Pouring on the coal as it flies straight up into the heavens is this F2H-2P photographic Banshee from VC-62 at Jacksonville. Note the three camera ports in the nose open and ready for business.

Pilot of the plane was Lt. (jg) Thomas G. Workinger, while the photograph was taken from another camera-carrying Banshee flown by Lt. (jg) Norman R. Gearhart, both with VC-62 squadron.
Feminine hearts were set aflutter from Barcelona, Spain, to Norfolk, Virginia, and back again because of some unpredicted eight to 10-foot swells that rolled over the Mediterranean Sea from the Gulf of Genoa into Barcelona. Although there were many anxious moments for all concerned, this Spanish romance ended with strengthened understanding between Americans and Spaniards.

The carrier USS Midway was making one of the usual Sixth Fleet goodwill visits to Barcelona in January, when it was decided that good relations between the United States and Spain would be set years ahead by holding an officers' dance aboard ship with some of the ladies of Spain as guests. So arrangements were made accordingly for the international diversion.

On the appointed night, over 100 young ladies from many of Barcelona's finest families, and their chaperones, were ferried out to the Midway in the ship's boats. Officers in their best blues and bow ties met them at the gangway.

The evening's festivities were proceeding in fine style, and in accordance with the best of naval traditions, until old man Neptune intervened with his high-riding swells. The Midway started to drag her anchor, and it became too rough to operate boats alongside. Nobody could come aboard, or leave the ship. Traffic between the carrier and the dock came to an abrupt halt. Dancing continued uninterrupted.
To compound the difficulties, a boat filled with more young ladies and more chaperones was standing off near the Midway unable to make the gangway because of the swells. A small fire picked this time to break out aboard ship. It was promptly extinguished, but the boat's occupants had unfortunately heard the fire and damage control parties being called away, and returned to the beach to set off a flood of rumors.

As the duty sections took care of the emergency, the dance continued—so did the swells. At 2400 the ladies couldn't be disembarked. Dancing continued until 0100. The ladies had to remain.

The dancers and their feet were wearing out under the strain, so movies were broken out and shown. Several hours and features later, people were even more tired, and especially so of movies. As the eastern horizon brightened with dawn, coffee was served in the wardroom.

The Midway's radio had long before started broadcasting on the frequencies of Barcelona's commercial radio stations to reassure the girls' families that all was well and that they would be returned safely just as soon as possible. Finally after breakfast in the wardroom, the sea had spent its fury. The last boatload of guests shoved off at 0900.

It took another week for the fury of wives in Norfolk to reach the Midway via airmail, but after all facts were known, all hands, even the wives and chaperones, could smile at Neptune and his ways. The affair in Barcelona was but one of the duties of the U. S. Sixth Fleet now cruising the Mediterranean.

The U. S. Navy has operated in the ancient Romans' Mare Nostrum since the days of Truxton and Decatur in the war with Tripoli in 1802. More recently, America's sea power was experienced by the Mediterranean during World War II's landings in North Africa, Sicily, Italy and Southern France. The Fleet is now there for a different purpose—to make friends and help prevent the disaster of another world war.

Bombers, Skyraiders and Savages are aircraft capable of carrying atomic weapons at tremendous speeds to a distant target and returning to their mobile and elusive carrier bases. VAdm. John H. Cassady's Sixth Fleet carriers in the Mediterranean operate all three, but today the missions of these aircraft are friendly ones. Men of goodwill hope that such will always be so.

The Sixth Fleet operates independently of the countries surrounding the sea and their economies, and is not dependent on support from bases ashore in the area. Its bases are on the east coast of the United States. Except for some fresh fruit and vegetables, its fuel and food comes from there.

If war would come again to this fought-over bit of water, the Fleet would stay right where it is to protect friends and help destroy enemies. Its built-in mobility would make it a tough target to catch. No "sitting duck," the Fleet can easily keep outside of range of Soviet short range fighter planes. If they would send out unescorted bombers to catch the shifty Fleet, it will be ready for them.

As VAdm. Cassady says, "The Japanese tried that, and you know what happened." (They lost their air force.—Ed.)

The Admiral is a friendly six-plusfooter who has been wearing his naval aviator's wings since 1928, and knows the air, sea power business as only a man who has worked at about every job in it from boot ensign on a destroyer to Deputy Chief of Naval Operations for Air can possibly know it. He has been a long-time student of the Mediterranean and its peoples, and has had as well a taste of diplomatic duty as Assistant Naval Attaché for Air in Rome from 1937 to 1939.

Summing up the job of his friendly fleet, the Admiral says "The U. S. Sixth Fleet is (generally) composed of two aircraft carriers, three cruisers, 14 destroyers, submarines and a support force of auxiliary vessels. The Fleet is continuously on the move, exercising at sea, visiting scores of ports, and constantly is prepared to fulfill its role as a coordinated and powerful striking force, if the need for such should ever be thrust upon us."

Following a visit to the Fleet by several high-ranking Spanish officers, he added, "I hope that these officers have come back with a working knowledge of Sixth Fleet operations and capabilities. I consider one of my primary missions to be the furthering of close understanding and cooperation between the Sixth Fleet and friendly Mediterranean nations."

In 1950 the Greek Minister of Foreign Affairs put it this way, "In the powerful gray diplomats of the Sixth Fleet we see the guarantee of small peoples' independence, for we know that you command them with the great inspiration of unselfishness for the service of the freedom of the whole world."

With few exceptions, each ship of the Fleet serves in the Mediterranean for
about four or five months on detached duty from the Atlantic Fleet. Upon completion of their tours, ships are relieved on station and return to the States for other Atlantic Fleet duties. This regular rotation of ships and their personnel in the Mediterranean not only permits efficient training of tens of thousands of Navy men, but it also acquaints them with the area and its people.

While the ships rotate at frequent intervals, the Fleet Commander and his staff remain in the Med for a normal 18 months to two-year tour of sea duty. Continuity of operation is thus always achieved by having "old hands" on hand to keep all new arrivals in the proven groove of Fleet activity and efficiency.

Because VAdm. Cassidy and his staff are on an extended tour of overseas duty, most of the married staff members have their families in Europe. Villefranche and its adjacent Cap Ferrat near Nice on the French Riviera is home for most of them. Like rents anywhere, rents on the Riviera are high. A house with a view of the sea on Cap Ferrat may be had for about $140 but the rooms are big, drafty and hard to heat. Contrary to popular belief, it gets right cold on the Riviera in winter. Most places have no central heating. With coal at $50 a ton, it doesn't take Sixth Fleet staffers long to build up their families' winter wardrobes.

NAVY FAMILIES find that their children pick up the French language in a hurry in school and in playing with French children. The kids prove invaluable as interpreters for their parents. When ma wants two quarts instead of one, from the milkman, junior comes in handy. Navy families are doing their bit in carrying out the Fleet's friend-making missions.

Should the international situation deteriorate to the point where the Sixth Fleet would have to show teeth as well as the flag, its powerful striking arm lies within its carriers, the USS Midway and the USS Tarawa and the others that would be added. The larger of the two CVA's now on station is the Midway. This broad-beamed beauty required 90 tons of blueprints during her construction in the latter days of the last war.

Capt. Frank O'Beirne's 2,500-man Midway ship's company includes men from every state plus the Philippines, Canal Zone, Hawaii, Guam and Canada. New York is best represented with 421 on the roster. Pennsylvania is next with 342, and Nevada trails with Willie Groesley, FN, as that state's only representative in the crew. New York City, Chicago, Philadelphia, Boston and Detroit lead the cities represented among the Midway's crew.

The 45,000-ton Midway flies the two-star flag of RAdm. S. H. Ingersoll, Commander Carrier Division Four.

The "Mighty-Mid" is a veteran of five extended Med cruises with the Sixth Fleet, and her air group, CAG-6, is also a real seagoing aviation outfit. Prior to leaving the States on the first of December, CAG-6 participated in the 1952 Midshipmen cruise, Operation Singpost testing the U.S. eastern air defenses, NATO Operation Mainbrace and Naval War College demonstrations.

During Mainbrace, the pilots gained experience in cold weather operations and in making "strike" flights over strange territory. While the group was in Scotland some of the boys tried out their Mk III exposure suits in the Firth of Clyde. They not only gained confidence in the gear, but detected some modifications for future suits.

CAG-6's two Panther squadrons Fighting 21 and 61, led by Cdrs. R. L. Johns and J. C. Longino, switched from FWF-3s to FWF-3s just before this cruise. Fighting 41 and 42, with Cdr. D. C. Rumsy and L.Cdr. M. C. Thrash in command, are flying the trusty old hose-nosed F4U-4s, and Attackrons 25 is outfitted for AD Skyraiders. L.Cdr. J. C. Mills leads this latter squadron. In addition to these five, CAG-6 has detachments from VC-4, 12, 33 and 62 aboard to furnish night fighter, AEW, ASW, photographic and other support. The CAG-6 VC-6's fly F3D Skyknights, F2H Banshee and AD Skyraiders.

CAG-6's commander, Cdr. E. J. Kroeger, holds a record of one kind or another. When he got his wings in 1938 he was ordered to CAG-6 on the USS Enterprise and stayed with the outfit until after the Battle of Midway in 1942. He now finds himself in command of CAG-6 on the Midway.

The group's aircraft are marked with a distinguishing color for each squadron. The jets are color striped on the nose and tail. The prop spinner and the belly tanks of the Corsairs are colored, and the ADs' spinners and rudder tips get the same treatment. To show no partiality, Cdr. Kroeger's plane carries them all—red, white, blue, yellow and green.

Like the rest of the Sixth Fleet, the Midway's operating schedule works out with about 60% of the time at sea for training and operations, and the remaining 40% in various Mediterranean ports for goodwill visits. One month's operations included a two-day rest of Italian air defense operations with the Midway's and Tarawa's air groups acting as the attackers, and Italian F-51's, P-84's and Vampires performing the intercepts. VC-5 operated eight AJ's aboard during the same month for carrier exercises.

VC-6 SAVAGE on Midway frames Fleet Flagship Newport News during passing of mall
On the way over on her current tour, the Midway carried the first two planes, SBD Helldivers, of a new Italian Fleet Air Arm. Lt. Mario Volpe and Lt. (jg) Vittorio Valente of the Italian Navy were aboard, and flew off the ship into Italy when she came within range of the Italian coast. Both Volpe and Valente were U. S. Navy trained.

NAS's Atlantic City, Jacksonville and Quonset Point are the homes of the Midway's composite detachments. Although four squadrons are represented, they operate from one ready room as a single unit with VC-4's, LCdr. W. C. Reinhardt in charge. The VC-4 FEH's and P4H's are the carrier's night and all weather fighters, and Lt. P. M. Budinger's VC-31 AD-4N's and Q's provide all weather attack and anti-submarine capabilities. All weather AEW support is furnished by VC-12's AD-1W's, and VC-62 photo Banshees are the CAG-6 photographers. The latter two detachments are headed by Lt. J. P. Boland and Lt. (jg) J. R. Farrell.

Most Midway officers and men are going beyond their regular on-the-job training to improve their professional competence by being enrolled in some sort of additional training; ranging from basic training to correspondence courses for college credit. Lt. O. W. Shaham, Jr.'s training department is responsible for these courses, as well as the ship's "T" Division, which he claims is unique.

Each officer and man reporting aboard gets a complete shipboard check-out by "T" Division. New men are assigned to it for a week, and by lectures, tours and films are oriented in ship routine and problems from atomic defense to marriage and family life. Cdr. A. B. Furer, the Mid's exec, greets new groups with a personal "welcome aboard." His 15-min.
ure greeting is followed by five days packed full of departmental lectures and tours, safety movies, general naval orientation, educational and insurance counseling, training in shipboard duties and moral and character guidance.

Mail from home is always a big factor in making or breaking any sailorman's morale. Whether he's the newest boot aboard or wearing stars on his shoulder, a Navyman likes his mail. That's why the Navy goes all out to get it through in a hurry. The postman usually rings the Sixth Fleet's bell two or three times a week.

To help keep mail and official documents flowing regularly to the fleet, FASRON-77 is maintained at Naples' Capodichino Airport. This squadron was commissioned on 1 April from the former VR-25 detachment located there.

FASRON-77 pilots regularly land their TBM-3R's aboard the Fleet's carriers bringing mail and personnel out from Naples. NANEWS' correspondent, LCdr. M. H. Portz, was delivered along with the official mail to the Midway in one of the squadron's passenger-configured Turbines by Lt. A. E. Vickers.

From time to time, the TBM pilots fly out expecting to return immediately, and like all throttle-benders they can get weathered in too. LCdr. D. H. Weller landed aboard the Leyte sometime ago after telling his wife that he'd be home for dinner. He got home—a week later.

AIRCRAFT AND men of USS Coral Sea line flight deck in inspection formation during that ship's last duty tour with Sixth Fleet. Frequent rotation of men and ships into the Fleet permits extensive training and experience in Mediterranean for many Navy men.
An Italian admiral who had been sailing the Mediterranean for most of his lengthy naval career stated flatly that it is impossible to predict the weather in the Mediterranean. As a clincher, he commented, "The only thing you can forecast is what you can see."

The job of predicting the unpredictable on the Midway falls on the shoulders of Lt. J. J. Creamer and his aerology crew of 13. They broadcast a surface synoptic every six hours and send out upper air winds and soundings twice daily. Creamer sticks his neck out two times a day by sending forecasts at 0700 and 1300 to other Sixth Fleet ships.

"The aerologists' big job," says Creamer, "is to keep our planes and ships out of trouble. If you can do that, especially the winter, you're breaking even."

"For example," he continued, "a jet stream at 30 to 35 thousand feet might push a fighter flight over a country where they shouldn't be before the pilots realize it. Possible international incidents can be avoided if the pilots are forewarned of the stream's presence."

While the summer weather in the Mediterranean is usually good, between November and March it's unusual if it is ever good. Storms accompanied by high winds and high seas are common, although the temperature seldom gets below freezing.

Sixth Fleet aerologists get weather data for map plotting from all over Europe, including the USSR. Communication difficulties however, usually make the latter come in too late to be of any particular use. Teletype weather schedules are received from Paris, Port Lympia, and the Azores. CW schedules come from Dunstable, England, and excellent upper air radio facsimile maps come from Rhein-Main in Germany.

In spite of the good weather reporting, the Med's difficult forecasting conditions can and do cause an occasional international headache like the Barcelona affair. Fortunately, weather, whether or not, seldom keeps the good will visits of the Fleet from being successful. Unlike the weather, other factors effecting the visits can be controlled, and are, through extensive pre-planning.

Before visiting any port, the ship's disburssing office makes local currency available for exchange. The training and public information departments collaborate in preparing excellent "poop sheets" on the history, layout, churches, points of interest, currency, transportation, clubs and restaurants in the city.

In addition to the official dope, old hands in the Med, have their own confidential information which they'll pass on to newly arrived friends. One such tidbit went like this.

"Best hotel in town is the Ritz Carlton. The price is approximately 1,400 francs, but you must tell them that you are Navy to get this reduction. Highly recommended is the Dabateau Restaurant, world renowned for its fine food. Suggested course is Flaming Fish."

"Cannes has an abundance of clubs and bars. Whiskey is very, very expensive. You'll do best ordering wine or beer. The best club in Cannes is Maxim's. It is very expensive, but anybody who is anybody goes there. It has the best floor show in town."

"If it's female companionship you're looking for, some of the higher class dates can be met in the Hotel Bar. Don't drink much there or you'll go broke before the night gets started. Avoid the ——— It's a queer joint."

While making the rounds, have a drink at Jimmy Davis's Bar and at the Chez Tony. They're good for atmosphere.

Sixth Fleet visits to Mediterranean ports are a practical approach to mutual understanding for both the inhabitants of the towns visited and the Americans who man the ships. Local dignitaries, and common citizens alike, enjoy the size and complexity of the visiting ships, as well as the cordial hospitality they find during receptions and "open houses."

The officers and men assigned as hosts and guides soon learn something too—the schoolbook geography impressions might be wrong, and that the citizens of Barcelona, Nice, Naples, Athens and the rest down the line are people much like themselves with similar problems, pleasures and hopes.

Although there are a few Sixth Fleet men who occasionally make spectacles of themselves ashore, and there are a few natives who chaff "U.S. Navy Go Home" on buildings, these cases are rare. The relationship existing between the men of the Fleet and the people ashore is probably somewhere between this extreme and the attitude expressed by a young lady of Southern France to an officer ashore the afternoon following a blast at the Fleet by the local communist-controlled newspaper. With tears staining her Chanel-scented handkerchief, she explained, "They were saying bad things about you today."

The powerful gray diplomats of the Sixth Fleet are making friends for democracy in the Mediterranean today, and if the worst does arrive on some black tomorrow, the Fleet's hard-hitting striking arm, naval aviation with its Banshees, Skyraiders and Savages, is ready for action to defend democracy.
Poor Way to Get Experience

The following is a story of six Naval Reserve aviators who were cleared for a cross country navigational training flight from NAS GROSSE ILE, Michigan, to Otis Air Force Base on Cape Cod, a distance of about 650 nautical miles, who as it turned out got quite a bit more experience than they had bargained for.

The flight was originally planned to refuel at Griffiss Air Force Base, Rome, N. Y. and then to continue on to the ultimate destination. However, because of reported thunderstorm activity in the vicinity of Griffiss AFB, the flight was cleared only as far as the Naval Reserve Air Station, Niagara Falls, N. Y. and arrived there at 1615.

The operations department and aerology at NAS NIAGARA were secured and the flight was briefed on the weather by Flight Service. The enroute weather to Otis AFB was reported by Flight Service to be VFR with scattered clouds and rainshowers, tops of all clouds at 7,000 feet. The destination was reported to be good with 20 miles visibility so the flight of six filed a VFR flight plan (500 feet on top) to Otis AFB with Flight Service and departed Niagara Falls at approximately 1710.

About an hour after leaving Niagara Falls the flight encountered numerous cumulus buildups and a few thunderstorms which they were able to circumnavigate for a while. The flight was forced to climb and to change course frequently in order to maintain 500 feet on top and stay out of the clouds. The static had become so bad that the radio range receiver was practically useless. At 15,000 feet the flight leader while flying between two buildups ran into a box canyon of clouds and couldn't avoid entering the overcast.

Somewhere between Syracuse and Albany, N. Y., while in the overcast, the flight became separated into two sections, the division leaders and two wingmen made a 180 degree turn while the other three aircraft continued on course and climbed out on top at 18,000 feet. When the flight became separated, a series of radio transmissions occurred between various members of the flight, including the flight leaders of both sections which resulted in the conclusion that they now were decidedly two flights and that neither knew quite where they were. Finally, all radio contact between the sections was lost.

The section that made the 180 degree turn continued to weave in and out of the clouds trying to stay on top and maintain a course toward Otis Air Force Base. After numerous blanket calls on Guard channel by the section leader, the section was finally located by Otis AFB DF and given a steer to the base. About 30 miles west of the field they luckily found a break in the overcast, descended underneath and landed at Otis without any further difficulty even though the ceiling at the time of landing was only 600 feet overcast.

The other section was not quite as fortunate as is evidenced by the statement of the section leader.

"When the division leader entered the clouds, I elected to continue straight ahead and began to climb. My two wingmen stayed with me and we broke out on top of the overcast at 18,000 feet and made quite a few changes of heading but there was so much noise and static that I couldn't orientate myself using the range receiver, so I finally turned it off so that I could hear the VHF. It was getting dark by this time and I called Griffiss Air Force Base for an emergency VHF DF fix, telling them that we were lost and on top of the overcast at 18,000 feet.

"A number of stations answered and Mitchell Air Force Base finally pinpointed our position. They gave vectors for us to fly and kept in touch with us constantly until we were over New York City. While we were being vectored to New York City we were lowered to 3,500 feet in the overcast. We maintained this altitude while Mitch Idlewild and Floyd Bennett fields were trying to get us in a position to land. [Incidentally, the weather in New York at this time was reported as 400 feet variable, 1/2 mile visibility.]

"Floyd Bennett GCA finally took over and gradually lowered us to 2,500 feet and at this point Idlewild GCA ordered us to 1,500 feet and then an immediate descent to 500 feet. We couldn't get
No Suction?
A plane captain with the assistance of another mechanic was attempting to correct a maximum RPM discrepancy on the starboard engine of an F4F. The plane captain took position in the cockpit and the assisting mechanic took position directly under the starboard engine to make minor adjustments as necessary.

A tractor-drawn jet starting unit was used and the engine was started successfully. The plane captain proceeded with a full power turn-up, noticed the RPM error, reduced throttle and signaled to the assistant mech to make the necessary adjustments on the engine.

This sequence of events was followed three times. (During this time, the jet starting unit power leads were left connected to the aircraft receptacle and the operator of the starting unit remained seated on the tractor.)

At some time during the fourth full power turn-up, the operator of the starting unit informed that the unit was needed to start another aircraft, dismounted the tractor and approached the starboard side of the aircraft turning up. As the operator approached directly in front of the air intake of the starboard engine and started to lean over—presumably to disconnect the power lead to the aircraft—he was sucked head first into the air inlet duct of the starboard engine.

Grampaw Pettibone Says:

"About the time that I begin to relax and figure that everyone has the word on giving these jet engines that are turning up a wide berth, I see another accident report. This is about the fifth or sixth time that someone has been sucked head first into the intake of a jet, and in all cases the injuries were either serious or fatal. In this case, the victim received such serious injury that there is some doubt that he will be able to return to duty.

This accident reminds me of the following verse that was originated some time ago and contains some mighty good advice when working around jets.

"There's not much suction," said Chief Erard, "They may pull a little, but not very hard." He stopped slightly closer and held out an arm.

As though during the jet to do him some harm.

"Well, doggone me," said the F2H."
PROPAGANDA BOMBS WEAKEN FOES' MORALE

If the North Korean Railroad company has complaints about how slow its laborers are repairing rail lines cut by Navy and Marine bombs, it probably can blame propaganda leaflets which showered down along with the bombs.

Commencing last June, attacking planes have been followed in on occasions by dive bombers or fighters carrying gaily-colored leaflets. They exhorted North Korean civilians to refuse to work on military projects.

This leaflet-dropping is part of a wide campaign of psychological warfare in which all services participate. Planes shower leaflets on the enemy, loudspeakers on front line tanks or bunkers and military shells carry leaflets behind the lines. The Army has printed these sheets in multi-million quantities and the Navy and Air Force help drop them. As many as 11,000,000 have been dropped in one week by one service.

Propaganda planes from the carrier air groups carry leaflets by loading them into AN-M5A cluster adapters obtained from NAD's, forming the Mk 105 leaflet bomb. One CAG dropped a million copies of two "popular" leaflets alone to aid in the "psywar" campaign to undermine civilian and military morale behind the Communist lines.

Proof that laborers take to heart the messages on the leaflets was seen in a report that repair to certain areas of track was delayed up to three days as a result of the leaflets.

Prisoner-of-war interrogators report many captured Communist soldiers have propaganda leaflets in their pockets. Some come running toward our lines waving "surrender passes" (Fig. 5, above) over their heads—this despite Red leaders' orders to destroy any pamphlets they find.

The United Nations forces knew about this destruction order and cleverly put the Reds on the spot. One leaflet contains a large picture of the Chinese Communists flag on it. (See Fig. 7, next page.) On the opposite side were the words: "This is the flag forced upon the Chinese people by Communist traitors!" It told the finder to destroy the leaflet.

Red soldiers were given a choice of keeping UN propaganda sheets or else tearing up their own flag. The paper they were printed on was thin enough to permit reading the Chinese writing on the reverse side through the flag, so that anyone who posted the flag in his bunker also could read the propaganda.

One of the leaflets (Fig. 1) aimed at railroad workers, which was dropped in great quantity by Navy pilots, contained such advice as: "People of North Korea. For many months UN aircraft have been attacking railroads, bridges and other military installations in the terrible war which was provoked by your Communist leaders.

"UN aircraft shall remain in the skies, seeking out targets and destroying them until the Communists have had enough. Your air force has not protected you from these attacks and cannot do so in the future. Is this not so? The UN does not make war on civilians.

"We know you are forced to work on military projects by the Communists against your will. Must you not save yourselves from useless death for the Communists? Is it the fate of Tungoo's descendants to die a dog's death for the Russians?"

"You must save yourselves! Flee to the hills! Do not work on the repair of railroads and bridges because UN aircraft will attack them again and again!"
A large percentage of the prisoners of war have frankly admitted that they had been influenced into surrendering by the messages they have read on propaganda leaflets. Hundreds who said they were afraid to keep the leaflets on their persons admitted they had read them and believed the promises of good treatment, better food and living conditions.

Out of a group of nearly 100 prisoners interrogated by UN officers during one short period recently, 100% admitted they had seen, read or discussed UN leaflets. More than half had been influenced to some extent in favor of the UN.

Psychological warfare in constantly devising new methods of playing upon the enemy soldier's fears, jealousies, hopes and suspicions to lower his fighting ability. In the broad sense, "warfare psychologically waged," consists of military operations carried out with close and studied reference to the politics, opinions and morale of the enemy.

Sometimes propaganda leaflets are designed to influence Communist workers in a particular area. One leaflet was dropped near a long by-pass around a destroyed bridge on a North Korean river. It showed a vertical aerial photograph of the construction and advised Communist readers:

"You cannot deceive the Flying Tigers of the UN! They have eyes which can pierce the darkness! They see that you are building a long by-pass around the ruined bridge over . . . river! . . . Your work is useless! The UN Flying Tigers have bombed this area before and will do so again and again! Is it not a pity to die a dog's death for such useless work?"

Allied intelligence once learned that a Chinese Red unit was going to attack a certain UN hill position. Leaflets were printed hurriedly and dropped on the units "selected" to make the attack, advising them the UN knew of their "secret" plans and inviting the Red soldiers to surrender in the confusion.

Never missing a chance to earn a few shekels, the North Koreans have been known to pick up propaganda leaflets and sell them for 200 won (6,000 won to a dollar). When leaflets flutter down on an area, Communist leaders frequently slap an immediate curfew down on all civilians or else try to rope it off so the leaflets can be picked up by "trusted" help and burned.

Many leaflets were aimed at civilian farmers urging them to feign sickness when labor companies came by (Fig. 8), to dig holes and hide their grain so the Reds couldn't steal it (Fig. 4) and to refuse to work for the Communists as slaves (Fig. 9). Another one urged them to pack up their belongings and flee south to friendly territory (Fig. 10).

Psychological warfare leaflets make all manner of subtle attacks on the enemy soldier's mind. Communist leaders come in for their share of lampooning in them. One showed Stalin and Mao Tse-Tung, Chinese Red leader, linked arm in arm stealing food from Chinese mouths to feed the Russians (Fig. 3). This was tied to news of a shipment of 500,000 live pigs from China to Russia and was aimed at creating discontent among hungry Chinese. It showed China's subservience to its Russian master, seeking to create a rift between the two.

Other UN propaganda leaflets showed photographs and described prisoners' sports, good food and learning of trades while in UN prison camps (Fig. 6). How successful this propaganda tactic was may be evidenced by the fact that the Reds sent picked men to surrender and stir up riots in the prison camps at Koje.

Some concrete proof of the war's ravages was contained in another leaflet which listed the number of buildings destroyed, vehicles burned, bridges and rail lines cut by UN planes. The leaflet blamed the country's destruction on Communist leaders who started the war. This propaganda is aimed particularly at North Korean soldiers. Another, aimed at these men, pictured an aged North Korean woman grieving for her absent son. It urged the reader to quit fighting and go back home.

Many troops in the North Korean army are South Koreans who were captured in the Reds' southern pushes and forced to fight for the Communists. These men would be especially receptive to such propagandizing.

Based on a soldier's disgust for defective weapons, another leaflet pictured an obsolete Russian rifle. In cartoon form, it showed Stalin handing it to Kim
Il Sung, North Korean leader, who in turn handed it to Korean fighters. It blamed the gun’s heaviness and jamming on the Soviet.

Not only leaflets have been dropped behind the enemy’s lines with telling effect. Psychological warfare people also have tried to win friends by dropping writing paper so Chinese soldiers could write home. Of course, the writing home process would bring on a certain amount of homesickness in the Chinese soldier. What he would have to report would not be good, and the folks back home would not be cheered up either, which is what the UN wants.

Another gesture of generosity was the dropping of plastic ploifilm bags in which various small gifts or useful objects are enclosed. On the bag is printed instructions for their use, with the compliments of UN forces, to show they were interested in Communist soldiers’ comfort.

In the handy bag are such items as miniature chess boards printed on paper, matches, stationery, gift card, cigarettes and a calendar. The latter item could not fail to make enemy soldiers conscious of their long stay in the combat area and spread discontent.

Ground forces have mounted radio loudspeakers on tanks and advanced bunker positions to broadcast Chinese and Korean-language propaganda. The Navy also has not used the ‘Polly’ planes it developed late in World War II. These PBY-2s were equipped with loudspeakers. Flying low over enemy-held territory where Japs were held up they would urge them to surrender. The biggest problem with loudspeaker planes, of course, is that to be heard by ground troops clearly they have to fly low, and this means plenty of trouble from antiaircraft fire. To fly above this flak and small arms fire would require louder broadcasts and this would mean still heavier installations in the planes to produce more volume. One advantage of loudspeakers has been that enemy party leaders are unable to prevent soldiers from listening to them, even though they might forbid leaflets.

One of VC-4’s former landing signal officers, Lt. K. C. Pailer, spent most of his working hours at sea waving aircraft aboard the carrier at night. The pilot’s couldn’t see his “black lighted” suit well enough, and he objected to the ultra-violet light getting in his own eyes.

Going to work on the problem, he came up with a simple lighting system of his own for making night LSO signals visible. The results of his efforts satisfied both the pilots’ (those who have seen it) and his own objections to black lighting.

Pailer bought a couple of sets of ordinary parallel Christmas tree lights, and mounted them on a suit of flight coveralls. The light sockets were mounted in small pieces of “spaghetti” insulation and sewed at 12” intervals down the arms and legs of the suit. One socket was taped at each corner of the paddles, and these were connected into the circuit of the suit by regular Christmas tree light plugs on the cuff of each arm.

The whole business was fastened to an extension cord at the bottom of the legs and hooked up to a 12-volt battery. Standard 12-volt bulbs dipped in red aircraft dope finished the job. Plans and comment have been sent to BuAer for evaluation.

According to Lt. T. S. Lockard, an F6F night fighter pilot and present VC-4 LSO who put the suit into use when Pailer was detached from the squadron, ‘Night recovery time has been cut down considerably with the Christmas tree lighting. There is no interference with the LSO’s vision, and even jet pilots can pick up the LSO at the 90 degree position.’

In early World War II night operational flying, various types of lighted wands were used by landing signal officers in waving the planes aboard carriers. The lighted wand system had two big drawbacks in that the pilot had no vertical reference point in the dark, and it was hard for the LSO to give him a clearly distinguishable cut signal.

These two difficulties were largely overcome with the adoption of the present black lighting system for night LSO work. Unfortunately, this system has some serious faults of its own. If the LSO looks into the black lighting, it spoils his vision, sometimes even to the point that vertigo, so he is forced to wear a guard below his eyes. Because he must stand squarely in front of the black lighting source to reflect light from the florescent strips on his suit, he can’t freely move around the platform. The Christmas tree lighting system of Pailer’s eliminates both of these objections.

‘Signals can be given with the same rapidity as in the daytime,” says the enthusiastic Lockard. “There is no blurring effect that is present with black lighting, and it’s a big advantage to the LSO not to be limited to one position on the platform.’

Other VC night pilots on the Midway where Pailer’s system is used by Lockard and Lt. (jg) J. Proctor, CAG-6 LSO, enthused their praise of the “Christmas tree” suit.

Lt. (jg) J. Q. Quinn, a VC-4 Banshee pilot added, “With the Christmas tree lights on the LSO at night, you can see everything but the frown on his face.”
Celestial Link Goes to Pole
Arctic Navigation Now Being Taught

They're dusting off the celestial Link navigational trainers of World War II days and preparing to use them to teach high speed, high altitude polar navigation.

The old celestial Links are being modified by Link Aviation Inc., retaining the old celestial dome with its gear box drive. The tower-mounted fuselage and ground projecting mechanism have been supplanted by an observation platform and student navigator training booths. More than 500 of the silo-like navigation trainers were made during the previous war for day and night flight check-outs.

In the modified trainer, simulated flights are possible in any direction, at any northern hemispheric geographic position above 55° north latitude. Simulated air speeds vary from 100 knots to supersonic speeds and altitudes up to 100,000 feet, with winds of zero to 200 knots.

Principal change in the celestial dome is the addition of the sun in place of one of the 12 original navigational stars.

In Her Husband's Footsteps
Crewman's Widow Asks WAVE Duty

A young NAS Quonset widow has offered to take her husband's place in the Navy. Mrs. Constance Quirk, whose husband John, was killed in a plane crash off Block Island last fall, only 12 days after their marriage, has applied to join the WAVES.

Mrs. Quirk told recruiters that she wants a job as much like her husband's as possible. In this case, it is quite possible she will get the duty she applied for. If she follows her husband into naval aviation, she will work in the control tower, directing planes.

FREAK CRASH TRAPS MARINE FILER

2ND MAW, CHERRY POINT — A freak accident trapped 1st Lt. Richard E. Kern upside down in the cockpit of his Corsair for 2½ hours following an emergency landing at ALF Atlantic, N.C.

Kern, a pilot with VMA-332 from 3d MAW Miami, escaped with only a dislocated shoulder after the harrowing experience of being suspended upside down while his squadron mates failed trying to reach him by digging frantically with their hands.

The rescue had all the elements of a thriller. Kern was returning from a bomb and rocket strafing run when his engine developed trouble and he overshot the landing strip. (See photo.) The plane hit a stump and flipped over on its back with the stump welded up through the inverted cowl into the cockpit.

No crash equipment was available at the landing strip and Kern was pinned in a cramped position, the stump blocking his escape and preventing rescuers from reaching him.

Capt. B. E. Beeghly, his flight leader, followed Kern into the field. Having no shovel, he dug with his hands around the cockpit opening so Kern would not be suffocated by gasoline fumes. He then radioed to Cherry Point for help.

Four helicopters from HMB-26, led by Maj. William E. Brown, were among the first to arrive. Immediate aid was needed. The helicopters took off and landed at various civilian homes near the field and in Atlantic requesting loan of shovels. Cooperation of the civilians was instantaneous.

Meantime crash crew personnel arrived by transport plane bringing more rescue equipment. All hands dug out the stump and freed the pilot. Because of his long vigil in the cockpit, Kern was unable to lie flat on the stretcher. The helicopter flown by Maj. Brown landed him on the lawn of Cherry Point infirmary.

Jets Touch-Go on Carrier
Boxer Air Group Claims It Holds First

USS BOXER—The Boxer’s Air Group Eleven claims a first in naval aviation, being the first air group to qualify in the art of ‘touch and go’ jet landings on board a carrier.

VF-112, commanded by Lcdr. C. E. Lair, Jr., and VF-113, under Cdr. J. H. Tripp, tried out the technique of power-on touch and go landings without barriers when the carrier was operating off San Diego.

With flight deck barriers unrigged and tail hooks retracted, the pilots made five landings. On the sixth landing, the arresting wires were raised and the hook brought the plane to a normal stop. Should the hook fail to engage a wire, the pilot merely adds throttle and takes off again.

This technique of landing was used successfully when the new canted deck on the Antietam was tried out. The Boxer’s checkouts gave its pilots a taste of this type of landing since the Antietam has no barriers.

Out of a total of 324 landings on the Boxer, only one barrier crash occurred, resulting from a broken deck pendant.

• MCAS Cherry Point—The first RQ-2 Fairchild Packet is assigned to the Marine Corps have been received by VMB-155.

AIRPLANES can't flap their wings, but this one does the next thing to it. The Bell X-5 research plane, shown here in multiple exposure photo, can change the sweep-back of its wings in flight to gather data on aerodynamic effects of changing sweep. The plane has made more than 60 flights.

COMFAIR Jacksonville has Lt. Homer Mor- rison as one of its top jet gunners after he put 102 rounds of 20 mm cannon fire into a tow banner target out of 284 shots fired. Morrison flies F2H-2 Banshees with VF-62. He was in VOS-2 during WWII and got refresher training at NAS Floyd Bennett field in 1951.

MAY 1953

11
Twin Crash at Sea

Not once, but twice the crewmen of a PBY-5 Neptune patrol bomber were cast into the sea to await rescue from their tiny life raft.

The VP-22 patrol bomber was on a routine patrol in the Formosa Straits when it was hit by ground fire and the crew was forced to ditch. The Navy and the Coast Guard immediately dispatched planes and ships to search for survivors. A Coast Guard rescue plane picked up the men from this first mishap, but it crashed and burned on takeoff.

Once again the Navy and Coast Guard men abandoned the plane and took to the heavy seas in life rafts. Ens. Donald K. McElroy dived into the rough seas to assist the weakened survivors to safety. The destroyer Halley Powell was the first to sight survivors of the second mishap. Seven men were found alive in a life raft and taken aboard and three others were rescued later.

Clay Pigeons

Day in, day out, during the Korean war, helicopter pilots and crewmen have carried on their rescue work without benefit of headlines. It’s part of their job and they don’t hesitate at all when it comes to hovering over a downed pilot while the Reds take pot shots at them.

Lt. Leonard A. Henke and Lt. (jg) James B. Overton of VC-3 call the appearance of a helicopter the most welcome sight a combat pilot can ask for.

They were sporting for the guns of the USS Los Angeles which was shelling targets in the Wonsan area, when Overton’s Corsair was hit. Flak was intense and accurate and several times Henke’s plane was rocked by the exploding anti-aircraft shells.

Henke was at 4,000’ and Overton about 2,000’ below when he was hit. The first thing Henke noticed was that Overton’s tank, still partially full of gas, was on fire. Soon the flames were licking the cockpit and the engine exploded. The plane banked sharply and dove into the water at a 30° angle.

Henke hadn’t seen his fellow pilot bail out and so he assumed that from the speed of the plane and its angle of impact with the water Overton was
killed. He radioed the Los Angeles, asking them to send their helicopter to the area. He directed the pilot to the spot where the plane had gone in.

The chopper flew low over the crash scene and the pilot reported that he couldn't see anything but bits of debris floating on the water. The helicopter was being fired on by small arms from the beach, so Henke began strafing runs with his 20 mm cannon aimed at the source of the ground fire. As he flew over the chopper pilot, he could see bursts in the water all around him as he hovered practically motionless a few feet over the water's surface, like a clay pigeon in a shooting gallery.

The helicopter pilot was about to give up and return to the Los Angeles when the ship radioed that they had spotted Overton on the beach. Henke and the chopper pilot spotted Overton at the same time. Henke began making more strafing runs to give covering protection to the downed pilot and the chopper.

Overton would run a few steps toward the incoming helicopter, then hit the sand. He repeated this performance two or three times until the chopper reached him. The last thing Henke saw, before flying south to land at a friendly airfield behind the lines, was his fellow pilot dangling from the "whirlybird's" rescue line as they flew off to the Los Angeles.

Only two weeks prior to this incident, Overton was hit by AA in this same area and crash landed wheels up on a friendly strip on Yodo Island in Wonsan Harbor. At about that same time, Henke, flying in pre-dawn darkness, spotted a truck moving along with its lights on. He made a low strafing dive and the truck blew up as he passed over it, putting 20 holes in his plane.

It Happened to a "Ghost"
The "Grey Ghost" of the carrier Kearsarge won't be haunting the Reds over North Korea for some time, because one of the enemy found out that even a ghost can be hit.

The F9F Panther jet from VF-141 received its name because it sports a natural aluminum color instead of the conventional Navy blue paint job. It is being tested against the elements to determine how well the metal surfaces will resist corrosion.

Ordinarily, the Starbuster's skipper, LCDr. Frenchie Roberts, flies the "Grey Ghost," but one day operational commitments necessitated a change in pilots and Lt. (jg) Jocko Schlisser went out instead. The "Ghost" and two other Panthers were on a reconnaissance mission near Songjin when Schlisser's plane received a direct hit in the left wing from an enemy 37 mm shell.

The resulting hole was large enough for a man to put his head and shoulders through. Although the plane was extremely difficult to control, Schlisser managed to return to the Kearsarge and land without mishap.

When LCDr. Roberts saw the damage that had been done to his plane, he growled at Schlisser in mock anger, "That's the last time you'll get the keys to the family car."

High Man at 23
First man of Capt. W. R. Hollingsworth's carrier, the Princeton, to pass the 100-mission mark in Korean combat was Lt. (jg) William F. Moore. Only 23 years old, Moore led all other pilots on the flatop, now operating off North coast. His 100th mission was flown to within four and a half miles of Manchuria and nine miles from the Russian border.

Ride 'Em, Cowboy!
Texas-born Ens. Bill Doggett of VA-145 aboard the Kearsarge probably has had many a rough ride on a bucking bronco, but he had to go all the way to Korea to get the roughest ride of his life.

Doggett was flying in an eight-plane strike against an enemy gun position in "Artillery Valley," when a 37 mm anti-aircraft shell hit the propeller of his Skyraider and exploded. There was a loud bang and then he saw an orange puff of smoke blossom just forward of the cockpit.

The explosion had torn a hole the size of a grapefruit in one blade of the propeller and had punched over 100 holes in the engine cowling and right wing. Jagged, foot-long streamers of metal chewed the propeller off balance and set up a terrific vibration that threatened to shake the plane apart. Doggett described the sensation as "a cross between a reducing machine and a Texas bucking bronco." To add to his troubles the engine began smoking heavily because of a damaged oil line.

For 40 minutes he fought the bucking aircraft as he skimmed 100 miles over the tops of mountain ranges, occasionally skirting towering peaks he couldn't clear. Finally, the airstrip came into sight. He circled once, then set the plane down in a perfect landing. The weary but happy pilot was flown to his carrier while his plane was turned over to armed repair crews at the airstrip.

When LCDr. Harry McLaugherty, CO of VA-145, saw the damaged plane, he remarked that he had never seen a plane that badly mangled make it back. The plane needed a new prop, new engine and hydraulic and structural repairs. All En's Doggett wanted was some sleep. His rough ride had tired him.
Veteran Carriers End Tour

As the Essex completed her second Korean tour, Lt. (jg) John Harris and Lt. (jg) Joseph Adams were the only pilots in Air Task Group Two who owned 100 combat missions. Harris led Adams in missions flown over war-ravaged Korea by 157 to 114.

Only five months after Harris won his gold wings at NAS Pensacola, he took part in the first Navy strike in Korea, flying from the Valley Forge. Adams made his debut against the Communists as a Princeton pilot in May 1951. He has since completed two tours on the Essex, while Harris flew from the Princeton on his second tour.

The jet photo detachment of VC-61 aboard the Essex completed the first full combat tour with F2H-2P Banshee photo planes aboard a carrier. Although other detachments of this squadron have used Banshees during their Korean tours, the Essex detachment was the first to use them from start to finish.

With the departure of the Badoeng Strait, ending her third tour of duty in Korean waters, the famed Marine Checkerdownd Squadron, VMA-312, transferred its operation to the Batan.

When the Bing Ding staged its homecoming celebration at NAS San Diego, the guest of honor was Miss Nina Warren, daughter of California's Governor. Miss Warren, once a polio victim, accepted a check for $5,400 on behalf of the National Foundation for Infantile Paralysis. The ship's crew dug deep into their pockets to raise the money to help fight the dread disease.

Happens Last

A unique situation occurred in the Sea of Japan off the Korean east coast when RAdm. Apollo Soucek, ComCarDiv Three aboard his flagship Valley Forge, relieved RAdm. R. F. Hickey, ComCarDiv Five aboard the Kearsarge, as Commander TF-77.

It was the first time in the history of the Korean War that a commander of TF-77, riding his own flagship, has commanded his own carrier division in the task force. CarDiv Three consists of the Valley Forge, Philippine Sea and the Kearsarge.

The unusual situation arose because of the different rotation dates of the ships operating in the Korean combat zone. Carriers are relieved on the combat line for stateside maintenance and overhaul singly, rather than in divisions. As a result, their dates of detachment and return to the line must vary. It was purely by chance that these attack carriers in CarDiv Three were united in combat.

Waltz Over the Waves

Moving day is enough of a problem on dry land to give anyone a headache, but when it comes at sea, it's no fun at all. That's what happened to the 112 officers and men who make up the staff of COMCARDIV 5, RAdm. Robert F. Hickey. They went bag and baggage over the highline from carrier to tanker to carrier.

The transfer came about when the admiral received orders to shift his flag from the Kearsarge to the Oriskany. TF-77 was restocking depleted ammunition and provision stores when the transfer was effected. Despite towering waves and icy winds, the entire operation went off like clockwork. The shift of personnel plus approximately 10 tons of freight and baggage went without incident.

Tragedy Aboard Oriskany

A young Navy cameraman aboard the Oriskany recorded on film the tragic moments before a wild bomb exploded, killing him. Thomas Leo McGraw, Jr., was at his station, standing by to take photos of any untoward incidents during carrier landings, when Lt. Edwin Kummer landed his Corsair with a bomb still dangling from the wing. Kummer had been on a mission over North Korea and the bomb had failed to be released over the target.

McGraw saw the bomb drop and started his camera. The film shows the action as the bomb bounced twice on the deck, skidded toward McGraw and exploded. The photographer was killed instantly, and the camera was shattered by the explosion. Somehow, the film escaped destruction.

Hot fragments and flames killed Thomas M. Yeager and wounded 15 others. Yeager was struck by the shrapnel while repairing electrical circuits of a plane parked on the hangar deck. Langford W. Henshaw, seriously wounded with a large piece of shrapnel in his own back, dragged Yeager from the debris and burned area in an effort to save his life.

More heroism was displayed as Airman Richard Donovan plunged through flames and exploding ammunition, disregarding his own personal safety, to rescue the unconscious pilot. Lt. Kummer miraculously escaped death, suffering only burns and minor injuries. Donovan cut the pilot from his parachute harness and with the help of Airman Michael J. Yok carried him to safety.

The ship's medical department was on the spot immediately, administering aid. The ship's doctors and medical corpsmen worked throughout the night and the following day. Hundreds of blood donors lined up to donate to their wounded shipmates.

The greatest danger to the ship came when the gas tanks of an F9F Panther on the hangar deck were pierced by hot bomb fragments. The hangar bay, flood-
ed with gasoline, was immediately isolated. Thoroughly-trained, tireless repair parties worked continuously throughout the night to repair the damage. The next day the Oriskany was fully operational. Special memorial services were held for McGraw and Yesger.

The rapid repair of the flight deck to full operational status brought a "Well done!" from VAdm. J. J. Clark, Commander 7th Fleet.

The Rugged Corsair

With all the to-do the newspapers have been making over 'The Last of the Corsairs," Ens. Dan Bryla's veteran plane added one more striking performance to a long list of battle feats.

Flying a Corsair from the Valley Forge on a coordinated strike against the Chosen Number One hydroelectric power plant, Ens. Bryla underwent an experience every pilot dreads. He began a steep attacking dive from 17,000' and the target was closing in on his gunsight, when, midway in his dive, his plane began to shudder and flutter about violently.

At first he thought it was caused by the enemy's anti-aircraft fire which was bursting around him as he closed on the target. As the shaking and yawing became worse, he realized that his plane was travelling fast enough to cause compressibility shock waves to develop around his control surfaces, making control of the plane almost impossible. He immediately released his bombs, chopped off his power and pulled back on the stick to recover from the dive.

Before he reached a horizontal position, his plane suddenly flipped over on its back. The ailerons froze and Bryla was unable to roll out to an upright position. He attempted a recovery by pulling the Corsair through a half loop or "Split S." More speed built, the stick began to freeze and the dive steepened. The pilot grabbed the stick with both hands and pulled back with every ounce of his strength. At the same time, he was exercising all the pressure he could put on the left rudder pedal to compensate for the speed.

He began to "grey out" and saw, as he slowly began to reach a level flight attitude, that he was headed straight for the middle of a 4,000' ridge of mountains surrounding the target area. By this time, Bryla was sure his number was up and he was plenty scared.

Luckily, the Corsair barely skimmed over the ridge and Bryla began to join up with his group from the Valley Forge at the same time trying to avoid the flak bursting all around him. With some of the strain of his hairier experience passed, he began to notice exacerbating pains in his left hip, stomach and shoulders. He was faint and felt very weak, but, after turning on 100 percent oxygen, he began to feel better.

When he approached the Valley Forge for a landing, he rocked his wings to let the LSO know that he needed to land at once and didn't think he could take a wave off and circle the carrier traffic pattern again. The LSO signaled a cut and he landed. The jerk of the arrested landing shot sharp pains through his body, but he found them almost enjoyable, knowing he was back home and in one piece.

Bryla was taken to the carrier's sick bay where medical examination revealed a broken left hip and strained shoulder and back muscles. Of the two, the plane withstood the experience far better. The next day, the rugged Corsair was back in the air, flying on combat missions.

Seemed like an Eternity

A really grim moment cropped up in TF-77 when Phillip Tucker, a young deck crewman on the Philippine Sea, fell overboard while pushing a jet into launching position. The ship's helicopter, manned by Lt. (jg) Leroy Kile and Richard A. Myers, lifted Tucker from the churning waters in less than a minute.

Although thoroughly chilled, Tucker was unharmed. Rushed to sick bay, he chattered out his story while consuming hot beef broth. "I don't know just what happened, but there I was bungoing in the sea. I waved and bellowed as loud as I could to make sure the helicopter pilot could spot me. Seems I was there an awful long time."

He was told the official log showed he was in the water only 50 seconds.

Korean "Thanks"

When a Marine Commandant says, "Well Done!" the Leathernecks know that they've done a bang-up job. When the people of Pyongteek turned out for "Marines' Day," the men of MAG-12 were given an ovation they will always cherish, as Koreans are just as reticent as the old man.

The citizens of Pyongteek were grateful for funds and clothing given them by MAG-12 and they took particular pains to say so. All city officials made speeches about the Leathernecks' generosity. They were flanked by principals from 15 grade schools and one high school, and representatives of the Women's Club and the Junior Chamber of Commerce.

Lt. Sidney E. Walters, who has been working with the Junior Chamber of Commerce, presented a Marine fund which will allow an additional 10 children to attend Pyongteek's school.
RELIEF MAPS AID KOREA BOMBING

Maj. Cushman, MSGT. Meck Developed Idea

SPOTTING pinpoint targets under
snowy terrain in Korea proved diffi-
cult until pilots of Marine Aircraft
Group 33 began carrying sections of
three-dimensional plastic relief maps
in their cockpits.

Familiar landmarks such as roads, rail
lines and river are difficult to find when
snow blanketed the Korean hills. Some-
times they were obliterated, making
them useless for target area identifica-
tion.

The main landmarks like large rivers,
mountains and lakes still were visible.
Many pilots find it difficult to interpret
flat maps since they do not show graphi-
cally elevations and depressions. Korea's
rugged terrain adds to the confusion and
pilots had a hard time untangling a maze
of contour lines to spot them as moun-
tains, ridges, draws, noses, saddles and
the like.

Maj. Thomas J. Cushman, operations
officer of VMF-311, got the idea of using
three-dimensional plastic relief maps for
target identification. The maps, de-
developed by Army Map Service as Series
L-932, were available in limited quantity.

Group fliers had used the relief maps
frequently in their ready rooms, but it
was desired to have small segments to
carry in their small Pitt cockpits. First
hurdle met was the scarcity of the relief
maps. Working with MSGT. Chester
Meck and 1st Lt. William A. Bowden,
Jr., of the intelligence section, Cushman
was able to secure a sufficiently wide
coverage of the group's operational area
to give it a try.

Map sheets of the vinyl plastic were
cut into sections, along the coordinate
lines, roughly 6" x 10". These were
thumbtacked to plywood sheets to pre-
vent damage. Cushman tried them out
on a mission and was enthusiastic about
their value.

Because of the shortage of maps, only
the strike leader gets a section to carry
with him. Occasionally a target lies on
the edge of a pre-cut segment, so the
value of the map is lessened since the
pilot cannot get a picture of the terrain
forms surrounding his target. MAG-33
hoped to fix this when more maps be-
came available by using a simple overlap
system.

Flight leaders found the technique
highly satisfactory and estimated use of
the relief maps increased target location
from 10 to 20%.

Let the Receiver Beware!
Friend's Gift Starts Hobby for Chief

In the beginning, Chief Oscar H. King
of NAS Norfolk didn't believe that
birds were worthy of the title of man's
best friend. Maybe he even thought that
the little feathered creatures were a bit
on the stupid side.

His ideas began to change when he
was returning from duty in Korea and
stopped in Honolulu. A friend gave him
two homing pigeons as a gift and from
that day on he was sold on a hobby.
When he arrived for duty as NAS
Norfolk, he built an aviary which now
houses 48 of his little friends.

Last fall one of his little racers re-
turned from Greensboro, North Carolina,
leading more than 150 other birds in
the 214-mile race. Not all of his birds
have performed in such an outstanding
manner, however. Last July he released
one of his pigeons and it concluded its
six-month marathon when it finally ar-
rived at the aviary in January.

Another time, a hawk with a hungry
look RAIDED the loft and succeeded in
frightening the smaller birds. The next
day King entered one of his feather
mechanics in a race. The pigeon flew
home in winning time, but wouldn't
land with the memory of the hawk still
uppermost in its head. After a good deal
of frantic coaxing, the bird finally came
to roost, but not before the chief's entry
had lost the race to another homing which
lit out for home without delay.

VADM. Ofstie Aviation Head
Replaces Gardner As Air Deputy Chief

A change in command in the top echel-
on of naval aviation took place on 16
March when VADM. R. A. Ofstie re-
placed VADM. M. B. Gardner as Deputy
Chief of Naval Operations (Air).

VADM. Ofstie came to the Pentagon
from his post as Commander of the U.S.
First Fleet in the Pacific. Until his posi-
tion there has been filled, VADM. H. B.
Martin, ComAirPac, will serve tempo-
rarily in that spot, as well as heading up
Pacific fleet aviation.

VADM. Gardner moves to Deputy
Chief of Naval Operations (Operati-
ons), where he replaces VADM. James
Fife.

Officers under DCNO (Air) recently
underwent a sweeping reorganization
which realigned OP-95 activities. Among
them was NAVAL AVIATION NEWS,
which was removed from Aviation Plan-
ing division and placed directly under
DCNO (Air), changing from OP-95 to
OP-95A.

He Wasn't Leatherneck Type
Marines Recall Star Refused by Films

Hollywood sometimes guesses wrong.
Lt. Frank Mullen, Marine Reservist who
is stationed at MCAS El Toro has
played practically every military part in
the movies but has never been cast as a
Marine.

He was turned down for " Sands of
Iwo Jima" as not being the Leatherneck
type. The Marines didn't agree with
Hollywood, however, and last year re-
called him to active duty. At the time he
was playing Commander Kit Corry on
the television serial, "Space Patrol."
Youthful viewers were informed that
her hero was going on a highly secre-
tive mission in the interests of inter-
planetary peace.

Part of the secret mission will include
attendance at the Forward Air Control-
er's School at Coronado in preparation
for leaving as a future replacement.

BIRD KING HOLDS COULD BE SIX-MONTH STRAY

VADM. OFSTIE WAS PANHANDLE CHIEF OF STAFF

NAVAL AVIATION NEWS
HUMOROUS SIDE OF AIR INVASION

"THIS MUST be some kind of record!"

No better summary could be applied to Airlox II, as seen through the eyes of all hands in VMF-235, based at MCAS El Toro. The three-day maneuver saw the vertical envelopment and capture of the enemy airfield Ambush, located at Mojave, Cal.

Subsequently, a complete Marine infantry regiment with its equipment, was airlifted into the area and a strong airhead was established. The Flying Packets of VMF-235 made 159 sorties totalling 195,975 passenger-miles and 75,124 ton-miles. They packed a little item of 1,661,500 pounds during the exercise.

With typical Marine Corps thoroughness, the exercise stressed teamwork and realism as the criteria for success. Unloading time at Ambush was cut to three minutes for one mission, as the air crews attempted to avoid enemy air strikes on the strip.

At times this emphasis upon realistic conditions led to some humorous developments.

During the first day's operations, while enemy troops still held strong positions around Ambush, an RQ para dropped supplies to the friendly forces. Another plane, forced to remain on the deck for simulated repairs, was stormed by an angry sergeant who demanded:

"Who packed that paratainer with horse manure?"

The pilot explained to him that rear echelons of his own regiment had ordered the gear and also packed the paratainer. The sergeant stomped away muttering: "What good is horse manure to the company in this freezing wind!"

Capt. Bill Breau was told by an umpire that he had been "strafed" by hostile jets while unloading at Ambush. He would have to remain on the deck for repairs, he was told. Not to be outbluffed, the captain asked, "What part of my plane has been damaged?"

Unhesitatingly, the umpire replied, "Number three prop governor was hit by a shell."

The dauntless aviator pointed out that the RQ is equipped with only two propellers. After a close scrutiny of the twin boomed aircraft, the official offered, "Number two prop governor."

"But," countered the indomitable plane commander, "we don't have prop governors on the Q."

Never to be outflanked, the umpire settled the discussion: "Your fuel pump has been shot up, and you will stay on this field for repairs!"

Contributing to the Herculean effort to unload expeditiously was the squadron's civilian Fairchild representative, R. E. Steward. As "Stew" explained later, "I was cleaning up loose ends in the cargo compartment preparatory to taking off, when I saw this two-by-four come sliding in through the back door. It had a black flag on it. I threw it out of the plane. Again, it came back in, and I tossed it out.

"Then a major's bewiskered face appeared at the door. 'Just where do you think you're going?' he asked. I said, 'Home.' 'Oh, no you're not!' he yelled at me. You were just strafed, and you'll be down for several hours.' I said, 'OK' and we stayed.'"

One pilot, Maj. G. L. Anderson, remarked that the Packet never gave the squadron any trouble. His co-pilot philosophized, "The RQ is like a good woman: not troublesome enough to scare you away, but just rambunctious enough to keep you interested."

By 2nd Lt. Gerald J. Ringer, VMF-235.

VMF-235 Opens its Heart

Two Sick Lads Entertained by Marines

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COAST GUARD, Navy and Air Force cooperated to save 10 men whose P2V was forced to ditch in the frigid Atlantic ocean and break in half when it slammed into the swells.

LCdr. James R. Bird, the pilot, flashed his plight to the Coast Guard search and rescue center in New York and the SOS was relayed to RDF stations along the coast. In 16 minutes a B-39 from Kindley Field, Bermuda, was taking off with a lifeboat slung on its underside to drop by parachute. Five minutes later a Coast Guard PBm took off.

With one engine out, LCdr. Bird began heading toward the Coast Guard cutter Coor Bay, which had left Portland, Me., that morning to patrol the Bermuda-Azores sea lanes. The cutter turned on its YR homing beacon to guide the P2V, keeping in touch by radio and plotting the plane's position by radar.

On board the cutter, crewmen prepared life rafts, float-equipped litters, acetylene cutting torches and other rescue gear. Others donned exposure suits. When the plane's fuel was sufficiently low, Bird brought the Neptune down into the water nose-high. The tail section broke off in the impact.

Lifeboats from the cutter picked up six men in liferafts and four from the water at 10:32 a.m., an hour and a half after the plane radioed for help. The Navy men were transferred to the cutter Banatura which took them to New York, and the Coos Bay went back to her sea patrols.

Men aboard the VP-16 plane from NAS Jacksonville were Bird, Lcdr. George M. Battle, Enr. Arthur P. Marking, John C. MacDonald, ADj.; Joseph E. Smith, ADJ.; B. A. Cooley, AGC; W. V. Evans, Axs; Frederic M. Horn, ALJ.; Thomas F. Grumling, ALJ.; and W. C. Stumpner, AT.

Sub Man Flies Blimp, Plane
Landon May Be Navy’s Triple-Theater

NAAS WHITTING FIELD—A student taking flight training here soon may become the Navy’s first triple-threat man—a submariner, blimp pilot and heavier-than-air pilot.

He is Lt. James B. Landon. He spent three years in submarines during World War II. In 1947 he went to Lakehurst and became an airship pilot with ZP-1. While in that squadron he became one of the first blimp pilots to make a landing aboard an aircraft carrier.

Landon entered HTA flight training at Pensacola in October, 1952, and flies from North Field with his instructor, Lt. W. C. Jackman.

New Training Books Sent Out
Recognition, Aerology Data Ready

Several new books or posters of interest to naval aviators and aircrews are being distributed to the fleet.

- **Aerology for Naval Aviators**, NAVAER 00-80U-25, replaces the WWII publication. The new book is loose leaf to permit revision.
- **First Aid for Air Crews**, NAVAER 00-80Z-17, originally an Air Force poster, has been revised and printed on waterproof, foldable paper so it can be stuffed in a flight suit pocket and be readable even after dunking.
- **Soviet Operational and Experimental Aircraft**, NAVAER 00-80Z-16, a Restrict-
AND THERE I WAS ....

With their hearts in their mouths, they feathered the engine, dumped as much fuel as they could and circled for an immediate landing. Investigation proved that a fearless Gooney had succeeded in cramming himself down the carburetor aircoop and No. 2 had cooked its goose.

It was later rumored that the pilots filed complaints against the Midway tower for failing to keep the field under positive control and ATC for failure to include essential traffic in the clearance. The CO of Gooney Birdton 387½ was reprimanded for failure to issue a night-flying schedule.

A Wise Guy, Hey?

Chief Warren J. Henderson of VR-31, battling bad weather brought his helicopter into a safe landing in a drive-in restaurant parking lot. Then he got out and calmly ordered a hamburger.

Henderson ran into a cold front and poor visibility while flying from Atlanta to Nashville. There was nothing for him to do but land at the first spot with room enough for his aircraft.

Henderson almost didn’t get his hamburger, though. The drive-in manager thought he had a wise guy on his hands until he looked out the window and saw the helicopter.

Good Shooting?

Back in 1931 a pilot in VF-I, the enlisted pilot’s squadron, came back with 104 holes in the gunnery sleeve during IBP. Since his gun had been loaded with only 50 shells, this was quite a feat.

The umpire, of course, ruled that the man couldn’t be credited with more than 100% hits—but wait a minute! LCdr. J. J. (Jocko) Clark belligerently claimed that his man had personally put those 104 holes in the sleeve.

Looney Gooney in Hot Seat

One of VR-5’s new F4Us recently returned from a special lift to the Far East with a tale of a short but heroic encounter with a looney Gooney bird on Midway Island.

The plane had made a gas and breakfast stop at Midway on a flight from Atsugi to Barber’s Point. After servicing the plane and completing the flight planning for the short haul to Barber’s Point, the plane taxi’d out, received a flight clearance and commenced its takeoff run.

At the lift-off speed, the manifold pressure and BMEP gauge on No. 2 engine began a slow but steady drop-off. The crew began to think they might as well have left No. 2 back at the terminal. Having spied numerous Gooneys engaged in field carrier landings and night taxi practice (without running lights), the pilots began to speculate on the possibility that No. 2 engine had swallowed the bird.

Voice of the Reserve

When United Nations forces poured ashore following their successful assault on Inchon in the fall of 1950, they received many gestures of welcome from South Koreans liberated from the yoke of Communist occupation.

Overnight, hastily painted and crudely lettered signs blossomed on dwellings and other buildings from Wolsin-do to Kimpo. Most proclaimed in bold letters, “Welcome U. N. Army” or “Welcome U. S. M. C.”, but one in particular stood out bigger and bolder than all the rest for the world to see. This sign virtually shouted at the passer-by: It read, “Welcome U. N.—U. S. M. C.—U. S. N. R.”
500,000th Technician ‘Out’
Command Graduates Many in 10 Years

On Friday, 6 February, the 500,000th trainee was graduated from the Naval Air Technical Training Command.

Lakehurst's technical training unit, commanded by Capt. G. V. Walker, graduated two classes on that day—an aerographer's mate class A and a parachute riggers class A. The honor man from each of these classes was selected as a member of the Half-Million Club. Capt. Walker officially swore them into the club and gave them membership certificates.

The Naval Air Technical Training Command was formed on 1 October 1942 at the Board of Trade building in Chicago’s loop. RAdm. Albert C. Read, who piloted the NC-1 across the Atlantic in 1919, was in command of the new activity. In just a few months more than 10 years after it was formed, NATTC was to graduate its 500,000th student.

Representing the aerographers school was William Blumen, AGAN. He was detailed to Coco Solo. Representative of the parachute riggers school was Steve B. Abrahamson, PRRN, formerly with VS-24 at Norfolk. He went to Kingsville, Tex.

JUBILANT BTU-2 LEADERS HONOR THE OCCASION

BTU-2 Sets All-Time Mark Flies 25,000 Hours Without Accident

NAAS CORRY FIELD—When the last plane landed here on 10 February, officers of Basic Training Unit Two heaved a sigh of relief and immediately laid claim to an all-time Navy record of flying 25,000 hours without an accident.

BTU-2's safety record began on 16 September 1952 with a goal of an accident-free month. Seven months went by without an accident and still the days piled up, adding to the record. An almost unbelievable aspect of this record is the different types of training done during the period. Flight students received instruction in basic instruments, basic formation tactics, basic night flying and day landing practice.

Capt. Charles C. Gold, commanding officer of Corry Field, and Cdr. M. E. Woyke, OinC of BTU-2, claimed it was enthusiasm and safety consciousness that set the record, not any super-secret methods.

In honor of the occasion, Cdr. Woyke presented a 10" cigar to Lcdr. V. W. Lydon, safety officer of the unit (see photo). Lcdr. R. W. Cramlet, assistant OinC, gives him a light with a blowtorch.

Ubangi's Try High Altitudes Jetters Get Hits on 41,000 Ft. Runs

NAS GUANTANAMO BAY—Having successfully completed 25,000 foot gunnery competition in this Cuban area, VF-12, the Flying Ubangi's, commanded by Cdr. J. M. Breen, started going to greater heights in their jets.

A highly successful start was made with half the squadron qualified at 35,000 feet. Scores as high as 14% hits were attained. A test was conducted to see how high gunnery competition could be carried out successfully. It was determined that runs could be made from 43,000 feet on a banner being towed at 41,000 feet. Only one plane made the runs, getting three hits on the banner with 50 rounds.

Lt. (jg) Nip Navarre riddled the target sleeve at 35,000 feet with enough 20 mm cannon shells to qualify for a Navy "E," thus becoming the first in the Atlantic fleet and possibly the entire Navy to do so. Lt. (jg) Clyde Alber and Charlie Knighten missed getting the coveted award by one shell each.

VMF-235 Wins Safety Award

Covert Pennant Tags Marines as Tops

A Boston Brave "farm club" has captured its fourth pennant in the past year and a half, a record that the "parent club" would have trouble equalling. The Beantown-endorsed "fans" are members of VMF-235, based at MCAS El Toro.

VMF-235, a peacetime Reserve squadron from Boston, won the coveted Pacific Fleet safety award for its enviable record of close to 2,000 accident-free air hours from 1 October to 31 December. Competing with more than 40 Navy and Marine squadrons for the honor awarded quarterly, the Marines posted some 200 more hours in the air than their nearest jet competitor and more than 500 hours over the closest propeller-type aircraft unit.

This latest victory in the safety field for the Boston baseball "mascots" was no tea party. The trophy was won during a period when the pilots were checking out in F9F Panthers. Only six of the 65 pilots had previous experience with jets and a great many of the pilots were inactive Reservists whose only training in the past six years consisted of a dozen hours in WW II-type planes.

Squadron officers attribute their outstanding safety record to team spirit, the professional competence of maintenance personnel and pilot indoctrination (Editor's Note: This story was written before the Braves went to Milwaukee.)

WEARING THE uniform of a Nazi lieutenant general, Marine Capt. Edward A. Schaefer, of MCAS Cherry Point, showed up at the main gate and baffled security there. MP Sgt. J. B. Boyce and Pfc. D. Shrewsbury checked his credentials before passing him.
COOKIES WORRY CRASH-LANDER

2ND MAW, CHERRY POINT—"Let's do something tonight, Mary. Something exciting."

Maj. Leo P. Frohe of VMA-211 was talking to his wife on the phone. In front of him lay a pile of soaked, dye-stained flight clothes. He had just gotten back to base after having ditched his AD-2 in cold Pamlico Sound and spent an hour in his life raft.

He was alive because he knew how to ditch his plane successfully, his survival equipment worked and rescue was quick in coming.

Flying on an instrument training hop over the Sound, Frohe's engine coughed and stopped. Diagnosing the trouble as fuel starvation, he used the electric booster in an attempt to start the engine again. He was unsuccessful, so he notified his wingman, 2nd Lt. Alex Morrison, and began looking for a spot to ditch.

Morrison radioed the "Mayday" call for help while Frohe headed his dive bomber toward a little island. "When I saw I couldn't make the island, after gliding three miles, I made an easy turn into the wind and kept hauling back on the stick to get my speed down to 90 knots. I set her down about 1000 yards from the island," he said.

The ditching was uneventful and the pilot climbed out on the wing to begin untangling his harness. "It seemed like she stayed aloft a long time, then suddenly—woosh! There I was in the water, wet up to my neck."

"I partly inflated my life raft and climbed in, then attached my parachute to the raft as a sort of sea anchor. Then I broke open the dye tabs to mark my position to help searchers find me."

"Everything worked fine. I never saw so many planes in the air," he said, referring to Morrison's Skyraider, a Coast Guard B-17 which flew over his position, and later the Coast Guard PBM that picked him up.

"My closest call was the smoke bomb dropped by the B-17," he said "I never seen a better shot—the bomb nearly hit my raft."

After about an hour in the cold water, Frohe was hauled aboard the PBM and taken to Elizabeth City, then to Cherry Point. His first thought when he arrived back to base was to reassure his wife that he was safe and suggest they "do something exciting" that night.

Winds Shorten Mars Hops

Seaplanes Land at Hilo With Gas Low

VR-2, PACIFIC—Heavy headwinds forced two JRM Mars seaplanes flying from Alameda to Honolulu to land at Hilo, Hawaii, emergency airdrome for the first time since the facility was set up.

When the pilots of the Mars planes saw they hadn't enough gas left to make it safely to Honolulu, they radioed ahead for a Coast Guard air/sea rescue PBY to escort them in, after 16½ and 17 hours in the air respectively. Passengers were flown to Honolulu in a VR-2 RBD. A fuel line was floated out from the beach at Hilo and sufficient fuel pumped out for the Mars to make it to their base at John Rogers field.

Practically the entire population of Hilo turned out to witness the operation. Plane commanders for the eventual flights were Cdr. D. A. Campbell, exec of VR-2 and Lt. B. A. Lawson.
REGULUS: RECOVERABLE MISSILE

REGULUS, a triple-threat guided missile which can be launched from submarines, surface ships, or shore bases, has reached the stage in its development at which a submarine has been specifically modified to launch and maintain it. USS Tunny, a converted WW II sub, has been modernized by the addition of a snorkel, the streamlining of hull and conning tower, and the installation of a tank for storing a guided missile and a rack for launching one.

Designed so that it can be recovered after flight, Regulus was developed and tested at far less expense than a non-recoverable missile would have entailed. During the early stages of development, a flight-test missile costs approximately as much as a jet fighter. Without the recovery-after-flight feature, Regulus' testing would have called for expenditure of around 200 missiles. As it was, only approximately 30 flight-test vehicles were destroyed.

Developed by Chance Vought Aircraft under BuAer contract, the Regulus program was begun in 1947. During the past year, a small group of officers and men on the Tunny have been taking special training at NAMTC Pt. Mugu, in Regulus operation and maintenance.

As an assault missile and in some other roles, a drone version of Regulus will be used. On tactical missions, the techniques and guidance systems of all-weather, distantly controlled missiles will be employed. This versatility makes possible the utilization of Regulus in various ways, thus precluding the need for designing and procuring a different missile for each function.

Guided-missile research reveals that these weapons can assume many forms. They can travel on predetermined paths or on ballistic trajectories and can move at either slow or supersonic speeds. All the Navy's guided missiles are remotely or automatically controlled, so they are not subject to some restrictions imposed upon piloted aircraft.

Study Probes Flight Pay
SecDef Commission Favors Incentives

Rates of flight pay should be sufficiently high to insure retention of best qualified pilots and aircrews on a career basis. This was one of the findings of a special commission to study incentive, hazardous-duty, and other special pays in the military services. The commission was set up by former SecDef Robert A. Lovett.

Noting that although base pays have been increased while flight pay has remained constant, the commission found that this situation has reduced the incentive value of flight pay. It recommended that flight pay should therefore be established as a percentage of base pay rather than continue as a fixed sum, so that flight pay could retain its incentive value.

Other recommendations aimed at greater flight-pay equity:

- Remove from flight status officers and men in non-crew member status (except aircrews in training) who do not possess technical skills contributing to the safety or mission effectiveness of aircraft. Couriers and stewards were cited as examples.
- Remove from flight status those who can't reasonably be expected to provide air leadership or serve operationally in an emergency because of specialized training in fields other than aviation.
- Require that all services submit to SecDef a flight-status selection system which will require a periodic review of the flying and service records of each officer to determine whether he should remain on flight status even though he can pass his flight physical.
- Change flight surgeons and medical aviation observers who receive crew member flight pay to the pay scale provided for non-crew members. Exception: officers such as flight surgeons on hospital planes who perform duties essential to the mission of an aircraft in flight.

The commission observed that members of the armed forces are unable to bargain with the Government or to resign before the end of a set period of service. Therefore, it was reasoned, the terms of their contracts with the Government should be strictly observed as a matter of good faith. Since special pays are an important part of these terms, the commission recommended caution in changing them.

No action has thus far been taken on the commission's recommendations.
FROM BRINY DEEP TO BLUE SKIES

NAVY PILOTS who log 10,000 hours of flight time can claim they really have a lot of flight time. When Cdr. Parker W. Gray, 50-year-old Organized Reservist, logged his 20,000th hour at NAS SQUANTUM, he became eligible to join ranks with a few other Navy pilots who have made the mark. For Cdr. Gray, the 20,000th hour of flight time rounded out a naval career that reads like a fabulous adventure story.

His naval service began aboard the USS Tucker, DD-57, one of the early “four pipers,” after he enlisted as a “landsman” in 1919. Less than a year later, he was awarded the Navy Cross for preventing what might have been a serious marine disaster. When a depth charge broke loose from its fastenings during a heavy storm, he wrestled with it, preventing it from exploding and causing serious damage to his ship and probable loss of life.

In the struggle, he broke all of his fingers, his toes and a shoulder.

He earned the “silent service” and was aboard the S-5 when she became stuck on the bottom after a crash dive. The submarine remained imbedded in the mud for 48 hours before rescue efforts were successful.

Following a period of duty aboard cruisers and battleships, he applied for flight training in 1925 and was ordered to Pensacola. Nine months later, he completed his flight training and was designated a Chief Aviation Pilot. He received his carrier qualifications aboard the Langley. NAS Coco Solo was his first aviation duty station. He remained there until he was eligible for discharge from the Navy.

Returning to civilian life, Cdr. Gray saw a promising future in commercial aviation which was still a lusty infant. He flew first with Pan-American on the Miami-Rio de Janeiro run, then started his own airline between the islands off Cape Cod and the mainland. It proved to be a short-time business venture and he returned to the expanding airlines field, flying for American Airlines.

As commercial aviation with its twin-motored Fords, Loenings and other new planes grew ramer and safer, Gray found himself becoming restless. He finally left for South America. There he found wider horizons and finally became a flight instructor for the Columbian Air Force with the rank of Captain. While in South America, he flew Curtiss Hawks, Junkers, Wacos, Swallows and even Messerschmitts.

When the excitement began to pall again, he returned to the United States and resumed operation of his island airline. With the beginning of WW II in 1939, the government suspended operation of the line and transferred his planes to Canada. It was a new venture and Gray went along too. Three days later, he and his airlines pilots were ferrying bombers to England as members of the Ferry Command. He made 167 North Atlantic flights, 64 PBY hops from Bermuda to Scotland, 14 B-25 flights across the South Atlantic, 16 PBY flights to Australia and 19 B-25 flights to New Caledonia and New Guinea.

Early in 1940, Gray was commissioned Wing Commander in the RAF and transferred to the 19th Bomber Group. On a routine PBY flight along the coast of Spain, he sighted a convoy of German merchantmen. Without hesitation, he poured on the coal and managed to set four of the ships afire before he was jumped by a flight of five Heinkels. Six members of his crew were killed and Gray was wounded several times. However, he managed to fly his crippled P-boat back to Wales. He was the sole survivor of the flight.

It took 18 transusions to patch him up. After a month in the hospital, he was returned to Canada for rest and recuperation. While there, he was awarded the British Distinguished Flying Cross. The urge to fight with his fellow Americans caught up with him. After he left the hospital in Canada, he resigned his commission in the RAF and rejoined the U. S. Navy as a lieutenant.

Following refresher training at NAATC CORPUS CHRISTI, he was assigned to VJ-1 at NAS FLOYD BENNETT. He was back at an old and familiar job once more, ferrying aircraft. This time, however, it was Avengers, Helcats,

Water Jug Game Raises $$

VJ-62 Players Put Dimes in the Glass

VJ-62, SANFORD—Three water jugs, a basketball game, collection cans and officer contributions were contributing factors to this photo squadron’s successful March of Dimes funds-raising drive.

The scheme which netted the most fun for donors was the water jug. A gallon jug with metal screw top was filled with water. A one-ounce jigger was placed in the bottom and a small slot was cut in the top. The skill-provoking object was to drop a dime thru the slot and have it fall through the water and settle in the small glass below.

It sounds easy but it isn’t. Several men seemed to “find the gage” and scored with startling success. Three such jugs were kept busy for two days and, together with other money-getting schemes, enabled VJ-62 to raise $825. The total was four-fifths of the whole air station’s contribution and a third of the money raised by the whole county.
QUONSET ‘SAVES’ PILOTS LOST WHILE TAXIING

PAINFUL 52, this is Quonset Tower. What is your present position? What are your intentions?

Tower from PAINFUL 52—I am lost out here in a sea of blue taxi lights. I just sent my co-pilot out to walk around to see if he could orient our position.

PAINFUL 52, this is the Tower. The crash truck is out cruising around trying to locate you. Blink your lights to attract his attention. You were given take-off instructions about 15 minutes ago. What are your intentions?

Tower, this is PAINFUL 52. I intend to take-off as soon as I find the runway.

The above incident involved a fleet pilot with two years of recent operating experience at NAS QUONSET POINT. The air station’s operations officer was in the tower to witness the debacle. Considerable trouble had already been given to methods of improving the Quonset taxiway lighting system and this incident proved to be the spur to action.

A local committee was expanded to include representatives of Quonset-based fleet units. Advice was volunteered from the electronics section of the Naval Air Test Center at Patuxent River, Md.

During the period of study over the next few months, it was determined:

1. That as many as seven minor but relatively expensive night taxi accidents had recently occurred at Quonset.

2. That an undetermined, but large number of “close calls” or near accidents did not occur, largely because the local pilots were acutely aware of the deficiencies in the taxi lighting system. They taxiway did not clearly mark the intersection, but in fact, gave the taxing pilot the false impression that such was the place to commence his turn, whereas the turn should begin at a distance of at least 25 feet. (For a 50+ wide taxiway, the average distance between the two locations of double blue lights is 165.)

5. That any turn lighted by incandescent blue lights arranged to form a curved line, such as outlining the arc of a turn, appears to the approaching pilot sitting in a taxiing airplane, as a cluster of lights. Depth perception is nil until the plane is near enough to the lights for the pilot to be able to look down on the plan view of a lighting pattern.

6. That adjacent taxiways approximately paralleling one another, if lighted simultaneously, add appreciably to the taxing pilot’s confusion.

7. That taxing pilots, except those thoroughly familiar with all taxiways and runways, must invariably have visual or verbal instructions in order not to become lost, and even simple instructions often can not be made clear to the pilot unless such instructions are complemented by a sign at each intersection to identify, for the pilot, his position and/or arrows that point directionally to the proper taxi route.

8. That the brightness intensity of the incandescent blue taxi lights is generally greater than required or desired from the pilots’ point of view. Pilots prefer a soft blue glow that can be easily used as a guide instead of the harsh glaring light that is universally used.

Among the recommendations from the committee were:

1. That each taxiway corner or intersection should be marked by a sign lighted in a color that is in sharp contrast to the blue incandescent bulbs used as edge markers for the straight taxiways.

2. That incandescent lights used on the interior arc of a taxiway turn should be arranged to form a straight line across the fillet of the turn, using evenly spaced lights of a color that contrast to the aviation blue, so that a pilot approaching a turn will continue in a straight path until the lights at the turn commence to form a straight line tapering into the taxiway and;

3. That the brightness intensity for all taxiway lights should either be reduced or made variable.

To a small portion of the taxiway system was added a number of experimental signs. A local manufacturer cooperated in building a number of shapes and sizes of both neon and incandescent internally illuminated signs for evaluation by the pilots.

At this point, the study was submitted for Bureau approval and assistance. The Bureau of Aeronautics had already tackled the problem. Dunlap and Associates of New York and Seaford, Conn., were under contract to make a study to develop an optimum taxiway lighting, routing and destination marking system. Dunlap was contracted and the company agreed to use Quonset Point as one of their “typical examples.” Dunlap’s technical report has been used as a basis for the presently installed system at Quonset, and BUAE is sponsoring the project as
its first experimental installation.

The signs are internally illuminated, double faced, weatherproofed, 56" x 14" x 8" in size, box-shaped structures, and are mounted at a maximum height of about 20' above the runway. The figures and letters are cut out of black painted metal panels mounted against a yellow plexiglas background. The intelligence can be read either day or night at distances of about 800', from front or rear.

Standard abbreviations were found to be the best type of symbolic representation for destination markings. The inbound markers contain three or four letter words to denote specific locations off the field. These terms for destinations will be encountered at most airfields. Oubound destination markers show the number of the runway to which the taxiway leads. These numbers conform to the standard practice of designating the runway.

**THE RUNWAY** turn-off points are identified by two markers, one on each side of the turn-off entrance. The sign on the near side of the turn-off contains a directional arrow and an identifying letter designation; the sign on the far side of each turn-off contains a single directional arrow. The letters on the side of a side facing a pilot as he takes off or lands proceed in reverse alphabetical order so that the "A" always appears at the last turn-off as shown in the illustration at the top of pg. 00. (A normal transmission from tower to pilot after landing: "——— cleared left. Go around the Able taxi sign.") Intersections are identified by the runway that may be crossed or entered at that point.

The system has proven to be of considerable assistance to all pilots and is a good start in correcting night taxi problems. It will prove its worth by decreasing night taxi accidents, expediting taxi traffic, minimizing radio transmissions and confusion to pilots, especially transients who arrive or depart Quonset during darkness. Aviators are invited to comment both to BU/AR and to Quonset. A number of civilian airports are considering using the sign system.

**MARINE NONCOMS RUN AIR SHOW**

2ND MAW, CHERRY POINT—The best way to uncover enlisted men who might make good officers is to give them the officer's job to do and see how they measure up.

Cherry Point tried this out for the first time recently when a Command Post Exercise was conducted entirely by noncoms of the 2nd Aircraft Wing. Sergeant of Marine Transport Group 26's headquarters squadron both planned and led the maneuver.

The problem was one of communications: the objective was to train the noncoms in what to do if no officers were present. The idea came from MSgt. Clarence J. Pence. Six weeks of planning and preparing was done before six helicopters of HMR-263 took off with four combat-equipped Leathernecks, returning later for more men.

In two hours the communication system was complete, and Sgt. Pence and his communications officer, TSgt. George R. Paley, were in touch with Cherry Point directing simulated air strikes against a mock enemy. Later the helicopters laid communications lines from the air and the command post moved a mile nearer the "front." Within nine minutes contact with the enemy was set up.

The only officers in the maneuvers were Capts. Wallace Wessel, Norman G. Ewers and 2nd Lt. William K. Schief, who prepared a critique of the exercise. During the day, communication lines several times were sabotaged by small pins being pushed through the wire and into the ground, thus closing the circuit. An immediate "alerter" was sounded, and two saboteurs were apprehended.

Interrogation of the men by Pence and TSgt. Max P. Coggin pointed the "finger" at Schief as the "brains" of the saboteurs. He was questioned and later released under surveillance. From then on sabotage ceased.

**Korean Lauds Marines' Air ROK Marine Head Praises Close Air**

MCAS CHERRY POINT—"I don't feel that we could do without the U. S. Marines' aviation."

Those are the sentiments of MGen. Shin Hyon Zoon, Commandant of the Korean Marine Corps, who recently toured Marine stations in the U. S.

Commenting on the success of Marine aviation units in Korea, Gen. Shin said, "Marine aviation has done an excellent job, and as far as close air support is concerned, we couldn't do without them."

"Not only have they been a great help to the ROK Marine Corps, but also to the First Division of U. S. Marines and the Fifth Air Force."

The general has a total of more than 18 years of service, including 12 years in the Japanese Army during which time he rose to rank of Captain.
ORDERLY’S COURTESY PAYS OFF

THAT OLD Southern hospitality paid off for a VR-21 flight orderly. James R. Jernigan—of the Raleigh, N. C., Jernigans—was named “Top Flight Orderly of the Quarter” for the five squadrons of Fleet Logistic Air Wing, Pacific.

James is one of more than 100 flight orderlies who make life more pleasant for passengers traveling on Navy transport planes in the Pacific area.

It takes a rare combination of talents and patience to be a successful flight orderly. He’s the “front man” for naval aviation to the people riding the big transports—high government officials, admirals, generals, dependents of service personnel, and, of course, the soldiers, sailors and Marines shuttling back and forth to the Korean War theatre.

The slim, blonde orderly from North Carolina has run into some situations that would tax the ingenuity of Hercules. “On one flight recently,” he recalled, “we were bringing dependents back to Barber’s Point from Midway. There were about a dozen children aboard, and about that many more ‘on the way’ to speak.” So far, Jernigan hasn’t delivered any babies, but he claims he wouldn’t be a bit surprised if he eventually has to perform that traditional service for which taxi cab drivers are noted in the daily press.

Then there’s the problem of small children whose parents have stuffed them with milk shakes and ice cream before taking off. Rough weather aloft produces quite predictable results from delicate young stomachs.

VR-21’s champion flight orderly gives the air-sickness prize, however, to the large number of Filipino service families transported regularly between Guam and the Philippines. “The weather is usually pretty rugged on that particular run,” says Jernigan ruefully, “and for some reason they can’t seem to stand it quite as well as other passengers.”

Not only must the flight orderly serve as public relations man and nursemaid, Jernigan also must brief the passengers on the use of emergency equipment and other conveniences aboard the airplane; he distributes food and beverages; tucks the passengers in with blankets and pillows at night and has a first aid kit for treatment of minor misfortunes. With as many as 35 passengers and seven crew members to take care of he has to sandwich in his secretarial duties, taking care of cargo, passenger and mail manifests connected with transport operations.

His job as flight orderly keeps him away from home base at Barber’s Point naval air station from 15 to 20 days of every month, sometimes logging 150-160 flight hours a month. “We’re getting more orderlies now, though, and are not as rushed as we have been.”

Extra pay, known as per diem, is allotted for his time away from Barber’s Point, and this just about covers the extra expense involved.

While laying over between flights in Japan, Jernigan shops for the many bargains to be found in Tokyo. To his best girl, Carolyn Fuquay, and his family in Raleigh, he has sent silk pajamas, robes, binoculars and souvenirs from Nippon.

The quiet, soft-voiced Tarheel proved himself a diplomat when asked which passengers were the easiest to get along with and which ones gave him the most trouble. “All passengers are interesting,” he said, “and it’s easy to please everyone. I just did my job in the line of duty and tried to make everyone comfortable and contented.”

S MALL wonder, then, that James Jernigan, AN, USN, received the following letter of commendation from the Commander, Fleet Logistic Air Wing, Pacific:

“Records of this command indicate that you stand at the top of the list for having received the greatest number of commendable comments during the fourth quarter of 1952 regarding the discharge of your flight duties. These comments were made by those passengers whom you so competently and courteously served. The value of an efficient flight orderly is reflected time and again by each satisfied passenger.

“It is with pleasure that the Commander, Fleet Logistic Air Wing, Pacific commends you on attaining the distinction of being the ‘Top Flight Orderly of the Quarter’.”

THIS PICTURE is a natural. The Bureau of Aeronautics Representative at Chase Vought Aircraft Co. plant at Dallas is Capt. Charles M. Jett. He happens to have twin boys, George and Charles, so it was the obvious thing to do to take a picture of the twin Jett’s beside the twin sets of Chance Vought’s F7U-3 Cutlasses at the Dallas plant.

Death Interrupts Exercises
Ships, Sub, Plane Rush Man Northward

USS Salerno Bay—Winter training maneuvers in the Caribbean were in full swing when word was received by this escort carrier that bad news had struck a submariner at sea in the exercises.

A. J. LaPalaosa, commissaryman first class, received a telegram informing him his young son had been killed by a New Jersey hit-and-run driver. RAdm. Frank T. Ward, Commander of Hunter-Killer Forces, Atlantic, issued orders necessary to speed LaPalaosa homeward. This took a bit of doing since he was on board the submarine Entenmedor and a long way from land.

The destroyer Basilone took the heartbroken man off the submarine and raced at full speed to the Salerno Bay to transfer him ashore. A plane piloted by Lt. William Fava was waiting on the flight deck of the carrier.

Within minutes, LaPalaosa was in the air and within the hour was waiting air transportation at San Juan, Puerto Rico. The hundreds of men on the destroyer, submarine carrier and airplanes returned to their work with perhaps a little more fervor and zest, realizing they all had helped a shipmate in need.

INSTRUCTOR? I THOUGHT YOU WERE!
PREP SCHOOL FOR KOREA COMBAT

writer. Old prefabricated buildings were torn down and brought from nearby Oak Grove to be set up alongside the airstrip, forming the three and a half buildings that comprise the squadron.

Equipment and men trickled in those first eight months of 1952, until instructors and students alike were flying four types of reciprocators (propeller-driven aircraft) and one type of jet, the TV-2 jet trainer. But shortages were still acute; there were not enough planes and only three mechanics in the entire squadron who could work on jets.

During this period the squadron's strength rose to 126 enlisted men and 10 officers. I. Col. Daniel L. Cummings took over as commanding officer, and the emphasis switched to jet training with the arrival of the new TV-2.

This meant a change in personnel too. Only a few of the original instructors had ever flown jets; the others checked out with the students as the school progressed. Returning combat pilots were transferred to the squadron to combine "know-how" with theory.

With the coming of the jets, much of the trial and error common to earlier training disappeared, and the squadron's new mission became apparent; jet tactics. Reciprocators were discarded, and the instructors were able to concentrate on two types of aircraft instead of five.

The new squadron head recognized the problem and set about solving it with a proposed "Jet Tactical School". This school, the only one of its kind in the country, started the next month and graduated its first class of five men in January.

Before being admitted to the school, however, the pilots received Marine refresher training at naval air stations in their home areas. Those who successfully passed the standards set at these stations were then sent to the jet school where they "started from scratch".

The tactical training school approaches training on the principle that the pilot "knows from nothing". He is taught the jet aircraft piece by piece, much as the Marine rifleman learns his M-1 rifle.

The recalled Reservists starts with the TV-2 trainer and works his way up to the TV-2. He learns his plane's fuel and hydraulic system and learns them well; his life may depend on how thoroughly he masters his lessons.

"We are not training these men to be mechanics," explains Capt. Taylor, "but we do want them to be able to recognize anything fundamentally wrong with their plane."

The course lasts 16 weeks, including 100 hours of flight time and close to 40 of lectures and demonstrations. The main concern, aside from teaching these men to fly jets, is jet tactics, something developed since World War II. But emphasis is also placed on aircraft procedures, flight tactics, ordnance (gunnery, rockets, bombing), close air support and night flying.

WHEN a copy of the Royal Navy's air magazine "Flight Deck" in its new slick format was opened by Grampau Petittone recently, the old gent was greeted by his British cousin the "Aged Aviator." Gramp found this character indulging in his own favorite pastime—dispensing pearls of safety wisdom to less experienced zonies. When queried if they had met before, the only response was a dignified "kumquh" as the two old gentlemen left for afternoon schnapps. A raconteur from wooden ship days recalled that he had overheard the two advising each other in a Port Arthur café during the Russo-Japanese war on the proper method of tarnishing ensign and sub-lieutenant stripes via the ancient toothbrush, salt shaker and waterglass route.
BIS TRIALS

A story currently told in irreverent non-naval circles relates that when Commodore John Paul Jones uttered his immortal battle cry, "Sir, I have not yet begun to fight!", a wounded Marine lying at his feet muttered dejectedly, "There's always someone who hasn't got the word!"

Relatively few persons in or out of the Navy's aviation service have "got the word" about a little known but powerful organization—the Board of Inspection and Survey (OP-45 in CNO), and its activities in conducting the official "BIS" service acceptance trials of aircraft. This lack of "spotlight" has not kept the board from occupying an important place in development of new planes.

When a manufacturer produces a new plane, someone has to find out if it will perform as the Navy requires—and that someone is the Board. It acts for the Secretary of the Navy, reporting its recommendations as to acceptance or rejection of the plane, to the Secretary via the Chief of Bureau of Aeronautics and the Navy Office of General Counsel.

Once the first photographs of new jets and other type planes appear in the magazines and newspapers the planes "disappear" from view for a time before they are turned over to squadrons. It is during this period when the Board gets in its exhaustive checking of the plane and everything in it.

Navy regulations require that service acceptance trials shall be conducted by the Board on each new type or model of aircraft bought by the Navy, prior to final acceptance from the contractor for service use.

RAdm. J. M. Higgins is president of the board. Its aviation members are Capt. E. T. Neale, Capt. Malcolm M. Cloukey, Cdr. B. T. Maconber and Lcdr. W. C. Adler. The latter three are stationed at Naval Air Test Center, Patuxent River, Md., where they supervise the actual flight trials and sign the reports giving "thumbs up" or "thumbs down" on the planes.

"BIS" trials are now being conducted for XFJ-2, F9F-6, F7U-3, F3H-3 and F7U-1 fighters; AJ-1 attack airplanes; F9F-5P and AJ-3P photographic planes; PSM-1 and P2V-5 patrol planes; HUP-1, HUP-2, HO4S-1 and HTK-1 helicopters and the ZPN-1 prototype airship.

If test aircraft become available, "BIS" trials are expected to begin before 1 January 1954 on 25 new models including F6F-7, FJ-2, FJ-3, FSH-1, F4D-1 and F10F-1 fighters; F9F-6P and F7U-3P photographic planes; AJ-2, AD-5, AD-5N, AD-6, AF-5S, AJD-1 and A3D-1 attack planes; S2F-1 ASW plane; R4Q-2 and R4Y-1 assault transport planes; HOK-1, HSL-1, HRS-3, HO4S-3 and HO4S-2 helicopters, and ZPN-1 and ZP-4K-1 airships.

Navy regulations provide plenty of help to the board in conducting the trials. "Chiefs of naval bureaus and "other organizations concerned" are directed to furnish information and assistance to the board. Shore establishments also may be called on to assist in the testing, as is done at Patuxent.

Bureau of Aeronautics assists the Board by issuing "TED BIS" project orders for trials, allocating test aircraft to the Board, providing engineering and logistic support for test aircraft, and providing government personnel and facilities at NATC PATUXENT RIVER, the

Htk-1 DOUBLE-rotored helicopter built by Kaman presents novel appearance as it flies in BIS trials at Natc Patuxent River

AJ-2 SAVAGE, advanced version of the AJ-1 now with the fleet, will get BIS trials shortly; new photo taken at Columbus, Ohio
TRIALS OF XFJ-2 fighter are nearing completion and production. FJ-2 have been started under the new streamlined trial system.

Naval Airship Training and Experimental Command, Lakehurst, N. J., and the Naval Aircraft Torpedo Unit, Quonset Point, R.I. These activities do the actual flight and ground testing required by the Board.

PAXUXENT accomplishes 90% or more of all test operations and preparation of all test reports in connection with "BIS" trials. Airship trials are conducted by a Sub-Board at Lakehurst, assisted by the NATC command. Aircraft mine and torpedo installation trials are performed by the torpedo unit at Quonset Point.

The Board's task, in general, is to find out if the procurement contract guarantees have been complied with; report all defects in material, performance and design; recommend design changes and recommend final acceptance or rejection of the aircraft for service use, to the Secretary of the Navy.

These guarantees range from broad assurances that the aircraft conform to the detailed specifications for their construction to specific guarantees of stability and control, suitability for land, carrier or water-based operations, weight empty and various performance characteristics such as maximum speed, stall speed, rate of climb, service ceiling, hover ceiling and minimum takeoff distance or time. When it orders an airplane the Navy specifies what it wants the plane to be able to do—it is the Board's job to find out if it measures up.

Procedures to be used in conducting the trials were authoritatively set by the Board for the first time when the manual of "Board of Inspection and Survey Aircraft Test Directives" was issued on 1 October, 1951. A committee of officers representing the five test divisions at Paxuxent aided in drawing up this manual.

Experience with this standing committee proved so successful that last June a new aircraft trials committee was established by the President of the Board. This committee consists of the five directors of test divisions at NATC, assistant directors as alternates, and the senior member of the board at Paxuxent, Capt. Claukey, as chairman. One of the committee's main jobs is to revise BIS aircraft test directives to keep them current as to technical requirements, as well as serving the best interests of efficiency and economy.

Detaiied estimates recently completed by the test divisions and the office of the board at the Test Center indicate that flight hours required for conduct of 'BIS' trials have been reduced by 35% under the revised requirements. Direct man-hours have been reduced by 37%, and the combined dollar costs of flight hours and direct man-hours have been cut by 36.5% or about $2,000,000 a year.

Steps now are being taken to modernize as well as streamline the trial procedures. Official permission has been granted to conduct realistic tests of anti-submarine aircraft and equipment in the joint aircraft-submarine training exercises conducted by Fleet Airborne Electronic Training Unit, Atlantic. Arrangements are now being worked out for suitable tests and trials pertaining to special weapons and guided missiles installations on new model aircraft.

The Board of Inspection and Survey may be one of the lesser-known aviation activities but its job of watching the quality of planes and seeing that the Navy gets its money's worth makes it important. All new planes must bear its stamp of approval before they can reach the fleet.
THE BIGGEST clamor among returning Reservists is for the return of their original squadron designations to NARJSTRACOM. VP-812 was the first veteran squadron to be reformed at NAS MINNEAPOLIS and VP-741 at NARTU JACKSONVILLE is helping to keep the ball rolling.

At impressive ceremonies at NAS JACKSONVILLE, Cdr. James W. Hardy, CO of VP-741, read orders officially redesignating VP-741 as VP-16. Immediately afterward, Cdr. Hardy presented to Capt. E. B. Noble, CO of NARTU JACKSONVILLE, the squadron’s pictorial account of its operations since its activation to Atlantic Fleet duty in March 1951.

Cdr. Hardy expressed the sense of pride that the outgoing Reservists felt in their unit and promised that VP-16 would do its best to maintain this high example of service. Capt. A. S. Born, COMFAIR-WING 11, declared that VP-741’s record was a “definite challenge” to the new unit.

The continuing interest in the Air Reserve program of these returning Reservists will pay off in the long run. These men have grown wise in the ways of the fleet and understand carrier operations under combat conditions. Their experiences will prove to be of inestimable value to other squadrons and members.

For instance, Lt. Francis “Yip” Yirrell and Richard Stephansky, former members of VP-741 at NAS QUANTUM understand helicopter operations under combat conditions. Recalled to active duty in September 1950, the two fighter pilots were assigned to a helicopter training unit at NAS LAKEHURST. Later they were assigned to COMAIRPAC and sent to Korea on a tour of combat duty.

While in Korea, they were on temporary additional duty with VMF-6 attached to the First Marine Division. They took part in a daring night rescue mission in the front lines, when a severely wounded officer couldn’t be evacuated from the front by other means. Disregarding the fact that it was dark and all aircraft had been grounded because of high winds, they flew to the front in a helicopter.

Yirrell took the controls of the copter and Stephansky acted as navigator on the first leg of the mercy flight. Stephansky’s job consisted mostly of holding a flashlight over Yirrell’s shoulder so he could see the instrument panel. When they arrived at the front, Yirrell landed the helicopter in the light provided by two parked jeeps.

The patient and the doctor were waiting. However, only three could crowd into the helicopter, so Stephansky remained behind and the doctor took over as navigator. Several times they barely cleared the tops of the 2,000-foot mountains that flanked the route to the evacuation hospital. This was one of the first night helicopter missions of the war.

Experiences like this one, will help in training other Reserve helicopter pilots. Both Yirrell and Stephansky have been assigned to Quantam’s helicopter squadron.

Not to be outdone by their Navy counterparts, Marine Reservists have also been hitting the trail back to the MARTCOM. Out at NAS OAKLAND, LCol. Leonard Sparrow once more took up his duties as commanding officer of VMF-114. A veteran flyer of WW II, he was the first CO of VMF-114 when it was activated in the summer of 1951. At the change of command ceremonies, Lt. Fred K. Drinkwasser, III, and Capt. Robert E. McChen were presented with Distinguished Flying Cross medals for heroic achievements in Korea. Capt. McChen also received the Navy Commendation Medal.

LCol. Sparrow assumed his old command in time to receive the Marine Air Reserve Trophy for his squadron. Based on combat readiness and overall proficiency, VMF-114 was selected as the best Marine Fighter Squadron in the Reserve command.

LCol. Herman H. Riddler, donor of the trophy, presented the award to Sparrow at impressive ceremonies. Major Gen. Christian P. Shilt, Commanding General, Air, Fleet Marine Forces, Pacific, spoke of the critical days from July 1951 until April 1952 when he was Commanding General of MAW-1 in Korea.

“Prior to August 30th, 1952, our shore-based Marine aircraft squadrons flew approximately 20 percent of the Fifth Air Force sorties, carried about 33 percent of the bomb tonnage dropped on the enemy and were credited with approximately 40 percent of the observed and assessed damage. When one realizes that over 50 percent of the pilots in the First Marine Aircraft Wing at this time were Reservists, we understand what an effective force the Marine Air Reserve is in meeting a threat to our national security.”

Marine Reservists came in for more high praise as MGen. Clayton C. Jerome, until recently the Commanding General of MAW-1, assumed command of MAW-2 at MCAS CHERRY POINT. He spoke briefly about Marine Reservists in Korea
And the magnificent job they are doing. He pointed out that Reserves make up approximately 50 percent of Marine Corps Air strength in Korea and said, "They flew during World War II and have returned to fly again in Korea."

**New Address For Squantum**

For three decades NAS SQUANTUM has played an important role in the Naval Air Reserve Training program. Newer, faster planes are helping to bring that role to a close. Squantum's runways, adequate for WW II planes, are dangerously short for jets that can eat up hundreds of feet in a matter of seconds.

During the coming year, probably after the summer training program is completed, NAS SQUANTUM will be reoccupied at what is now ALF SOUTHWEST. During WW II, South Weymouth was the home station of many lighter-than-air squadrons which patrolled the Atlantic coast. After the war ended, the station was disestablished and placed in a caretaker status. In September 1951, the first construction in preparation for the relocation began. A 7,000-foot runway, nearly twice the length of the longest runway at NAS SQUANTUM, was started with plenty of room remaining for expansion.

**Crash Crew Commended**

Seventeen sailors, members of the NAS DALLAS Crash Crew, put their training to the test when an FGR, landing at Dallas, veered off the runway, nosed over, pinning the pilot beneath the plane, and caught fire.

The crash crew rushed to the scene, fighting the fire which broke out anew several times. Risking their own lives, crewmen scooped foam away from the pilot's head, as he hung head down, in danger of suffocating. The crane truck arrived and picked up the tail of the plane, allowing the pilot to be pulled out of the wreck. The whole incident happened in a brief interval of six minutes.

Shown in the picture below are: Vowels, Wilson, Cooper, West, Mitchell, Peters, Whaley, Files, Herrin, Johnson, Miller, Holt, Jobe and Ketchum. They were present when LCdr. G. K. Sherman, acting Security Officer, read a letter of commendation from Capt. S. C. Strong, CO of NAS DALLAS.

**Reserve Roundup**

- **NAS NIAGARA FALLS**—Joni James, popular recording songstress was voted "the girl we'd most like to believe." She was presented with an official Navy certificate, naming her an honorary "Weekend Warrior."

- **NAS COLUMBUS**—First of the "Weekend Warriors" to check out in the new Phantom jets was LCdr. Daniel Charmichael.

**LOOK, MA, no hands!** New chiefs Grindstaff, Huntington and Hill get their initiation at NAS COLUMBUS via pigs' troughs

**WHY DON'T You Believe Me Girl**, Joni James receives certificate as honorary "Weekend Warrior" from Cdr. William F. McDonald
AIR FORCE PILOTS LEARN A TRICK

USS DUXBURY BAY—Arab citizens of Bahrain island in the Persian Gulf were greatly surprised to see a USAF Grumman SA-16 (Navy UY) land in the harbor and taxi to the fantail of this seaplane tender. The occasion was a special one—the Air Force seaplane was to be refueled while aloft, a new experience for the "boys in blue."

When the Duxbury Bay, commanded by Capt. R. C. Needham, arrived in the Persian Gulf with her new coat of white paint, sharp-eyed aviation officers spotted the amphibian at Dhanar Air Force Base.

With a view to maintaining a high state of training and performing competitive exercises, the cooperation of the 59th AF rescue squadron was enlisted. The squadron never had thought of conducting a refueling exercise from a seaplane tender. Maj. M. L. Pengue, USAF, the CO, had served as an exchange pilot in a PBM squadron and was familiar with the problem.

So, on 20 January, in Khor Kalyia anchorage, the Duxbury Bay laid a standard aircraft mooring buoy 300 yards from the ship by use of stairstep and bearers. Standard PBM refueling procedure was used for the SA-16. Two-way communications were established between the plane, ship and crash boat. After landing, the Air Force pilots were transferred to the ship where they expressed doubt, over coffee, that refueling could be accomplished.

The plane got underway and came up astern of the tender and picked up the fueling buoy. The whaleboat picked up and maintained a strain on a line streamed from the port waist hatch of the plane while the Duxbury Bay hauled the aircraft up to the fantail.

At this point an overhead trolley line was passed to the plane from the ship and the fueling lines run out to the aircraft. After the simulated refueling, the line on the winch was slacked off and the whaleboat pulled the aircraft clear of the ship, then cast off. The plane returned to the mooring buoy and its pilots were brought back to the tender.

Wide were the grins on the faces of the Air Force pilots from the knowledge of the new trick just learned. They were quick to realize the advantages of the elimination of their operating range through use of a seaplane tender. The dirty faces of the refueling personnel also were happy in the knowledge they had shown the Air Force a new trick.

The Duxbury Bay, incidentally, was stillsmarting from an incident which occurred when it was sailing out of the Navy Yard before going to Persia. Gleaming in its new white paint job, its pride was hurt when a destroyer in the vicinity inquired by flashing light, "Navy or Coast Guard?" The captain's reply to that query would have curled the DD's radar antenna had it been sent.

'Copter Used In Timber Lift
Marines Adopt New Combat Maneuver

When it comes to a lot of ingenuity, the Marines have always been famous for coming up with something new and different. Give the Marines a helicopter, and they'll find some new way to use it long before the idea occurs to anyone else.

In the Korean conflict, combat Marine's have found that it was sometimes difficult to hold hard-won positions because the enemy held bunkers were destroyed while the ground was being fought for. Without the bunkers they had no place to dig in and, if they took time to rebuild them, they were vulnerable to Red counter-attacks.

The answer simply was to have the Marines carry their own bunkers with them in helicopters.

After rear-area guards saw bunker timbers to the proper length, the Marines load them, along with gunny sacks which will be filled and used as sand bags, in the 'choppers which hedgehop along behind advancing troops. When a position is taken, the helicopters alight and pour out the timber and sacks. Leaving out, the guards quickly place the logs and fill the sacks to chink in open spots. In no time at all, the bunker is rebuilt and ready to withstand a terrific pounding.

The Marines have found the technique is so successful in saving time and lives that it has been adopted as a standard combat maneuver.
ALUMINUM ARMOR PROTECTS AD'S

In the early part of 1951, in Korea, the Douglas AD Skyraider airplane was put to use in close support of Marine front line ground troops. To accomplish their assigned missions, the pilots attacked from altitudes ranging from 100 to 300 feet and up—altitudes from which extreme accuracy could be obtained.

It was soon discovered, however, that losses of both pilots and aircraft from enemy ground fire became prohibitively excessive. To avoid or at least minimize such losses the pilots were forced to drop their load at a minimum altitude of 1000 feet with a consequent drastic decrease in target hits.

To regain the tremendous advantages of "on-the-deck" attack, it became imperative that action be taken to provide some means by which the close support combat potential of the AD could be realized with some reasonable degree of safety to both aircraft and personnel.

A thorough analysis of available Korean combat data for the AD airplanes revealed the engine accessory area, the so-called "Hell Hole," was the chief contributor to aircraft casualties. Bureau of Aeronautics decided that the most effective way, short of a complete redesign of the airplane, to reduce the vulnerability of the airplane to ground fire was to install armor plate in those areas in which the incidence of killing was high. Aluminum alloy, which is highly effective against shell fragments and projectiles at high altitudes, was the material selected to accomplish this purpose. With the assistance of the Douglas Aircraft Company at El Segundo and the cooperation of the aluminum industry, BuAer, in the latter part of 1951, expedited an external aluminum armor installation for the Skyraider aircraft operating in Korea.

This armor covered the under part of the airplane from the nose to the rear of the cockpit including the "Hell Hole" and the wing stubs and extended along the sides of the cockpit. One-half inch thick aluminum plate comprised all of the armor, except that on the sides of the cockpit which consisted of one-quarter inch material. In all, 618 pounds of aluminum armor were added to the AD. This was with the 200 pounds of armor originally designed in the airplane made the Skyraider a veritable Stormrider.

That the armor was effective is evidenced by the reports received in the Bureau of Aeronautics from the forward area AD squadron commanders. Rifle, "burp gun" ammunition, .50 cal., 23 mm HE projectiles and shell and bomb fragments have been stopped cold. Even more significant are the reports that the armor has saved a number of aircraft and pilots from loss by direct hits by 37 mm HE projectiles.

Since about March 1952, when the first armored AD's were used in combat, at least 18 AD airplanes and pilots have been saved by the armor from loss or major injury. This amounts to a full complement of AD aircraft aboard a carrier.

What effect do 618 pounds of additional armor have on the flight characteristics, maneuverability and load carrying capacity of the AD? The answer is that the only adverse effect imposed upon the airplane is a slight reduction in load-carrying capacity for the carrier based AD's. The land-based Skyraider has taken the additional weight in its stride.

Enthusiasm for the armored AD's has been almost unanimous among the forward area squadron commanders. As one AD squadron commander said "it is the opinion of this squadron that the additional protection afforded ... definitely compensates for increased weight. Pilot morale factor alone is justification." The Marine AD squadron commander who said that arming the AD airplane was the best thing that happened in Korea may be said to be a little over-enthusiastic. However, it is a fact that when the armor demonstrated its effectiveness in saving pilots' lives and aircraft, the beneficial effect upon pilots' morale was markedly significant and they again began unloading from practically the deck with results disastrous to the enemy.

by Carl R. DeVine
BuAer Armament Div.

VR-2 Athletes Set Pace

Capture 10 First Out of 14 Sports

VR-2, ALAMEDA—This transport squadron racked up an outstanding record in intramural sports during 1952, winning 10 first and two second places out of 14 sports entered.

Under the direction of Lt. (jg) Phil B. Greene and Richard M. Reiss, ADC, squadron athletic teams won firsts in Fleet Air Alameda touch football, volleyball, basketball, badminton, golf, swimming, tennis, wrestling, table tennis and 45 cal. pistol competition. It took seconds in handball and bowling. In the two remaining sports, horseshoes and softball, VR-2 finished third and fourth respectively.

In the accompanying photo, Lt. (jg) Greene (left) is shown with Capt. Albert S. Major, Jr., commanding officer of VR-2, and Capt. W. H. Westom, chief of staff of ComFAir Alameda, with trophies won by squadron athletes.

Efficiency is Their One Aim
San Diego Gets New Organization

Top-level civilian administrators of NAS SAN DIEGO have established a "first" in the San Diego area by organizing a chapter of the Naval Civilian Administrators Association. Primary objective of the organization is to promote the efficiency of the naval activity in cooperation with the Commanding Officer and his Department Heads.

The NAS unit received its charter from William T. Ashton, member of the National Board of Directors. The first meeting was addressed by Rear Admiral Leslie E. Gehres, USN (Ret).
**Gramp Would Like This One**

Pilot Brings Plane in on One Wheel

When Ens. Witvoet of VF-34 made a forced landing on the NAS Jacksonville strip, no doubt Grandpa Pattibone was riding right along with him, whispering the right things in his ear. The only injury to the Banshee jet was a damaged wing tank.

The pilot was part of a three-plane ferry hop from VF-34 to VF-22. He was to land second in the flight, but he discovered his starboard landing gear wouldn't come down. After trying all emergency procedures without success, he was advised to try a landing.

He lowered his port wheel, nose wheel and tail hook and then approached within 100 feet of the field arresting cable before letting the wheel and hook touch. He kept his plane on the one wheel until the hook engaged the chain. Once engaged, he slide on the wheel and his starboard wing tank until the plane stopped.

Witvoet credits the clear heads in Operations, an alert ground crew on the line and the excellent advice given him by Lt. Hugh Tate, who coached him while he was still in the air, with the successful landing. So little damage was done to the plane that it was flown back to NAS Cecil Field the next day.

**Lady Aboard the Oriskany**

Mascot Adds Four Pups to Ship's Crew

While Panther jets and other aircraft were being launched from the Oriskany's flight deck in Korean waters, a two-year-old lady was giving birth to quadruplets. Schatzie, the carrier's dachshund mascot, was enacting a scene as old as time.

Piped aboard in Tripoli during the summer of 1951, she is just some 3,000 miles short of sailing around the world. She is the first female to sail around Cape Horn's treacherous waters aboard an aircraft carrier. In her two short years she has crossed both the International Date Line and the Equator.

Her pups, one male and three females, are being cared for by one of the crewmen. Their future is undecided, but meantime all the men have become their ardent admirers.

![Vets at an early age are Schatzie's pups](image)

**NAVY PILOTS JOIN 'ZERO' CLUB**

ROUND numbers always have had a fascination for naval aviators, especially when they give an excuse for a cake-cutting or special party of some kind.

- Down at Fleet Air Jacksonville, 81 hurricane hunters from VJ-2 were presented with "Century Club" cards and "Order of Hurriphoners" certificates recently for flying through hurricanes of 100 knots or more in 1952. Cdr. David J. Walkinshaw passed out the honors.
- Aboard the Coral Sea off Norfolk, Lt. (jg) James W. Kissick brought his AD-3 in for a landing. It was like any other landing, but since it was the 50,000th aboard that huge flattop it called for a special party. Capt. H. D. Riley and Cdr. F. T. Moore, Jr., air officer, assisted in cutting a huge cake for the occasion. Cdr. Moore has supervised almost 20,000 of the 50,000 landings as air officer.
- The Coral Sea, since her return from the Mediterranean last fall, has been an Atlantic Fleet training carrier and flagship of ComCarDiv Six, who is RAdm. Charles R. Brown. Adm. Brown, incidentally, is the holder of the Navy's aerial gunnery championship, having won it back in 1930 when he put 120 bullets out of 120 into a row banner for a 100% score.
- On another front, Lt. (jg) Fred Thorn with VF-73 aboard the Tarawa in the Med became the first aviator to make more than 100 landings aboard the flattop. He first flew aboard the Terrible T in Sept. 1947, in an F6F while in VF-11. He flew VF-73's F4Us' aboard later and F9F-5's with the same outfit in 1952.
- At Jacksonville, three pilots of VF-62 claimed honors for making 100 jet landings aboard one carrier. Then VF-31 dug around and found it had nine members of the "Centurian Club" who had landed F4F's or F1H-2's aboard the Leyte. Members of VF-31 with 100 jet landings were Cdr. Edwin S. Memel, and Lts. (jg) William L. Parthum, Henry H. Dodd, Ronald H. Caldwell, John B. Cogdell, William F. Rau, Richard J. Owens, Donald M. Lynam and Lloyd L. Parthemer. All of them made at least two Med cruises and all but Parthemer were on the Leyte during its Korean cruise. In the accompanying photo are Owens and Parthemer, front row, and Dodd, Parthum, Lynam and Rau, rear.
- Another member of the "Zero Club" was the training carrier Monterey at Pensacola. Second Lt. Lloyd L. Lund made the 45,000th landing aboard the CVL during the course of his carrier check-out preparatory to becoming a landing signal officer. Lund has 10 years of Marine flying behind him, having been an officer in World War II, then reverting to "flying sergeant" and going back up to his former rank as officer in Korea.
- Although it is only a CVL and one of the Navy's newer carriers, the USS Wright landed its 45,000th plane on 19 February. Lt. Howard M. Worthley of VS-27, flying an AF-3B, brought it in and won the cake. The Saipan, a sister ship, celebrated its 54,000th landing when Lt. John I. Lund of VS-801 came in with another AF.
- Another sister ship, the Cabot, claimed the record for landing helicopters when Capt. Redalan of HMR-362 brought his HRS-2 aboard, marking 1,000 such landings by pinwheels. HMR-362 made 1,491 landings on the Cabot off Vieques and Onslow Beach. The Cabot boasts 54,881 conventional arrested landings making it one of the top carriers in the Navy.
HOT LACQUER SPRAY GEAR READY

THE hot lacquer spray process for painting aircraft exteriors has been given a tremendous boost by the Overhaul and Repair Department, NAS Jacksonville where it has been developed in a practical efficient way. The hot lacquer spray process has been used industrially, but before it could be used at air stations, it was necessary to develop special equipment. This was done under the direction of Capt. L. D. Coates.

Some months ago BuAer requested NAS Jax to work out the details of the process, develop equipment and work out techniques for station use. By 2 February, the prototype equipment had been put into experimental production.

The project began in April 1952 when O&R requested BuAer's authorization to employ hot lacquer paint to the outside of aircraft.

The process incorporates a steam heating unit located about 30 inches from the paint gun, which sprays the lacquer topcoat at a controlled temperature of approximately 160°F. It is a development of the old pot heating procedure used by wagon manufacturers a half century ago.

In order to study the process as it was used industrially, Walter S. Morris, materials engineer, and Horace G. Rhodes, snapper in the finish and insignia shop, went out to the west coast. When the men returned, they submitted a report, BuAer authorized O&R to develop the hot lacquer method for use at all naval shore establishments.

By 21 November 1952, the first military aircraft was painted by this method at Jax. In order to evaluate the procedure, 23 aircraft were painted on one side with hot lacquer and on the other, with cold lacquer, and released to operating squadrons throughout the Navy.

Lacey Day, plant engineer, then asked BuAer for special funds to develop a piece of apparatus that would eliminate the chief difficulties involved in the hot lacquer process. Approval was given and in just over a month the first equipment was designed and constructed.

George W. Brown, mechanical engineer, coordinated the work. The design included a reservoir for the lacquer; heating equipment; gages for control of paint, air and steam pressures; devices for removing moisture and foreign particles from the air; hose reels; spray guns, and a dolley which would make the unit portable.

The prototype gear provides four individual painting units. Two aircraft can be painted simultaneously by either two or four painters. The equipment releases paint at the same pressure whether one painter or four are at work. The painter's operative alternatives are limited to speed of work and distance from the aircraft.

THERE are great advantages in using this method. Uniform equipment for one to four painters decreases painting-in-process time and increases production. There will be a remarkable savings in paint thinner. One coat of hot lacquer provides an enamel type finish without the usual surface imperfections and is the equivalent of two thicknesses of cold lacquer. The method does not require the usual expensive humidity and temperature controls and is therefore usable anywhere.

Thickness must be controlled to meet BuAer specifications because otherwise paint finish would fail in service. This JAX has done by rigorous process control and careful training of the spray painters as well as in the design of equipment which makes it all possible.

**MCAS CHERRY POINT—**The first annual All-Marine Boxing Tournament was held at this station. BGen. William G. Manley, commanding general, was host for the gala tournament. Most Marines like fencing.

**Mr. Happiness** Commented

**VR-6 Man Recognized for Aid to Kids**

Dee F. Richardson, training devicesman second class, was commended recently by Capt. Edmond K. Konrad, VR-6 commanding officer, for helping underprivileged children in the area.

Richardson, who is known throughout the Springfield-Holyoke, Mass., area as "Mister Happiness", received commendation at "Meritorious Mast" exercises before 800 officers and enlisted personnel of VR-6.

Richardson first began his work for children in September 1952. Each Wednesday afternoon he shows movies to the children at Springfield's Mercy Hospital, Brightside Home for Boys and Mr. St. Vincent Home for Girls. He has organized Halloween and Christmas parties for the children which were very successful.

**DO THESE men look like Air Force men? Six sailors with FASRon-107 in Iceland sent $40 to a Boston girl with a serious brain disease. A Boston paper called them Air Force men, much to their dismay as they read the clipping. They were: W. N. Whittemore, B. J. Dixon, E. G. Morgan, C. P. Brasie, H. R. Cooper, with H. R. Dettweiler, seated, holding the newspaper clipping.**

**EQUIPMENT provides hose reels at sides, paint reservoir in front, gages at center.**
New Electric Hydraulic Test

An electric hydraulic (hydrolube) test stand has been designed by D. C. Bakko, AMC, and W. C. Stephens, AMC of Pasion-16, NAS Moffett Field. A 10 hp electric motor, an FW hydraulic engine-driven pump assembly, and salvage and expendable scrap metal were used in making the stand.

The new stand has proved highly successful in operation. It has three outstanding features:

1. Engine-driven pump supplies pressure automatically and does not need to be regulated.
2. Electric equipment requires little servicing and has low operating cost.
3. The electric unit is compact and easy to handle.

Students See Theory Shown

A new training aid developed by instructor Bill Goers, TD1, at NAETECHTRACEN MEMPHIS enables students at the TD(A) school to see theories they once had to learn to believe by theory. Various meters have been installed on an illustrated Pentode circuit to aid in trouble shooting.

The instrument of wood and cardboard construction has various parts of a circuit mounted on individual masonite plug boards which can be inserted or removed from the circuit as desired. Consequently, the results of faulty tubes or parts are shown on an incorporated oscilloscope.

Goers' invention has proved so successful that plans are being made for the construction of two more of these training aids.

Hi-Shear Rivet Training Film

A training film entitled "Riveting with Hi-Shear" is available in B/AER for use of interested activities. This 16 mm. sound technicolor film, 18 minutes long, was made at Q&R stations during the summer of 1952.

It shows the proper riveting technique as well as the inspection and removal of Hi-Shear type rivets. It was produced by the Hi-Shear Rivet Tool Company, Los Angeles, Cal.

Activities which wish the film to be shown should forward their requests to B/AER, attention Airborne Equipment Division. Requests should include dates and number of personnel who are expected to see the film.

Tech Training is Expanded

Changes in the naval air technical training program to widen its training and liberalize some requirements have been announced by the Navy.

- A new air controlman school (class B) was established on 15 April at NAS Olathe, Kansas, a 16-weeks course designed to give advanced training to control tower operators. The step is in line with increased emphasis on all weather flying and expansion of aviators' instrument training.
- An aerological equipments maintenance course (class C) has been established at NATTC MEMPHIS. This six-weeks course is designed to train aviation electronics technicians in maintenance of rawin, radiosonde receptor, and ceilometer and other shore based aerological equipments.
- A specialized helicopter maintenance course (class C) has been established also at Memphis. Its object is to train AD's to maintain HRS, HUP and other helicopters added to the training program. It lasts four weeks on each type aircraft.
- Standards for selecting personnel to be sent to Class P and Class A schools have been liberalized. Minimum test scores have been set which are slightly lower than scores formerly required for admissitance to the schools in most cases.

Entrance marks at the AN(P) school have been brought in line with the requirements for entrance to the several Class A schools by setting up the new entrance scores of GCT+A=105 or ARI+MECH=105.

- All naval air recruits except Waves are now processed through the Airman (Class P) school at Norman, Oklahoma. The AN(P) school at Jacksonville is reserved for Marine aviation recruits and the Waves.
- Formerly only the following Class A schools were available to the fleet for quotas: aviation electronics technician, aviation aerographers mate, air controlman and photographer. In addition, fleet quotas now are available to aviation ordnancemen, aviation electricians mates and training devices men.
- The AT(B) school for electronics technicians mates has been made more attractive to married men by making the quotas non-returnable. This permanent duty status makes it possible for these trainees to have their families with them for the 40 weeks of this course.
- The J-48/P-6 jet engine has been added to the engines available for a three-weeks course of instruction under supervision of the AD(B) school at Memphis. Quotas are available every three weeks.

Huge 'Paddles' Hitched onto T-34 Turbojet

New Wide Prop Blade Out

A new aircraft propeller with the widest blades ever built will power the R3V-2 transport, hitched to a 5,500-hp Pe&W T-34 turboprop engine.

The new blades are expected to help give considerable performance increase for the plane over its piston-engined counterpart, the R3V-1. Hamilton Standard division will build the new propeller, parts of which are already in production.

The blades are of hollow steel construction supported internally by a steel core. Air spaces in the blades are filled with a vulcanized synthetic sponge for additional support of the outer shell. Designed originally for engines in the 5,000-hp class, the new prop is first in a line of propellers which, in various combinations of numbers of blades, can be used on engines of more than 9,000 hp, and airplane speeds of more than 500 mph.

Marine 'Copters Lay Wires

For several months Marine Helicopter Squadron One has assisted the Marine Corps Equipment Board in the evaluation of an airborne wire laying device. This device consists of a cylindrical shaped canvas container, closed at the forward end, with a hole four inches in diameter in the trailing end.

The case has a hinged opening extending along one side and across the forward end. Pay-out of the wire is initiated by a cockpit control which releases a weight suspended at the rear of the case. When the weight is released, the payout end of the wire is fed out through the hole in the trailing end of the case.

Very little or no difficulty has been encountered in the accuracy of this device. The average accuracy of the wire drops were within 50 feet at the initial point and within 25 feet at the termination station. It is possible to obtain greater accuracy with heavier drag weights, but this, however, is mostly a matter of pilot practice.

Wire laying flights up to four miles have been made. Tests conducted by HMC-1 established the optimum speed of 40 to 45 knots for wire laying in the HLT-4 helicopter, this making it only a matter of minutes before telephone communication may be established between vital points along the battle area.
NEW BARRIER STOPS WILD ROCKETS

LOOSE ROCKET HEADED TOWARD IRISH BARRIER

FINS OF RUNAWAY ROCKET ARE CAUGHT IN MESH

CDR. IRISH (LEFT) INSPECTS BARRIER DESIGN

The USS Badoeng Strait experienced numerous hang-ups of returning F-4U strike-mission aircraft while operating in the Yellow Sea. There was no effective method employed on the VMA-112's F4U aircraft to jettison rockets that have hung up because of broken "pig tails", electrical failures, or similar causes.

The Badoeng Strait has effectively constructed a barrier net made up of two-inch cotton and nylon webbing supported by 3/8 inch cables. The rig is attached to the number four barrier stanchions which effects its immediate use at all times.

The idea of the cargo net barriers originated aboard the Badoeng Strait in 1951 and was affectionately known as the "Fredericks barrier," in honor of the executive officer who originated it.

The new barrier, likewise named for Cdr. A. H. Irish who designed it, is the improved successor to the Fredericks barrier.

Many factors for availability make the use of the Irish barrier very feasible:

1. The barrier takes up no space when not in use; it lies flush to the deck, allowing aircraft to be taxied or towed across it without difficulty.
2. Wherever the barriers are up it is always available, thereby eliminating the use of additional hands in rigging it.
3. Rigging time is only 15 minutes on the first operating day.
4. Personnel are not endangered by its movements.
5. Owing to the closeness of the barrier to the jettison ramp, the entangled rockets can be quickly disposed of with a minimum of danger to personnel.

In the few times that hung rockets have jettisoned from returning aircraft, the Irish barrier has more than proved its effectiveness and worth as a safety device.

Navbit Trainer Modification

A modification to the Link NAVBIT trainer has been developed by Harold D. Mason, T/4, of the Aviation Training Aids Unit, NAS Quonset. It is designed to assist maintenance and to increase accuracy of instrument indication.

This modification results in an absolutely accurate transmission of the trainer attitude from the bank and pitch drive unit to the artificial horizon indicator. After proper installation all malfunction, stickiness or lag in the horizon system is removed.

A system of pulleys groups each correctly positioned to obtain maximum efficiency and using a phosphor bronze cable to connect the bank and pitch drive unit with the artificial horizon disabling unit is the key to this greater accuracy. A minimum saving of two hours per week in maintenance time is estimated.

Emergency Runway Lighting

By adding a few "practical twists" to an old accepted method of runway lighting, Cdr. L. M. Madden, operations officer at Navy's new master jet base at Oceana, Va., has developed a new emergency runway lighting system.

Electrically powered runway lights are all right, but if a power failure occurs, there must be a fast-paced remedy ready. What Cdr. Madden has done has been to design a quick method of using old-fashioned smudge pots to light the runways.

His system requires two trucks, capable of pulling two small trailers, 12 men and—smudge pots. In an emergency, the trucks are driven out on the runway, one of each side. Two men riding on the back of the trailer light the smudge pots while another signals where they are to be dropped. Another man pushes the smudge pots aft of the truck, where one man slides them down a chute. Once down the chute, the smudge pots land upright and illuminate the runway.

By using this system, an 8,000-foot runway, plus a ramp into the parking area, are ready in just six minutes.

VR-3 Engine Time Increased

VR-6 maintenance crews at Westover AF Base have again increased the engine time on squadron R8 aircraft.

Twelve engines have had over 1000 hours each on their flight time logs. Each engine on aircraft #90401 has logged over 1300 hours flying time.

One engine on a VR-6 Skyraider has logged a total of 1452.7 hours. This engine is expected to continue its fine performance until its removal after 1750 flying hours. A 25% increase over the normally allowed flight time was gained by changing all cylinders on this engine.

Refracting Rods for Runways

Pilots hopefally feeling for the ground at night have often complained about the inadequacy of semi-recessed runway marker lights. Harry Dalton of NADC Johnsville and Tom Macario have invented a simple means of providing a better runway light pattern with an easier-to-maintain, more-economical light fixture. It is called the "Macron Rod."

It consists of a transparent plastic plate to replace the original light cover and a 2½" plastic rod that literally pipes the light to the top of the 1½" rod. The plastic cover plate is drilled to conform with the metal cover of the fixture it is fitted on. The rod is attached to this plate by means of a one-half-inch dowel of the same material. This attachment allows the rod to snap the dowel pin under five pounds pressure with no interruption to the light circuit or pattern.

Rods are light and not generally damaged when struck from the fixture, so they may be used many times before replacement is necessary. The Macron lens plate and refracting rod improves the pattern of lights.
ORDNANCE HANDLING GEAR READY

ORDNANCE gear rarely gets the attention it merits. It does not explode with a brilliant flash, and it makes no noise except for mechanical squeaks. But there is nothing dull about the work the gear makes possible.

On the hangars and flight decks of an aircraft carrier, the ordnancemen are working under terrific pressure to meet rigid time requirements in rearming aircraft for strikes. More than anyone else, they appreciate armament handling equipment.

The Armament Division of BuAer is constantly studying the problems of rearming and transporting ordnance in order to improve equipment. To V. S. Jefferson, one of Navy's land-based "sailors," a civil servant in the division, goes a great measure of credit in the success of new handling equipment.

A new series of ordnance gear is the Aero 128 bomb skid and adapted adapters. For purposes of evaluation, 50 new Aero 128 bomb skids have been distributed to carriers in the Pacific and Atlantic—the Midway, Essex, Leyte, Kearsarge, Oriskany, Bou H'mome, Richard, Cabot, Sicily, and Salerno Bay.

Outstanding improvements include bigger wheels (for negotiating larger arresting gear cables), new rubber compound for the tires, new tire tread, lighter weight, and a reduction in storage space required. The new rubber compound, developed by the B. F. Goodrich Company, will withstand a temperature range from -70° to +160°F. This low temperature limit was necessary owing to the increased tempo of operations in the Arctic regions.

The new tread is non-directional. No matter at what angle the bomb skid wheels hit the arresting gear cable or similar deck obstacle, they ride over with ease. Since the overall size of a bomb skid is determined by the size of the smallest bulkhead and elevation platform opening on any type carrier, any increase in wheel size was a major problem. The old Mark type skid had been designed with adequate clearance, but with the addition of larger wheels, it would not fit the bulkhead openings. However, after careful study, squeezing of dimensions and structural modifications, the new bomb skid was designed around the larger wheels. This was done at lighter weight and at no sacrifice of capacity or capability.

Reports by the ships using the new equipment show that the new equipment is considered a great improvement over the old. Use of the new bomb skids and adapters would, on the basis of wartime allowances, yield, it is estimated, the following savings in weight and space:

- CVB: 23,090 lbs., 142 sq. ft.
- CV: 16,310 lbs., 78 sq. ft.
- CVA: 7,200 lbs., 60 sq. ft.
- CVE: 5,270 lbs., 64 sq. ft.

All operating parts of the bomb skid such as wheels, brake mechanism, handles, chocks, and hold-downs are completely interchangeable. Handles may be latched on to either end of the skid, the latch control being located at the operator's hand and not, as heretofore, at the skid. Thus the operator, after loading the skid onto the elevator, doesn't have to enter it to unlatch and release the handle. The skid is capable of transporting any store up to 1000 pounds from the ammunition room, up through any combination of upper and lower stage elevators on any aircraft carrier. It is 53 pounds lighter than the one currently in use.

A description of the associated adapters for the Aero 128 skid follows:

**Aero 88 Bomb Skid Adapter**—The adapter is a frame upon which are mounted adjustable supporting stamps designed to handle six of any type rocket from 3 3/4 to 5 inches in diameter. The adapter occupies less stowage space than the Mk 3 Mod O bomb skid adapter and requires no loose or interchangeable parts to accommodate the various rocket diameters. All parts such as supports, hold-downs and frames are completely interchangeable. When the adapter is hung upside down on a bulkhead, the projecting supports swing over and in, thus reducing the space required. Even if the adapter is stacked on the deck in preference to hanging it on the bulkhead, there is a saving in stowage. By actual weight, the adapter is 49 pounds lighter than the one currently in use.

**Aero 98 Bomb Skid Adapter**—The adapter is a collapsible box, the sides and ends of which are attached to the box with piano type hinges. When assembled and ready for transporting stores and miscellaneous equipment, the sides and ends of the adapter are held in position with four simple bolts. The adapter occupies less stowage space than the Mk 5 Mod O bomb skid adapter and it is entirely free from loose parts. The adapter is capable of transporting practice rockets, rocket heads, rocket motors, belted ammunition, ammunition cans and any packaged pyrotechnics up to its 1000-lb. capacity.

In its collapsed position, the adapter can be hung on a bulkhead or stowed on the deck. By actual weight, the adapter is 100 pounds lighter than the one currently in use.

**NEW TAIL TOW BAR FOR F9F**

Aircraft handling crews aboard the USS Oriskany have been able to speed up flight deck resports by manufacturing a suitable rail tow bar for F9F-3 aircraft. The universal tow bar was unsatisfactory because of the excessive time required to hook up and the danger of tipping the aircraft over when turned broadside to the wind.

The new tow bar allows a straight pull back, thereby eliminating the 180° turn required when using the Universal tow bar. It is also used to spot the aircraft. Inasmuch as it can be used on the F9F only, additional tow bars must be carried in stock for use on other type aircraft.

Despite some disadvantages, the new bar has found most suitable for reverse towing. The design is a composite of ideas obtained from several other carriers on which the F9Fs are operated.

**NEW RETRACTING STRUT TOOL**

A new tool designed to simplify the extraction of the snap ring from the swivel gland shaft in the landing struts of the F9F has been manufactured by B. F. Fogle, AML of Acceptance, Transfer and Training Unit, Corpus Christi, Texas.

The tool is made from two pieces of 3/8" chrome-molybdenum steel pipe. The pieces of pipe are four inches long, and welded to form a T. The lower wall of the vertical pipe is filed to form two 90° grooves, resembling screw driver blades. The grooves are formed directly opposite each other.

To extract the snap ring, the prongs of the tool are placed on the retainer ring and the swivel gland spring is compressed by pushing in on the handle. After the spring is compressed, the snap ring may be removed by the use of a small screw driver inserted between the prongs of the tool.

Previously, it was necessary to use two screw drivers to exert pressure on the retainer ring. A second man was required to slip the snap ring out. Owing to the restricted space, considerable time was required for the job. The new tool makes it a one-man job.
LETTERS

Sirs:
The Oklahoma chapter of American Ex-Prisoners of War is holding the Sixth National Convention of American Ex-Prisoners of War. It will be held in Oklahoma City on June 4-6, at the Biltmore Hotel.

There are approximately 132,000 ex-prisoners of war or next of kin who are interested in this convention. This also includes all American ex-prisoners of war who are still in the service.

B. A. ALLEN, LT.
NATTC, NORMAN, OKLA.

Sirs:
There is a right way and a wrong way to do things in aviation, and the wrong way has been getting some publicity of late and should be spotlighted.

Aviation Medical Safety Bulletin #8 tells of an AD pilot whose engine froze, forcing him to ditch. The story quoted him as saying he swam a few feet from the plane. "I then inflated my life vest and unbuckled my chute."

Naval Aviation News December issue tells of a Marine at Elenton who ditched his Corsair. The story says "He released his safety belt, floated out from the plane and inflated his Mae West. With a little difficulty, he took off his parachute."

In both of these cases the pilot did things backwards. We keep hammering in training that the parachute harness should be unbuckled before the Mae West is inflated. It is difficult to unfasten the harness once the vest is blown up and might consequently cost the pilot his life.

Colonel, USMCG

Sirs:
Greatly enjoyed "The Life and Flight Times of Gramp" in the January issue, but find one statement I'm sure Gramp wouldn't have left slide through—if for no other reason than his undoubted belief in a Hugosiss Curve.

The article credits Gramp's flight with VP-10 from Diego to Pearl as "the longest mass flight attempted up to that date, 1938."

Page VI-13, NAVYER 10-40-32, says that's a distance of 2,288 miles. So what about the 13 PB4Y-1s of VP-4 which Lt. R. W. Moore led from Diego to Coco Solo in late June 1937? The same page says that's 2,507 miles—or is it 18 planes more of a "mass" than 14?

A. A. SPROULE, LCDR

NAMTC, PT. MUGI, CALIF.

* The first "mass flight" of Navy planes on record actually was when six PZ's flew from Norfolk to Coco Solo in Sept. 1933. Lt. Wm. McDade led 12 PZ's from San Diego to Pearl Harbor in January 1937, so it looks as though the Gramp's flight qualified mainly because of the most planes.

NAS JACKSONVILLE—After eight months of combat action in Korean waters aboard the Kearsege, the Red Rippers, VP-11, are home.
LETTERS

Sirs:

With reference to the article "Flares Light the Way for Fighters," January, 1953, issue, some added information is hereby submitted. The operation was pioneered by VP-72 and VP-26, followed by VP-37 who later checked out VP-9.

The sketch shown on pg. 14 was drawn expressly for VP-61 as can be noted by the designer on the tail. The account of the operation was well written, however, it is disconcerting to ex-members of the Old Lamp Lighters to see their sketch lifted without acknowledgment.

J. F. RUSSELL, Lt.

1225 OXFORD WAY
STOCKTON, CALIF.

† The article and pictures were prepared for NA5 News by ComNavFe in Tokyo. The drawing showed better than could any photo how a night flare plane operated. VP-9 hereby gets a pat on the back for pioneering, with other squadrons, in Korea.

Sirs:

An article in the January issue concerns the high altitude photo record set by a pilot of VC-15 from Miramar. In the accompanying photo, which shows many points of interest to a native San Diegan, the naval air station at Miramar is not shown.

The article refers to an "X" formed by crossed runways, as those at Miramar. However, having flown from both fields, I have recognized the "X" in the picture as the runways at Montgomery field, or San Diego municipal airport.

Rex A. MADDOX, AC1

GCA UNIT NO. 26
NAS ATSUGI, JAPAN

† Our apologies to Miramar for mistaking it for the smaller field. We got a bum steer from a chairborne photo interpreter in the Pentagon.

Sirs:

The February issue of NAVAL AVIATION NEWS credited VP-711 with being the first squadron to add an economy officer to its organization. No date was given for this addition to their roster, but we believe that our VP-711 may have beaten the gun on this one. On 13 November 1952, Lt. W. R. Berger was appointed Cost Control Officer of our squadron.

Up to now, we have been equipped with PBM-5's. Those twin tugs of the Mercator burn a lot of fuel so that we have no reply to VP-711's NSA record but we have been devoting a good deal of time to cutting costs where we can. With our new P2V-5's, we should be matching or beating VP-711 in short order.

CIR. A. A. BARTHELS
COMMANDING OFFICER

NATC PATUXENT

Sirs:

The readers of your article "Naval Air Station Types" in the February issue might be interested in the extra news that NAS CORPUS CHRISTI has aboard a training component which we feel worthy of inclusion under "Training Air Stations"; it is the Naval School, All Weather Flight.

Estimates of the capabilities of present equipment and training methods support a contention that general carrier air groups can be made capable of conducting carrier operations with ceilings as low as 200 feet and visibility of 1000 yards. Obviously, the tactical training and necessary for such a task cannot be given to newly designated aviators unless they are thoroughly qualified in basic instrument flying, and at ease in instrument weather; this is where all weather flight comes in.

Each newly designated carrier pilot goes through an intensive instrument flight syllabus before going on to jet training or directly to the fleet. This advanced instrument course is a modification of the well known instrument flight instructor course given by all weather flight for many years.

Comments of fleet commands receiving recent graduates of flight training indicate that it is training time profitably spent and gives the fleet pilot well qualified to pursue tactical all weather training in the type aircraft he is assigned to fly.

J. R. REEDY, CAPT.
NSAWF, CORPUS CHRISTI

WAVES' ELEVENTH REUNION

All Waves, past and present, active and inactive, USN and USNR, are invited to attend the eleventh annual National Wave reunion to be held July 31st, August 1st and 2nd, 1953, at the Brown-Palace Hotel, Denver, Colorado. For information, send a self-addressed, stamped envelope to National Wave Reunion Committee, P. O. Box 622, Denver, Colorado.

VB-5 REUNION

Bombing Squadron 5, USS Yorktown (CV-5), is planning to hold a reunion in San Diego on 6 June 1953, at a place to be announced, of all personnel who served in the squadron at any time from the date of commissioning to July 1942. All former members not already contacted are asked to write John W. Trott, 4512 Pescadero Ave., San Diego 7, Calif.

YORKTOWN REUNION

The sixth annual reunion of men who served on the CV Yorktown, known as "The Fighting Lady," during the last war, will be held in New York City, May 8-10 at Hotel Belmont Plaza. The Yorktown Association numbers 1250 members. For more information write: Yorktown Association Inc., c/o George Bernard, New Equipment Digest, 60 E. 42nd St., New York 17, N. Y.
THE FIVE squadrons of Carrier Air Group Six based aboard the Midway, subject of this month’s feature article, are presented here. VA-25’s leaping cat with bared fangs and claws depicts the striking power packed in the squadron’s punch. VF-41’s animated ace of spaces is loaded with a rocket to hurl after the one he’s just let go from his tail hook equipped cloud. The mailed fist of VF-21’s Mach Knockers shatters the sound barrier, and the VF-42 shield carries the chessman’s pawn. The Jolly Roger of VF-61 waves traditional skull and cross bones.
GET HEP! GET IN STEP . . .

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