE 27 STATIONS AND UNITS IN NAVAL AIR RESERVE TRAINING COMMAND LINE UP WITH RADM. DOYLE AT GLENVIEW

Army Likes Marine Close Air

LCOL. FINN CALLS FOR MARINE CLOSE AIR SUPPORT STRIKE DURING FORT RILEY DISPLAY

MARINE AIR and Army ground forces teamed together recently to demonstrate the value of the Marine concept of close air fighter support to ground units—a decisive factor in the fighting in Korea—for the benefit of troops in training at Fort Riley, Kansas.

The joint service project, first of its kind to be held for mass instruction purposes at Ft. Riley, was designed to give recruits an understanding of the use and effect of the fighter plane as a front line weapon. It worked out so well that the two services hope to join in similar demonstrations regularly.

Col. W. E. Sewell, commanding 87th Infantry Regiment, and Maj. J. F. Kudrna, assistant chief of staff for operations, 10th Infantry Division, were enthusiastic about using such demonstrations to emphasize the meaning of close air support to troops in training.

"Understanding the use and effect of aircraft that can come on call and blow stubborn enemy resistance right out from under your nose, so to speak, gives troops a lot of confidence as well as a lot of comfort", said Col. Sewell, who fought with the 5th Army against the Germans in Italy during World War II. "Close air support, such as the Marines demonstrated here today is a great morale builder for the infantry. And it's a lot easier to learn about it this way than in combat."

Col. Carson Roberts, assistant chief of staff for operations, Marine Air Reserve Training Command, stressed the importance of having ground units understand the direct help that fighter aircraft can furnish. "In the Marine concept, the plane is not merely a machine," he explained. "We regard the fighter plane as an adjunct to the rifle—the airman as the direct and very close partner of the rifleman."

Flying Navy *Hellcats*, loaded with bombs, rockets and machine gun ammunition, a 16-plane Marine Air Reserve squadron from NAS LINCOLN, VMF-113, roared in low on tactical calls to plaster targets in a "front-line" area less than 1,000 yards in front of the "student" troops during the demonstration. Led by Capt. M. C. Webb, VMF-113 CO, the *Leatherneck* pilots showed off the Marine air speciality of bombing, rocketing and strafing enemy obstacles in front of advancing ground units.

As in actual combat, operations were controlled and strikes called by air-to-ground and plane-to-plane radio contact. LCol. E. V. Finn, MAD CO at NAS LINCOLN, directed the strike from a tactical air control center on the ground. His exec, Capt. J. L. Cooper, flying with the squadron as air coordinator, passed the word aloft.

Artillery support and smoke shells laid on targets to guide the Marine pilots in for strikes were furnished by Battery "A", 35th Field Artillery Battalion under Capt. D. A. Schmidt.

MORE THAN 600 officers and men of Army Infantry, Field Artillery and Leaders' Course units in training at Fort Riley witnessed the display and listened in on the air-ground talk, beamed via loudspeakers.

All had high praise for the pin-point accuracy of the *Flying Leathernecks'* strikes on target areas—an accuracy which may in the future serve them well, for VMF-113 Reservists were called to active duty shortly after participating in the joint demonstration and are now serving with Regular Marine Air units.

BGen. W. O. Brice, commanding general, Marine Air Reserve Training, and MGen. L. J. Whitlock, commanding general 10th Infantry Division and commandant of Ft. Riley, approved plans for the joint demonstration.

MARINE AIR RESERVE PILOTS ROAR IN FOR STRIKE AS ARMY OFFICERS AND TROOPS WATCH

BOY, AM I GLAD TO SEE YOU!

62 Landings in 14 Minutes

Cherry Point Wins Praise For Record

MCAS CHERRY POINT—Landing 62 jets and conventional fighters, almost all of them nearly out of gas, in 14 minutes is the record made by this station last June and it recently brought a letter of commendation from Admiral Forrest Sherman, CNO.

Unable to land aboard the *Midway*, the air group was routed to Norfolk. On arrival, they found it encased in storms, likewise Oceana airfield, so they were routed to Cherry Point.

Using two runways at once, the tower brought the planes in thick and fast, in fact at one time 23 planes were either touching down or completing their run-out. One jet ran out of fuel but was able to roll clear of the landing runway, the other had only six gallons of gas left. Some of the conventional fighters had as little as 15 gallons.

In his letter of commendation to BGen. W. L. McKittrick, Adm. Sherman said "The fact that the entire air group landed without mishap in a period of only about 14 minutes is indicative of the efficiency displayed and the excellency with which the tower personnel handled their responsibilities."

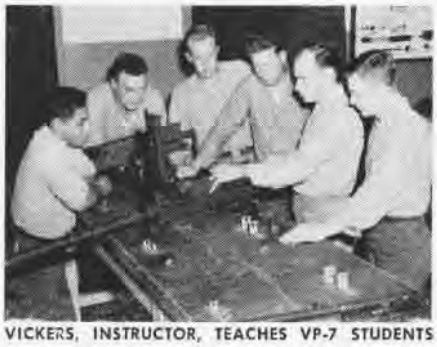
VP Squadrons Win Citations

Five Outfits Given World War Honors

Five patrol bombing squadrons of the Navy have been awarded the Presidential Unit Citation or Navy Unit Commendation on the basis of their heroic actions during World War II.

Those granted the PUC were VP-83, later renamed VB-107, and VP-84. VP-83 won the citation for heroism against German submarines in the Atlantic between January and April 1943, July through February 1944 and the month of September 1944. Any personnel attached then can wear the PUC ribbon.

Squadrons winning the Navy Unit Commendation were VP-32, VP-82, later renamed VB-100, and VB-103, later renamed VPB-103. VP-32's honor was won off Cuba from July 1 to 31, 1943. VP-82 won its award in the Atlantic from 15 January to 10 June 1942 and during April 1943. VB-103's period covered 1 November 1943 to 31 January 1944 and from 1 March to 30 April 1945, in Atlantic waters off England.



VICKERS, INSTRUCTOR, TEACHES VP-7 STUDENTS

Training Combat Air Crews

Squadron Conducts Month-long School

VP-7, QUONSET POINT—This squadron operates the most comprehensive school for training combat aircrewmen in the Atlantic fleet, devoting five days a week for four weeks to the job.

Since May, personnel from AN's to CPO's have attended classes in gunnery, communications, familiarization, recognition, first aid and survival. Chief Robert L. Greene, AOC, is in charge of the school, under supervision of Capt. J. C. Nichols, USAF, on duty with the Navy, and Ens. George Goode.

After their classes from 0800 to 1600 daily for four weeks is completed, practical work in air firing is done on towed targets to finish the course. Personnel from VP-8 also were invited to enroll in the school, with 10 members in the current class. To date, 16 graduates have been designated CAC's.

SAY, JOE, TIME TO GET UP!

Navy Hunts For Lost Child

Memphis Turns Out 50 To Join Search

NAS MEMPHIS—It was "Navy to the rescue" recently at Forest City, Ark., when a two-year-old got lost in the woods with her three-month-old puppy.

Fifty volunteers from Memphis naval activities joined more than 100 other men in the search for Betty Kay Wisant. Ted Abbate, AN, of NAS MEMPHIS operations, finally found the little girl in a nearby cotton patch following an all night search.

Abbate heard the puppy barking. He investigated the yapping and found the child wet, cold and frightened, huddled on the ground where she had spent a dismal night. She burst out crying when he wrapped a blanket around her. At a hospital, she was found none the worse from her ordeal.

• NAS ATLANTA—AVUA-5, which was commissioned on 26 August, is now undertaking a full weekend schedule of checkout flights and ground training lectures. Forty-five pilots were under orders to the unit.

DO THESE FACES *reflect the fear so often associated with war? Lined up on the flight deck of the CVE Badoeng Strait just prior to the amphibious assault on Inchon are Marines of VMF-323. "Death Rattlers" squadron pilots commanded by Maj. Arnold A. Lund have been giving close air support to United Nations ground forces since 6 August. All are veterans of World War II and 50% graduates of amphibious warfare school at Quantico. Left to right, front row: Ihli, Rupe, Cole, House, Steinkraus, Lund, Mohnson, Caudle, Keuey, Nichols, Penn, Johnson, Anderson, acting air group commander; Second row: Yachik, Rodd, Graham, Wood, McCollom, Wooser, Fisher, Peacock, Jones, Beswick, Stanton, Ferguson, Turnbull, and Brown; Third row: Newell, Welker, Frederick, Greene, Blaydes, Halligan, Ward, Oster, Van Campen, Johnson, Fisher, Cohen, Sidney, Hall. Six of the men are enlisted pilots.*

ICE OVER UTAH DESERT

NAS ANACOSTIA—Newest unofficial authority on aircraft icing is LCdr. H. P. Prather, station training officer, who ran into a peck of trouble flying over Utah and had to make an emergency night landing in the Great Salt Lake desert with 20 passengers in his R4D.

Prather had left Alameda with passengers from the Navy biological warfare unit at Camp Detrick, Md., enroute for Washington, D. C. It was a VFR flight and the forecast was good. Going into Ogden, Utah, however, a fast-moving front cut them off, and the plane was held at 13,000 feet for an hour and a half.

Weather authorities told him he would have to circle another two and a half hours before the emergency traffic below could be landed. His windshield gathered three inches of ice on the inside and with his gas running lower, Prather decided to head back west.

The trip west was against 80 mile headwinds and the ice cut his airspeed to as low as 90 knots. He found a hole in the stuff near a little emergency CAA grass landing strip at a range station near the town of Lucin, Utah, population three, repeat three.

When the plane had landed at 2100 the passengers were chilled by the 24-degree temperature. There were only three buildings and no sleeping facilities. Prather and his crew found an old-fashioned telephone along the Union Pacific railroad track and after much cranking raised Ogden. They requested the next UP train through stop and pick up the passengers.

The next morning the Air Force flew out 200 gallons of gas from Ogden and Prather and his crew got the plane to that city, picked up the passengers and resumed the flight east. When he went out to the plane that morning, Prather found a two-foot pile of ice on the ground under the nacelles and leading edge of the wings.

On his arrival at Anacostia, Prather received a letter of commendation from the naval biological warfare unit. Members of the crew were LCdr. W. Wimbush, station engineering officer, copilot; R. W. Teague, ADC, and H. W. Villiard, AL3.

★ ★ ★ ★ ★ ★ ★

GCA BOX SCORE

September is the leading candidate for "soup month", a new all-time record of "saves" by GCA being racked up by the radar units—952. Included were 190 GCA landings at NATC Patuxent.

September Approaches	12,694
Instrument Approaches	952
Grand Total Approaches	410,809
Grand Total IFR	17,542

★ ★ ★ ★

Quick Action Saves Airship

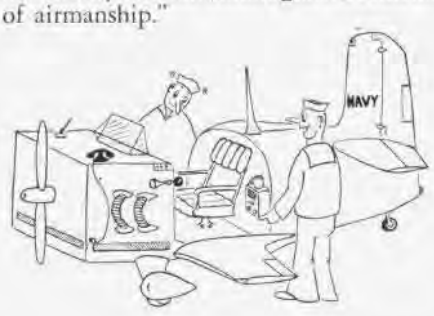
Chief Commended for Fast Thinking

The quick thinking of H. K. Calahan, ADC (AP) of Airship Squadron Two combined with the unique flight characteristics of airships recently averted serious damage and possible loss of one of the squadron's airship at NAS Lakehurst.

Calahan had made a normal landing and, with the ship in the hands of the ground-handling party, was waiting for the mooring mast to be brought into position. With the mast only a few feet in front of the ship, a sudden guest of wind tore the ship from the hands of the ground-handlers, and it surged forward narrowly missing the mast.

Calahan immediately put both propellers in reverse, and as the ship backed away from the mast in a nose low attitude, it became airborne. When well clear of the mast, throttle settings were changed to ahead and the ship safely cleared the field.

A letter of commendation from the squadron commanding officer, Cdr. F. N. Klein, Jr., was addressed to Calahan for his "ability and outstanding achievement of airmanship."



THAT'S FOR PILOTS WHO WORK IN PENTAGON

Jet Pilots Set New Record

Whiting Mechs Pump Plenty of Petrol

NAAS WHITING FIELD—Jet Training Unit One broke its own record for hours flown in a month when it piled up 1315 hours during August. With an average complement of 19.5 aircraft and a 93% availability, an average of 67.3 hours was racked up on each jet.

Each plane required about 290 gallons of fuel to fill 13 different tanks through five filler caps between all flights. The line crew ran about 26,000 gallons through the fueling hose daily to set what they figure is a record for gallons per man a day.

Backward Facing Seats Next

New Transports Capable of Conversion

Future passengers in the Navy's new R7O's, R6D's and Super R4D's may be riding backwards.

Although those new aircraft are being procured as cargo planes, provisions are being made to have backward-facing seats installed if and when they are converted to troop and passenger-carrying transports. MATS is putting the seats in 20 of its R5D's as a starter.

Extensive tests have been made to determine if backward-facing seats were safer for passengers than present ones. It was found that the human body could withstand as high as 35 G's sudden deceleration in that position. By providing a headrest and support for the trunk, the body can take greater G's by riding backward than it can by merely having a safety belt across the lap.

MATS made a survey of passengers and found only 10 percent objected to facing the rear of the plane while in flight. The extra safety factor during crashes and ditching is expected to offset this objection. Their seats are 15 pounds lighter than the older models and can take 15 G's stress compared to six.

ANYONE WITH *doubts about a jet plane being a good gun platform is invited to count the 68 holes LCol. David E. Marshall, skipper of VMF-122, put in this banner target with the 20 mm cannon on his F2H-2. Using the Mk 8 gunsight unit of the Mk 6 fire control system, he fired 160 rounds, to get 42.5% hits during one of his first live gunnery flights.*

THIRTEEN *is lucky number for Major J. J. Ferguson, USAF, currently an exchange pilot flying with Panther squadron VF-61. Exec. of USS Franklin D. Roosevelt, Cdr. J. L. Chittenden, congratulates the Major at cake cutting ceremony after making 29,000th landing. Cdr. Smith, skipper of VF-61, looks on.*

Reserves Aid Polio Victim

NAS St. Louis R4D in Mercy Flight

When commercial airlines, railroads and an air freight line were unable to move little 10-year-old June Reisenhofer, a polio victim, from Galveston to St. Louis because of the size of her respirator, officials of St. Louis and of the St. Louis Chapter of the National Foundation for Infantile Paralysis appealed to NAS ST. LOUIS for help.

ST. LOUIS PILOT SCOGGINS TALKS WITH JUNE

After receiving necessary clearances, the station installed a "putt-putt" engine in the head of its R4D to furnish 110-volt power supply for the iron lung. Four bluejackets went along to hand pump the lung in the event of a power failure.

The flight, however, was made without incident and the crewmen confined their efforts to entertaining the little girl enroute. Today, she is resting comfortably in her iron lung at St. Anthony's hospital in St. Louis.

NAS Akron Helps in Test

Boy Scouts Search for 'Downed Pilot'

Officers at NAS AKRON cooperated with Boy Scout leaders in the area to give Scouts at Camp Manatoo a "real life" test on woodmanship.

No sooner had the Scouts arrived for a weekend at the camp than a Navy plane roared overhead apparently having trouble. All of a sudden a parachute shot out and opened. The word spread rapidly, "Man down in the woods somewhere toward the north."

The boys immediately assembled for "search" instructions. Meanwhile, the "victim", which was really a dummy, was replaced by a human being, who strapped on the chute harness and pretended to have a broken leg.

As the boys searched for the "victim", marked tenseness was noticed among the group; none of them seemed to suspect that the whole project had been pre-planned. Since Boy Scouts are often called upon to find those who stray in the woods and get lost, the test was considered most valuable and the naval air station received much favorable comment in the community for its assistance.

OFF TO A GOOD START—*Capt. Louis E. French, CO of* NAS GUANTANAMO BAY *swears son 'Hank' into Naval Air Reserve.*

BIRTH OVER MID-ATLANTIC

VR-6, WESTOVER—"Air-born" babies are the latest thing with this squadron's Atlantic-hopping R5D's. With the birth of an eight-pound boy in mid-Atlantic, a historic "first" for MATS was successfully established.

The baby was born at 9,000 feet, while the plane was 3½ hours out of Burtonwood, England, en route to the United States. The mother, Mrs. Irene Cooper, was traveling from Germany to join her husband, an Air Force sergeant. With her were two children, both boys, aged one and two. Mrs. Cooper is a German war bride, and the first two children were born in Germany while her husband was stationed there.

When it became apparent that the stork was close, the R5D's commander, Lt. (jg) R. B. Strickland, reversed his course and headed back toward Burtonwood at maximum speed. The bird was faster, however, and caught up an hour and 20 minutes later.

Three women passengers volunteered and assisted with the delivery. All were mothers, but none had medical or nursing training. As the orderlies rushed up and down the aisles with the traditional hot water, passengers debated the legal aspects of the prospective baby's citizenship.

With a lusty cry, the baby met the world at 2209, and the time and position were duly logged by the navigation officer in proper Navy style:

"2209—Born, at sea, in position latitude 4920 north, Longitude 0730 west, a baby boy; to Mrs. Irene Cooper, German, age 22, passenger."

OLD DOC STRICKLAND, LEFT, WITH 'CREWMEN'

On landing at Burtonwood, Mrs. Cooper and family were delivered to medical authorities, who pronounced both in fine condition. Mrs. Cooper had so much confidence in the Navy by this time that she protested when told she would be taken to the hospital. She wanted to go on with the plane to the states.

As Bureau #0406 took off again for the states, a small sign was posted on the door of the crew compartment. Its hastily-scrawled letters read:

"MATERNITY WARD"

John Paul Jones would have been proud.

LETTERS

SIRS:

Just a short note which I have meant to write many times—to tell you that month in, month out, you have turned out a darn fine magazine which we naval aviators can feel most proud to have represent us.

You play an important part in keeping up both Regular and Reserve morale and *esprit de corps*.

Keep it up! My best wishes for continued success and cooperation.

N. C. GILLETTE, JR., CDR.
VX-1, KEY WEST

SIRS:

There are more ways than one to win a baseball game.

Enlisted men and officers of VF-772 scheduled a beer-baseball game. As practice went on, it was evident the men were getting too good. Therefore, it was necessary to issue a directive that there would be no baseball practice on Friday, Aug. 13.

After diligent spying, LCdr. Fisher and Lt. (jg) Pharaoh caught Stallings, Barbee and Grandfield practicing behind the flight shack.

The fact that these men were good ball players had nothing to do with their being put on report and summoned to a deck court Sunday. Lt. Burson was deck court officer, ably assisted by Lt. (jg) McCabe and Ens. Roitsch, with Lt. (jg) Sally Sutton recorder and Chief Cunerty counsel for the defense.

Even with the entire squadron present, order in the court was maintained for two hours while the prosecution and defense pleaded their cases. Because it was felt that the baseball might have hit government property or an officer, the men finally were convicted of sabotage and mutiny.

By 1330 Monday gallons of cold beer arrived at the ball diamond so the game could start. After much commotion about character references for the umpires, suggested by both teams, the game got underway. Three hours later there was a slight whispered debate as to the exact score, but by counting the run made by AM2 Barbee on a bicycle, it was agreed that a score of 33 to 33 was as accurate as could be determined.

During the balance of the week, flight time kept on rolling up and squadron organization became more streamlined. After checking out on the last day of the cruise, another squadron party was held. After this was well underway, all hands agreed that fleet orders could come any time now.

COMMANDING OFFICER
NAS LOS ALAMITOS

SIRS:

When Midshipman J. F. Kropf recently received his commission as an ensign, he was presented with an enormous set of brass bars to replace the midshipman anchors on his collar.

The bars were made by the members of Ens. Kropf's flight crew and they further ex-

pressed their congratulations by upholding Navy tradition and seeing that Ens. Kropf went for a little swim in the station pool, clothes and all. The photo shows Cdr. H. D. Hilton, skipper of VP-4, presenting him with his commission papers and eyeing his gaudy ensign bars.

PUBLIC INFORMATION OFFICER
VP-4

SIRS:

To prove the point that war is broken once in a while for snatches of private life, on 25 September, aboard the CV *Valley Forge* in action in Korean waters, the stork made enough importance to break into operations.

LCdr. H. F. Thompson, operations officer of VF-51, was on a morning sweep of enemy airfields when the ship received a dispatch telling of the birth of a daughter to Thompson and his wife in Coronado, Calif.

Disregarding the chance of shock to the overdue father, the ship contacted him and informed him of the good news when he was 80 miles away and three miles up. Although he failed to stop and pick up any cigars on the way back to the ship, no one was heard to complain about extra traffic on the strike channel.

D. L. CHRISTIANSON, LT. (JG)

• NAAS CABANISS FIELD—The spotless safety record of ATU-2 which ran from 25 May was ended in September after 10,630 hours of accident-free flying in F8F's.

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• THE COVER

Our Christmas cover was drawn especially for this issue by Robert Osborn, a Reserve lieutenant commander who during the war created Dilbert, illustrated numerous "Sense" pamphlets and drew scores of training posters. Osborn, in addition to his civilian pursuits, still draws *Grampaw Pettibone* and *Flight Safety* cartoons for the *News*.

• BACK COVER

Santa Claus, J. B. Kelly, CWO, USMC, greets his first visitor, Phyllis Wilson, daughter of P. E. Wilson, YN1, of NARTU Seattle after arriving in a specially-painted PBY. Photo courtesy of *Seattle Times*.

• THE STAFF

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

NAVAL AVIATION NEWS

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

SWEPTBACK OR STRAIGHT

TWO OF the British naval air arm's sleek new jet fighters are shown here, the Hawker *Sea Hawk* F.1 and the newest and fastest Hawker P.1081 with its sweptback wings and tail surfaces. The new plane has its jet orifice in the tail to permit afterburner on its *Nene* engine. It has a variable incidence tail. The *Sea Hawk's Nene* jet exhaust squirts out the wingroots.

XMAS
GREETINGS
TO ALL-
N.A.NEWS