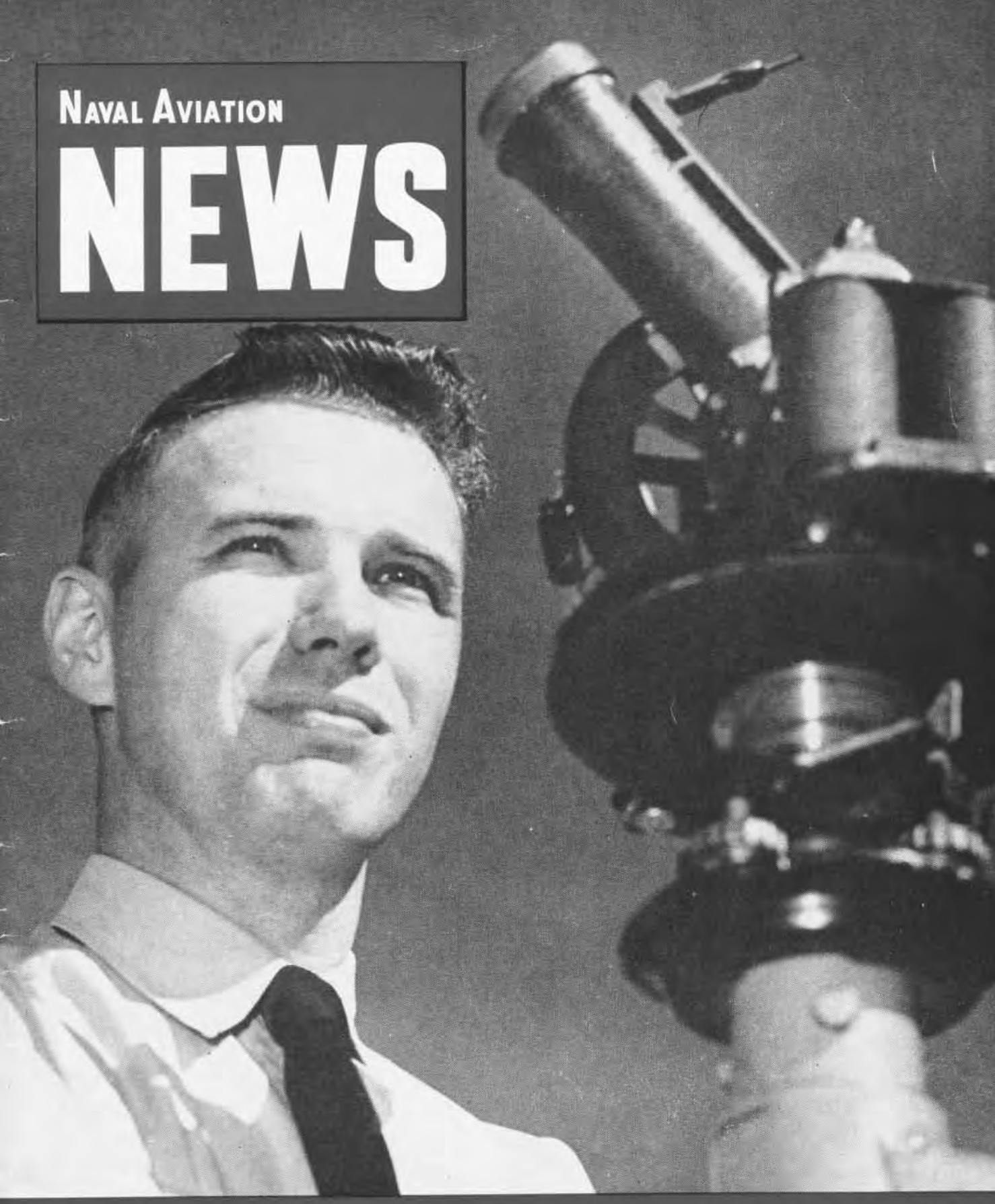
NAVAL AVIATION NEWS



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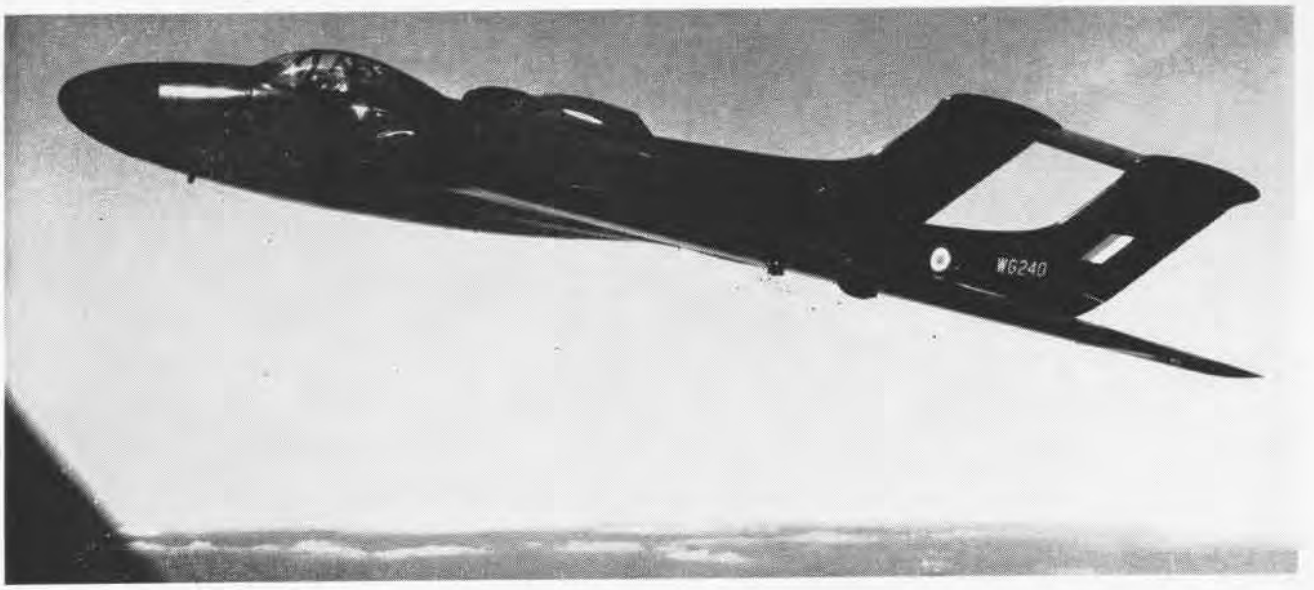


ROYAL NAVY JET FIGHTERS FAST

Two jet fighters built for the British Navy for carrier use are shown here—the de Havilland 110 in the upper picture and the DH 112 **Sea Venom** night fighter—both two-seaters. The 110 is powered by two **Avon** jet engines, each with 9,500 pounds thrust, giving an idea of its high speed. One **Ghost** engine powers the DH 112.

RADAR RAIDERS

As the carrier *Philippine Sea* eased into the seawall at NAS San Diego, 50 members of VC-35's night attack *Team Mike* lined the flight deck to catch a glimpse of wives and sweethearts ashore.

With the return of *Team Mike*, the squadron's first splinter unit to come home since the Korean truce, 34 months of successful and unique operation against the Communists came to a close. During this period, *Mike* and 17 other teams sent to Task Force 77 by VC-35 chalked up an impressive record of night heckler flights in Korea.

Although the primary mission of Composite Squadron 35, commanded by Cdr. L. E. Burke, is antisubmarine warfare, the greatest number of combat missions were night interdiction flights. On their ASW flights, the VAN team planes worked with VC-11 aircraft in forming hunter-killer teams.

With the launching of each night ASW hop, the night radar raiders also left the deck. These missions were not the run-of-the-mill carrier sorties. They were highly-specialized raids to seek out and destroy evasive supply trucks and trains speeding to the front under cover of darkness. "Night hecklers" to some, "roadrunners" to others, the Communists no doubt had a special name for these pilots and crewmen who cut away, night after night, at their precious truck convoys and rail shipments.

Each team has its own tale to tell, full of color and achievement. All are thrilling and in keeping with the traditions of a fighting outfit. Some, however, stand out—a close shave, a record, or a big kill. For one of these, let's go back to April, 1953, when *Team George* was operating aboard the USS *Oriskany*.

A pall of haze clung to the rugged Korean coast and shrouded the many canyons and valleys jutting inland. The night was cold and black and the drone of the *Skyraider* resounded from the rocky seawalls as it skirted in and out along the shore. The pilot, Lt. T. P. (Teeps) Owens, and his crew, J. C. Peckenpaugh, AO3, and R. M. Rial, AL3, stared down into the darkness as they followed railroad track *Mable*, only occasionally detectable in the haze and gloom. All of a sudden the pilot spotted smoke below. Owens banked and dropped a powerful flare.

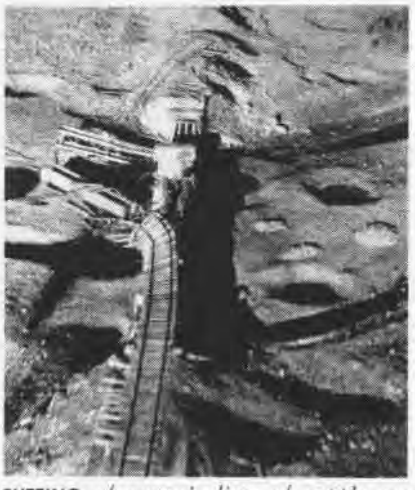
By J. D. Tikalsky, JOC.

THE blinding light flashed like a giant spotlight in a fog, then flooded the area in whiteness. There directly beneath was an eight-wheeled locomotive pulling nearly a score of cars.

Lt. T. G. McClellan in another "road-runner" three miles ahead and to the left was alerted by the flash of the flare. His earphones crackled with Owens' voice, "Hey Mac, I've got a good one. Fly for the flare."

McClellan jammed the throttle forward and called to his crew, F. B. Georges, aviation electronicsman third class, and E. L. Hazelwood, aviation machinist's mate third class, "Looks like 'Teeps' got us a train. Here we go!"

Immediately Owens began his first firing run on the train. The first boxcar burst into flames. The engine uncoupled and began to run for a tunnel a short distance ahead. The *Skyraider* veered back for a second run and swooped low. Bombs away! and a direct hit on the track two hundred yards ahead of the speeding locomotive. The eight-wheeler plowed into the rail-



CUTTING *of enemy's lines of supply one of VC-35's biggest jobs during the war.*

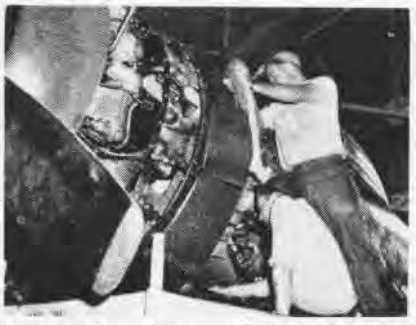
break under full steam, nosed up, smashed onto its side in a cloud of dust, smoke, and steam, and exploded.

Lt. McClellan was busily raking the freight cars with cannon and bomb when Owens rejoined the strike pattern. The train was helplessly at the mercy of the attacking aircraft. The cars exploded and burst into flames under the barrage, indicating a heavy load of supplies.

With ammunition expended and fuel running low, Lts. Owen and McClellan turned their planes to sea. Behind them the Communist supply train was a pile of rubble issuing columns of black smoke that rose straight into the air and then flattened into the thickening layer of haze. Track *Mable* was a mass of twisted rails and splintered ties.

The pilots knew that in a few hours the track would be clear and the twisted rails replaced. Soon they would be back to bite once again into this vital enemy artery. But the most important task at that moment was the return trip to their sea-going base and the unfamiliar but pleasant feel of their bunks.

This mission was typical of the thousands flown in the squadron's nearly three years of continuous operation in Korea. VC-35 boasts proudly



KEEPING *'em flying took long hours of work VC-35's mechs, Rudzik and Alford.*

CDR. BURKE *and LCdr. W. C. Griese add VAN Team Baker's insigne to the squadron's honor roll display; almost every carrier in TF-77 had a unit taken from VC-35 rolls.*

that except for three ships, they supplied an attack team for every attack carrier that left for Korean combat.

Since VC-35 was commissioned in May, 1950, its complement has risen impressively from an onboard count of seven to more than 100 officers and better than 650 men. The majority of the pilots are seasoned World War II aviators averaging over 1,000 flight hours. These mature combat veterans are carefully selected for their specialized tasks as night attack and all-weather pilots.

Before an attack team is sent to the line, all hands undergo eight months of rigorous training at various stations stretching from NAAS EL CENTRO, Calif., to NAS BARBERS POINT in Hawaii.

When a new pilot reports aboard, he has to disregard a lot of his former tactical experience. He soon realizes that being a night heckler requires a special skill and an entirely new approach to this business of flying.

First he is launched on a course of aircraft familiarization. After two weeks of mockups, lectures, and study he becomes a walking technical manual on the AD-4N.

Then comes a concentrated course in survival which even includes the *Dilbert Dunker* of cadet days. Next the prospective *Roadrunner* again packs his bag and he's off to Barber's Point for three months of instruments, night flying, and radar-controlled bombing.

In the same manner, the squadron's

aircrewmen are crammed with knowledge. They undergo what has been described as one of the best aircrewman training programs in the Navy. Under the direction of Chief Radio Electrician W. E. Gallagher, the men learn their "two-hat" jobs as members of a night attack team. Along with the diversified responsibilities of conventional aircrewmen, they learn to operate and maintain the flying laboratory of electronics gear jammed into their aircraft.

In flight these men are electronics technicians of the first degree. On the deck they are hard-working, capable mechanics, ordnancemen, and metalsmiths. With them it's fly and keep 'em flying. Their ability is aptly demonstrated by the high combat availability of each team's aircraft. Ninety-eight percent is the rule. In one instance, *Team Baker* operated six months, flew 325 sorties, and returned home with all original aircraft, an availability record of 99%, and not one engine change.

When the pilots return to San Diego from training in Hawaii, they are joined by their crewmen. As a team, they attend more schools—anti-submarine warfare, close air support, more electronics and bombing practice.

As the syllabus draws to a close, the group of six officers, over 40 men, and four planes become a closely-knit unit. When the day of their deployment arrives, we find a hard-hitting, self-contained team. The reason behind the extensive and thorough training becomes obvious once the group is aboard ship; for when embarked they are responsible for their own maintenance and support.

SQUADRON *aircrewmen learn radar navigation as part of night attack training.*

The training also pays off in emergencies when quick actions and clear thinking mean the difference between life and death. Proof of this was evident one night when the last light of evening had just faded from the Korean sky and three *Skyraiders* of *Team Mike* winged inland toward Hamhung.

Lt. P. E. Sullivan and Lt. B. K. Harmon flew a standard staggered formation behind their flight leader, Cdr. F. G. Edwards, VC-35 executive officer. The target was a heavy concentration of boxcars and locomotives in the marshalling yards of the important North Korean rail center.

In those few moments of total darkness between twilight and moonrise, the planes passed over the target area gaining position to make their strike seaward. Lt. Harmon peeled off from about 5,000 feet and Lt. Sullivan followed. When the second plane was on target at about 3,000 feet, the sky suddenly was filled with a maze of anti-aircraft fire. More tracers than the pilots had ever seen streaked upward and converged on Cdr. Edwards, and Lt. Sullivan's planes.

Sullivan continued his run and released two bombs on the roundhouse that sheltered the locomotives. As he pulled out of the dive, his *Skyraider* lurched sharply. A shell had found its mark and struck the starboard wing root. The plane began to leak oil and hydraulic fluid and a strong smell of gasoline filled the cockpit with each change of the throttle setting.

SEARCHLIGHT *and radar load the AD-4NL's of VC-35, used to hunt out enemy trucks.*

With his airspeed indicator out and after jettisoning the rest of his ordnance load, Lt. Sullivan headed south for the nearest emergency landing field, 100 miles distant. As the two other aircraft joined up, one of Lt. Harmon's crewmen flashed a light on the damaged *Skyraider*. The dreaded news came through—except for two bombs and a flare, Sullivan's plane was loaded—really loaded! His bomb racks had failed to release and he was still carrying four 100-pound bombs, two 250-pounders, and five flares.

As the aircraft approached the emergency strip, the situation grew worse. Hydraulic pressure had dropped to zero, and the crippled plane was now difficult to control. A low overcast blanketed the field.

Lt. Sullivan was forced to use emer-

VC-35 GAVE *the "Mighty Mouse" 2.75 folding-fin rocket pods a tryout in Korea and found them effective; this AD-4N carries three bombs, four flares and six of pods.*

LT. (JG) *Reynolds brought his damaged Skyraider back after heavy AA hit him: 5 VC-35 men were prisoners of war.*

VAN-12's *leader, LCdr. W. E. Moore, talks over a day's strikes with George Cooperstein, AD1, aboard Phillipine Sea off Korea.*

gency procedures for lowering his landing gear. Both wheels lowered but the indicator showed the starboard gear as unlocked. This was bad! If the gear collapsed on landing, the flares might fire and with the gas leak, the bombs could very possibly explode!

The *Skyraider* dropped through the overcast and the field burst into view a few hundred feet below. Lt. Sullivan eased the plane down, groping for the landing strip like a blind man for a curb. He banked the plane slightly. First the left wheel touched and as the aircraft slowly leveled off, the right. They both held!

The *Skyraider* settled onto the strip but much too fast! A complete loss of hydraulic fluid had left the aircraft brakeless. Lt. Sullivan saw that he could not stop before reaching the end of the runway. A deep gully loomed ahead as his thoughts raced. Then, just as time was about to run out, he intentionally groundlooped the plane in a skillful maneuver.

Tires screeched as the *Skyraider* spun around a few feet from the dropoff at the end of the runway. It shuddered to a halt with not so much as a scratched wing tip. The long months of training and a thorough knowledge of his aircraft had enabled this VC-35 aviator to avert disaster. He, his crew, and plane would fly again.

For the most part, VC-35 shipboard operations were plain hard work performed undramatically in all kinds of weather. There were, however, a few chuckles. On one occasion last winter, two VC pilots on the *Valley Forge* were scheduled for an antisubmarine patrol. When they awoke at 0130, they were almost certain that the hop would be cancelled. It was snowing heavily and visibility was measurable in feet. They received their briefing with one ear cocked toward the "squawk box" for the words, ' Flight cancelled."

Instead, in disbelief, they heard, "Pilots, man your planes."

There was just a trace of panic in the airmen's eyes as they stumbled across the deck groping for their planes on the catapults. This was ridiculous! they thought. Snow was piling up on the wings of their planes faster than the deck crews could sweep it off. They climbed in.

Still no word. Then, "Start engines."

As the clock edged toward the launching time, the catapult officer stepped onto the flight deck flexing his arms. Unable to remain silent any longer, one of the pilots called the ship, *"Uncle George,* this is *Crock One;* for your information I am on the starboard catapult and in my opinion, the weather is unsatisfactory."

Silence, then, *"Crock One,* this is *Uncle George;* Roger your message regarding weather on starboard catapult. All planes will be launched from the port cat!" This was followed by another calculated period of silence and then, "Cut your engines. Your flight is cancelled."

Perhaps the term "all-weather" should be modified to "almost-all-weather" pilot.

VC-35 was often called upon to perform tasks outside of its normal schedule of operations. Among the extra-curricular activities delegated to the squadron was the combat evaluation of the 2.75" folding fin rocket, the *Mighty Mouse.* Executive Officer Cdr. F. G. Edwards was in charge of the evaluation which was conducted by *Team Mike* aboard the *Philippine Sea* in the spring of this year.

The weapon consists of seven "mice" (rockets) in an expendable plastic-cardboard pod mounted in the usual fashion to external bomb racks. During these tests *Team Mike's* planes carried a standard ordnance load of six rocket pods, 800 rounds of 20 mm ammunition, one 500-pound and three 250-pound bombs, and four flares. This pay load totaled about 2,800 pounds.

The effectiveness of this new rocket is vividly portrayed by a raid of LCdr. F. E. Ward, officer-in-charge of *Team Mike.* One clear, moonless night late in March, 1953, he and his crewmen, E. B. Willis, aviation machinist's mate third class, and R. M. Yonke, aviation machinist's mate second class, were covering a sector just west of Wonsan.

Throttled back at 5,000 feet they scanned the area for the tell-tale headlight winks of a truck convoy. They knew the tactics employed by the "Commie" teamsters. The trucks would be well spaced with every fourth truck sporadically blinking its lights as the column rumbled along.

Beneath the *Skyraider* lay a valley, its greyness broken slightly by the outline of a sandy river bottom. Suddenly, two tiny beams of light stabbed through the darkness below. Two more

blinked farther to the west, and after them others. LCdr. Ward swung the heavily loaded plane to the left and began a "dummy" run.

As the aircraft swooped down the valley, the flickering headlights stopped. Ward detected the long string of trucks winding its way down from the hills and through the valley. He pulled his plane up just as the lead truck reached the river.

The driver flashed the first truck's headlights across the narrow bridge and stopped short. Apparently he was afraid to cross without lights but dared not use them with the heckler overhead. LCdr. Ward made another pass as the vehicles piled up close behind one another. This time a flare from the attacking *Skyraider* turned the blackness of the valley into daylight.

The plane climbed to about 2,000 feet and leveled off at the head of the valley. Ward checked his rocket launching switches and nosed over into a dive. About 30 trucks were like sitting ducks.

THE ALTIMETER counted off the descent—1,800 feet, 1,700, 1,600, LCdr. Ward's hand gripped the stick tightly. The glowing needle slipped to the predetermined altitude and his thumb snapped down on the red button. All 42 rockets streaked forward and almost instantly the convoy was showered with a barrage of white-hot explosions. Supplies and torn metal rent the area and flames leaped from the truck beds and canopies. One push of the "pickle" and five trucks had been blown to oblivion.

This report is one of many made during the evaluation by *Team Mike* pilots on this new weapon.

Another example of the squadron's versatility and scope of operation was its large number of VIP passenger hops. Since their AD-4N's were among the few shipboard aircraft with two rear seats, the VC-35 aviators were often called upon to transport notables from ship to ship and ship to shore.

Out of the 20 naval aviation personnel — pilots and aircrewmen — who were captured by the Communists and released this summer from prisoner of war camps, five were from VC-35. They were Lt. (jg) Harry E. Ettinger, Raymond L. Blazevic, AT1; Julian H. Gilliland, AT2, Jess R. McElroy, ADU3, and Ensign Gerald C. Canaan.

NAVY CARRIERS CREATE NEWS

NAVY carriers have been in the news lately. Biggest news probably was the announcement that the *Forrestal*-class carriers were being modified to have a fixed superstructure instead of being a flush-deck, disappearing island type.

The change was made after highly-successful tests of the canted deck idea aboard the *Antietam* revealed the plan to lower the island during operations was unnecessary. The *Forrestal*, *Saratoga* and a third large carrier of this same class, will be equipped with the British-developed steam catapult which can launch larger planes at greater speeds than hydraulic. The canted deck idea also was British, although the *Antietam* was the first to use it.

The *Forrestal*-class carriers will feature a fixed island, canted deck and rearrangement of the catapults and elevators. The fixed island will facilitate electronics and communications installations and was made possible by the fact the canted deck will permit planes of wide wing span to operate from a carrier deck. The change will save $3,000,000 in the cost of the big carriers with no delay in completion date.

Another of the Navy's big carriers will go into Bremerton Naval Shipyard for conversion to include canted deck, stronger catapults and arresting gear, and greater avgas capacity.

Secretary of the Navy Robert B. Anderson has announced the Navy's 1954 ship construction would include a third *Forrestal*-class carrier and the *F.D.R.* reconversion project. The third big flattop will be built on the East Coast since no private western shipyards can handle the job.

The work on the *F.D.R.* is the first conversion done on that class carrier although numerous *Essex*-class carriers have been beefed up with stronger catapults, arresting gear and flight decks. The islands have been cut down and turrets removed—the *Oriskany* was the first of this type of conversion. Estimated cost of the *F.D.R.* changes is less than one-fifth the cost of a *Forrestal*-class carrier and takes one-third the number of man-days of work.

Unit Has 100% Students

FASRon-6 Pushes Education Program

COMFAIR, JACKSONVILLE — FASRON-6 has set a record which no other squadron can beat—100% of its personnel are signed up for advancement-in-rate courses of study and have been for seven months straight.

Since the squadron comprises 350 officers and men, the mark is one not easily attained and is a credit to Lt. (jg) Frank Glendinning, squadron education and training officer. A well-stocked squadron libary plus daily lectures from 1530 to 1630 help the unit to attain its perfect record.

WHEN THE *firing in the Korean War ceased, the carrier Boxer, serving her fourth combat tour of duty off the Korean east coast, paused on a Sunday for memorial services. Officers and men heard the ship's chaplains ask blessings for shipmates killed in the war. Capt. M. B. Gurney prayed that the truce would become a lasting peace. A Marine guard fired three volleys and taps were sounded for the men who did not come back.*

GRAMPAW PETTIBONE

Russian Roulette

The pilot of an F4U was cleared for an air ground demonstration which included simulated dive bombing and rocket runs. He entered his first bombing run at 40-50°. As he started to pull out, he noticed a spongy effect in the elevator controls and as he increased the back pressure on the stick, the aircraft pulled up abruptly, making the climb out abnormally steep.

At this point we pick up the pilot's statement: "I decided to make a shallow diving entry on my next pass to test the plane at various 'G' stresses before continuing on the flight. My

second run proved that I would be unable to dive at steep glide angles as I got the same effect as on the first run, except that the snap effect was a bit more pronounced, and left me climbing out at an angle of about 75°.

"On my third run I leveled off high and pulled up with the same effect as on the previous runs. I decided to make one more pass before returning to the base. I entered the fourth run in a shallow diving turn. On pull-out I applied back-stick pressure gradually as I was hesitant to pull back sharply because of the trouble I had had previously. I was losing altitude rapidly and it looked as if I was going into the trees. As I pulled the stick back all the way the plane once again pulled up sharply, but not before hitting the tops of some trees on top of a ridge.

"The plane came out of the trees nose-high and snapped to the left on its back. I completed the roll to the left and had difficulty stopping the roll. I pushed the nose over and applied full throttle and although the plane was shuddering, it would fly. I needed over 160 knots to maintain flying speed.

"At this point I noted a large hole in my left wing. I started a shallow climb to get some altitude to test the stall characteristics of the aircraft before returning to the base. Almost immediately my oil pressure dropped to zero and my engine quit. As the engine quit, the plane rolled to the left. I had difficulty in getting out of the cockpit, but finally managed. As I reached for the rip cord I was struck violently in the back (he probably hit the plane's horizontal stabilizer) and almost lost consciousness. I pulled the rip cord and the chute opened just before I struck the ground."

Grampaw Pettibone Says:

Holy Smokes! You finally got on the ground with a whole skin, but I didn't think you were gonna make it. Son, if you were so all-fired anxious to play a game of chance, why didn't you drag out your old "38" revolver and play a little game of "Russian Roulette." That would have made about as much sense as your antics in this case.

It's beyond me what you expected to gain by making that third and fourth run since you had already decided that you shouldn't continue the flight. Any time that you're in the air and something

goes wrong with your plane, you're asking for a heap of trouble if you don't head for the nearest landing strip and find out what's wrong. If you don't believe me, you oughta read the epitaphs of a few other aviators who were just about as hard to convince as you are.

Since the plane was demolished on impact, they haven't found out yet what was wrong with the controls, but it's a cinch that the control column trouble had nothing to do with the engine failure.

Anyway, from here in I'd say you better be pretty careful, as there's little doubt that you've forced your guardian angel to take a "rest cure."

Grandpaw Pettibone Says:

Brakes should be left off when airplanes are parked in very cold weather to prevent them from freezing tightly in the locked position.

Plenty of Rime—No Reason

A flight of five F8F's were cleared on a local IFR training flight. The weather at the time was estimated to be 600-800 feet, eight miles visibility, with the top of the overcast at 3500 feet. Light rime was reported in the clouds. The weather was expected to deteriorate to 400 feet with the visibility decreasing to one to two miles.

The Organized Reserve pilots were briefed to climb through the overcast, form a stack on the range station, and make a range approach and a GCA run prior to final landing. Each plane was given individual clearance for climb out at timed intervals.

The flight leader was cleared to climb out and report over the range station at 3000 feet. When the flight leader reported leaving the range station and descending to the GCA pattern, the number two man in the flight received the same clearance. The other three aircraft were cleared through the overcast to maintain four, five and six thousand feet respectively.

The flight leader made two GCA runs before he landed. Upon landing, he noticed that the plane's stalling speed was very high and that he had one and one-half to two inches of rime ice on the leading edge of the aircraft's wings. The other members of the flight were so informed.

During this time the number two man in the flight became lost in the overcast. While making a left turn at 3000 feet and 130 knots, the plane stalled and entered a spin to the right. He recovered from the spin on instruments but he struck a 10-inch wooden high tension pole before completing his recovery, causing considerable damage to his plane (and no doubt to his peace of mind). He climbed to 2500 feet, received a DBF steer back to the field and landed with about 300 feet of wire dragging behind the plane. He also had about two inches of rime ice on his plane.

Meanwhile, the remaining three F8F's became lost above the overcast. They were brought back to the field by DBF, put into the GCA pattern individually and landed without too much trouble. The weather at this time had deteriorated to a variable ceiling of 200-500 feet with a visibility of one to two miles.

Grampaw Pettibone Says:

Gee whiz, fellows, everybody knows that flights under actual instrument conditions are essential in the development of a proficient instrument pilot, but did you have to crank in the rime ice and deteriorating weather on a single engine training flight to prove the point? You're pretty lucky that the flight turned out as well as it did.

Under the prevailing weather conditions, it appears to me that the person who cleared the flight was just "asking for it," particularly since none of the pilots had any recent instrument experience, although they all held valid instrument ratings. The pilot of the plane that hit the high tension pole hadn't flown an instrument flight in four and a half months. He had flown only 5.8 hours of flight time in the preceding three months. Under the circumstances, I think he deserves a lot of credit for remaining calm in his emergency when panic could easily have cost him his life.

There oughta be a law requiring a certain minimum amount of instrument training each quarter for pilots holding instrument ratings. It's a cinch you shouldn't be flying under minimum weather conditions if you haven't flown instruments for four or five months.

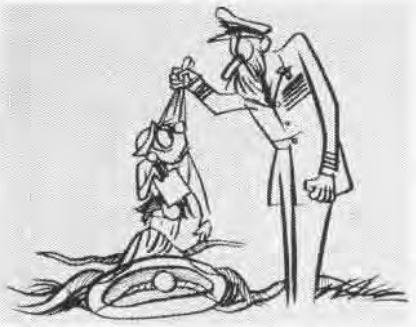
Climb and descent through an overcast is excellent training, and if the flights are properly controlled, is the safest form of instrument training. Let's play it safe, and when you're flying on instruments in an aircraft not equipped with de-icing equipment—either avoid icing areas or plan your flight to minimize the time spent in icing areas.

I still have a sneaky feeling that this accident might have been avoided if the tower operator had followed his instructions and cleared all of the planes to "500 on top" before the pilots began their range approach.

Non-Scheduled Flight

Just about the time I think I've heard all the reasons for busting up airplanes, along comes something new.

About midnight one dark night, an



SNJ was started and observed to taxi away from the parking area. The plane continued to taxi, making numerous changes of heading and came to a stop on the end of one of the unlighted runways on the field. Attempts to contact the plane by radio were unsuccessful.

During the take-off, the plane was observed to swerve 90° to the left, become airborne for a short time, stall out, and hit on its left wing and begin to cartwheel. The landing gear sheared off at this time and the plane skidded backwards for about 120 feet before coming to rest. The occupant was uninjured.

Not that somewhat similar accidents haven't happened before, but just listen to this:

The plane was being maneuvered by a seaman apprentice (he had never flown before) who decided that patrolling the ramp on watch was a little dull and thought that a little joy ride would break the monotony of it all. He started the airplane and taxiied out to an unlighted runway and attempted to take off into a nice black night. You've already heard the rest.

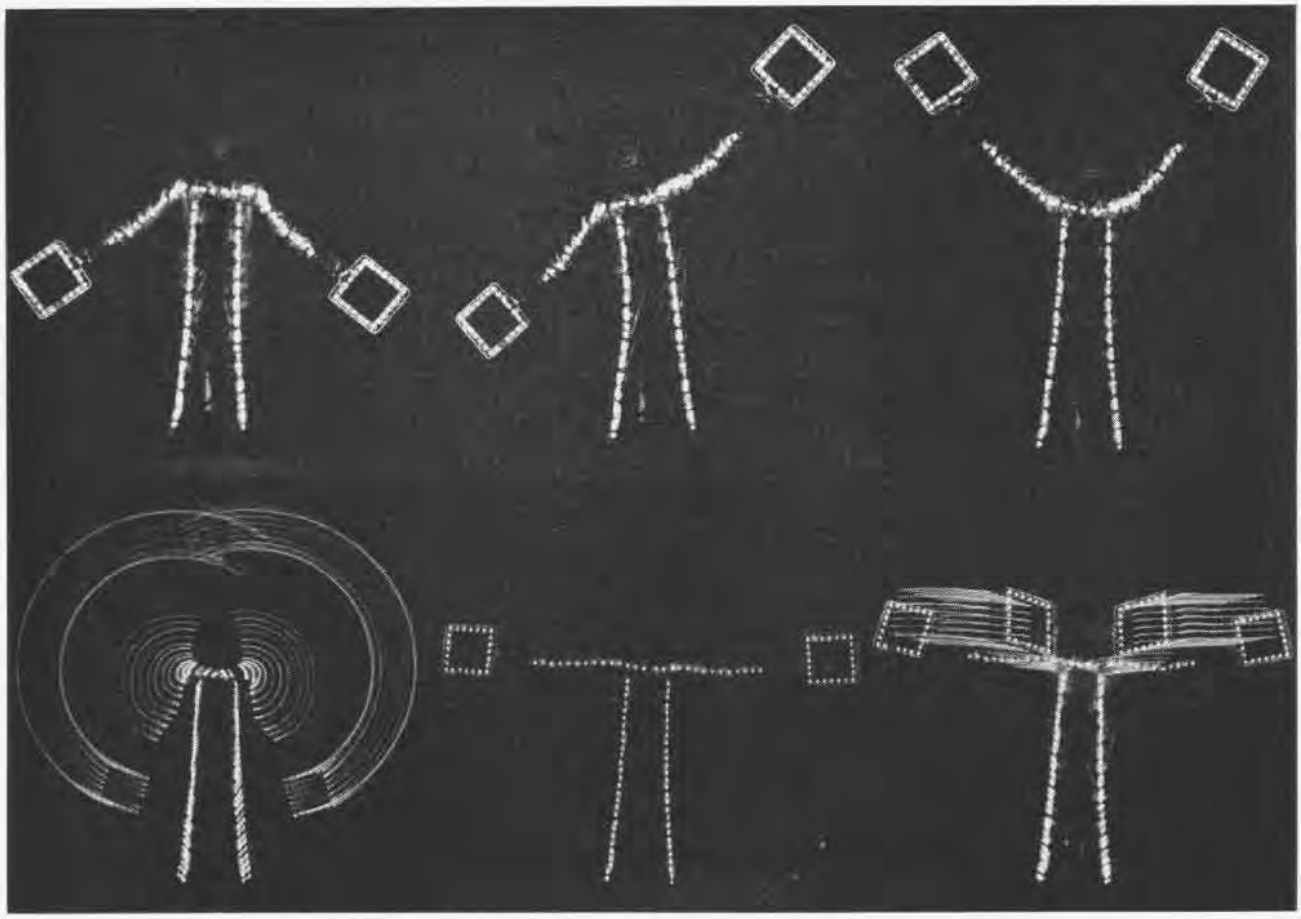
Grampaw Pettibone Says:

Believe me, I've been tugging on my beard for many a day over this one. The ISIC in his endorsement on the accident report states: "It is considered that this accident is an isolated case in which no trend or pattern is discernible and that the possibilities of a recurrence of this type of accident are highly remote."

Well, for goodness sakes, let's hope so!

Grandpaw Pettibone Says:

If the hatch or other opening is left open when a plane is parked in very cold weather, air is allowed to circulate. This prevents formation of frost on the inner side of the windshield.



NIGHT SUIT FOR LSO REFINED

THE CHRISTMAS tree light night LSO suit developed by Lt. K. C. Pailer and tested by Lt. T. S. Lockard on the USS *Midway* (NANEWS May 1953) has been improved, officially tested and favorably evaluated. A night pilot approaching a carrier would see the LSO as in the pictures above.

Pailer's suit had a couple of sets of Christmas lights rigged to a summer flying suit and hooked to a 12-volt battery. Later it was improved with aircraft recognition lights and tested aboard the USS *Bennington* by Lockard and Lt. Chet Kingsbury.

Lockard was ordered to BUAER on TAD to help develop a more permanent and improved version. With the aid of the National Bureau of Standards, the suit was completed in a record three days. The project was then assigned to VC-4 at NAS ATLANTIC CITY for field and carrier testing. Representatives from DCNO(AIR), BUAER, BUSTANDARDS and VC and VS squadrons were present. The suit was further tested aboard the USS *Tarawa* by Lt. Rod Newman, VC-4 LSO.

The new suit utilizes the present LSO suit, including the stripes, to which 84 28-volt parallel circuit lights have been attached. There are 24 lights per paddle, and the intensity of all lights is controlled by a rheostat.

PIONEER *version of the Christmas-light night LSO suit built on USS Midway.*

LT. LOCKARD *models refined suit built for Navy by National Bureau of Standards.*

48 NAVY, MARINE AIRMEN RED POW'S

A BLONDE BUPERS clerk took two pink "Killed in Action" slips out of one file and placed them in the "Prisoner of War" folder one day recently, marking a happy ending to two naval aviators' war histories in Korea.

The two fliers who were certified by their commanding officers to have been killed in combat were Ens. Edwin A. Nixon of VF-91 and Roland G. Busch of VF-653. In both cases their squadron mates had watched their AA-riddled planes smash into the ground behind the Red lines and burst into flames.

But when the Reds handed over their POW's during August, *Big Switch*, these two men were among the 21 naval aviation personnel and 27 Marine pilots included in the 3,598 prisoners turned back to United States forces. Since the Navy operated mainly offshore and the Marines from land bases and a CVE, the POW's mainly were pilots shot down behind the lines, their aircrewmen or hospitalmen assigned to Marine ground units.

FIRST SIGHT OF FREEDOM VILLAGE FOR NAVY, MARINE PILOTS WAS THIS WELCOMING SIGN

● The story of Ens. Busch involves one of the outstanding rescue sagas of the Korean war. Task Force 77 almost ceased combat operations for two days to search for him and his squadron mate, Ens. Harlo E. Sterrett, Jr., both flying off the *Valley Forge*.

Sterrett, incidentally, was feared to have been killed since the rescue missions failed to find him, but he also turned up among the prisoners of war freed by the Reds in August.

Both were flying far inland over mountainous North Korea when Sterrett's *Corsair* was hit by AA. He crash-landed on a 6,200-foot plateau. His squadron mates, including Busch, flew cover over him, dropping "survival bombs" with guns, food, and a short-wave radio.

The cruiser *St. Paul* sent its helicopter in to rescue him but the severe turbulence stopped it cold.

On the second day, tragedy struck the rescue mission when Sterrett's close friend and squadron mate, Ens. Busch, crashed while trying to spot him. His F4U was seen to hit a hillside, explode and burn. That was on 27 May 1952. Two big Marine helicopters from HMR-161 flew out to the *Valley Forge* for briefing for a rescue attempt.

One helicopter flew across the gusty plateau. A mile from where Sterrett crashed, the helicopter hit a downdraft and smashed into the hillside. The second helicopter was flown in, rescued the three Marines under Communist gunfire and made it back to the carrier with almost dry fuel tanks. No trace was found of Sterrett or Busch by the search parties. Nothing more was known of them until they walked out of the POW exchange, Busch being officially listed as dead and Sterrett missing in action.

● The second man who was officially declared killed in action only to turn up as a POW was Ens. Nixon. Flying


COL. SCHWABLE *shows rigors of imprisonment as Gen. Megee pins wings on him*


CAPT. BOOKER, *first pilot captured in KoWar, and Lt. Bell talk to Bernadini*


OFFICIALLY *listed as dead, Ens. Busch here talks to Capt. Hayward on release*

an F9F-2 from the *Philippine Sea* on 1 March 1952, the VF-91 pilot went into a dive-bombing run on a heavily-defended railroad bridge near Wonsan. AA fire hit his plane and he went into a dive. The *Panther* glided into the ground, exploded and burned, causing his squadron mates to report back to the carrier that he had been killed. His safe return, like that of Busch, came as a complete surprise to his friends, family and the Navy.

One Flier Freed Earlier

One Navy pilot, Lt. (jg) Marvin S. Broomhead of VF-194 on the *Valley Forge*, was turned back to the U. S. forces in an earlier prisoner of war exchange called "Little Switch". He was the first Navy pilot to be freed in the truce, after 14 months of imprisonment. The rescue attempts made to save him at the time he was shot down northwest of Wonsan rival those for Sterrett and Busch.

Broomhead's fellow pilots flew a cover for him while the *Manchester's* helicopter came in to pick him up. The RESCAP collected bullet holes for their trouble and the helicopter crashed. The two men in it took off on foot, reached the injured Broomhead and hauled him to a safer position on a sledge. Red gunners moved in for the kill.

More protective planes were rushed in and an Army helicopter landed about 200 yards away but due to enemy fire the three men on the ground had to wave it away because Broomhead could not be carried across the line of fire. Next morning planes came back for a third attempt to rescue Broomhead and his two would-be saviors.

Only footprints on the snow indicating a fight told the story of what happened to the trio. Broomhead's release by the Communist preceded by a few weeks that of Lt Edwin C. Moore, the HU-1 pilot from the *Manchester*, who was captured with him on 8 February.

A complete list of the 21 Navy pilots and aircrewmen POW's follows:

Bagwell, Ralph M., LCdr., VA-35.
Blazevic, Raymond L., AT1, of VC-35.
Broomhead, Marvin S., Lt. (jg), VF-194.
Busch, Roland G., Ens., VF-653.
Canaan, Gerald C. Ens., VC-35.
DeMasters, John A., Lt. (jg), VF-64.
Ettinger, Harry E. Jr., Lt. (jg), VC-35.
Faler, Dale, Ens., VA-65.
Gilliland, Julian H., AT2, VC-35.
McElroy, Jess R., ADU3, VC-35.
Moore, Edwin C., Lt., HU-1, Manchester.
Moritz, Dale E., Lt., VA-923.
Neal, Geo. M., ADAN, HU-2.
Nixon, Edwin A., Ens., VF-91.
Osborne, Henry H., Lt., VF-63.
Psel, Gaylord A., Lt. (jg), VA-95.
Riker, Andrew L., Ens., VA-923.
Sterrett, Harlo W., Ens., VF-653.
Thorin, Duane W., AMC(AP), HU-1 Rochester.
Thornton, John W., Lt. (jg), HU-2.
Yerger, Maury F., LCdr., VF-23.

Out of the 80-odd Marine officers captured by the Communist in the war, 27 were aviators. Highest ranking officer taken by the Reds in either the Navy or Marines was Col. Frank H. Schwable. He was one of the Marines'

THIS MOVIE *camera, photographing POW's at Village, also recorded Jap peace signing on USS Missouri, Panmunjom signing*

LCOL. THRASH *tells prison camp experiences to engrossed audience at Freedom Village, including Marine Gens. Pate, Megee*

TURKISH *Gen. Akkurt chats with Lt. (jg) John Thornton, who is believed to be first helicopter pilot shot down in Korea*

ODD PIPE *intrigues Lt. O'Shea, Capt. Lipscombe, Ens. Nixon while Lt. Dale Moritz puffs; Nixon came back from "grave"*

HAND-*carved crucifix made in POW camp shown by Capt. Chas. E. Martin to Capt. Montgomery, Maj. Sampler after release*

GEN. PATE *talks with Thorin, Williams, Spence, seated, and Riker and Sterrett, object of hectic TF 77 search, standing*

FIVE POW'S *Capt. Gray, Lt. (jg) DeMasters, Capts. Flynn, Amann and LCdr. Bagwell pose happily with Maj. Gen. Megee*

BGEN. *McCaul welcomes Capt. Martin, Lt. Stanfill, Capt. Perry and Ens. Canaan following arrival at Freedom Village*

outstanding night-fighter pilots in World War II, skipper of its first squadron, VMF(N)-531, and chief of staff in the 1st Marine Air Wing in Korea when he was shot down behind the lines. Maj. Bley was his co-pilot.

A list of Marine officer pilots repatriated from the POW camps follows:

Amann, Emanuel R., Capt., VMF-323.
Baugh, Milton H., 2nd Lt., VMF-311.
Bell, Richard, 1st Lt., VMF-311.
Beswick, Byron H., Capt., VMF-323.
Bley, Roy H., Major, Hq 1st MAW.
Booker, Jesse V., Capt., Hedron 1st MAW.
Fink, Gerald, Capt., VMF-312.
Flynn, John P., Capt., VMF(N)-513.
Gillette, Robt. J., 1st Lt., VMF(N)-513.
Gray, Roy C., Capt., VMF-311.
Harris, Walter R., Maj., VFM-323.
Henry, Kenneth W., 1st Lt., Manchester.
Lipscombe, Robt. B., Capt., VMO-6.
Lundquist, Carl R., 2nd Lt., VMF-312.
Martelli Paul L., Capt., VMF-323.
Martin, Charles F., Capt., VMA-121.
Perry, Jack E., Capt., Hedron MAG-33.
Richardson, Judson K., Maj., VMF(N)-513.
Schwable, Frank H., Col., Hq., 1st MAW.
Smith, Mercer R., Capt., VMF-311.
Spence, Kenneth L., Capt., VMO-6.
Stanfill, Herman F., 1st Lt., VMF-323.
Taft, Leonard C. Jr., 1st Lt., VMO-6.
Thrash, Wm. G., LCol., MAG-12.
Wagner, Arthur, Capt., VMF(N)-513.
Wilkins, James V., Capt., VMF-312.
Williams, Duke Jr., 1st Lt., VMF-212.

One of the Marine Corps best-known enlisted pilots who was shot down and returned in the POW exchange was MSgt. John T. Cain of VMO-6. Sgt. Cain distinguished himself by flying little OE reconnaissance planes 184 hours and had 76 combat missions in one month. Just before he was shot down, Cain personally paid for six months' education of nine Korean children who lived near VMO-6 advanced airbase. (NANEWS, Sept. 1952).

Because of his greying hair and lack of insignia, the Reds insisted he was a lieutenant colonel. After questioning him for 84 days, they gave up trying to indoctrinate him in Communism.

Capt. Booker was believed to have been the first Navy or Marine pilot taken captive during the war. He was shot down while on a recco mission, flying from the *Valley Forge*, a few days after it started.

When the prisoners of war arrived in Freedom Village they were issued Marine fatigue caps. Gold naval aviators' wings donated by fliers in the 1st Marine Air Wing were pinned on the chests of pilots by Marine MGen. R. M. Pate or BGen. Vernon E. Megee. In one case, Cdr. George S. Morrison gave his Navy wings to Lt. Henry H. Osborne. Morrison had worn the set of wings since he left Pensacola in 1943 and logged 3,000 hours with them.

On his return to freedom, Ens. Busch reported he was hit by small arms fire while flying his F4U at treetop level. He crashed in it and was so badly burned he was several months in recovering. Medical attention was poor. Civilians where he was shot down near Wonsan were very hostile because of the heavy pounding they had been getting from the Navy carrier planes.

F4D SETS JET SPEED RECORD

LCDR. VERDIN IN COCKPIT OF F4D SKYRAY BEFORE SETTING NEW WORLD SPEED RECORD

THE NAVY set a new official speed record of 753.4 mph in the delta-wing F4D *Skyray* at Muroc dry lake speed course on 3 October, eclipsing the previous record of 737.5 mph set eight days before by an RAF Supermarine *Swift* jet on the Libyan desert.

Pilored by LCdr. James B. Verdin, the Douglas El Segundo speedster flashed over the measured 3-kilometer course four times with the temperature reading 98.5°. His fastest pass was the second when the F4D was clocked at 761.414 mph. His first was 746.075, the third 746.503 and the fourth 759.499. He averaged each mile in less than five seconds.

Verdin's record was slightly under the speed of sound, estimated then at 792 mph. The F4D is powered by a J-40-WE-8 Westinghouse jet engine with afterburner. Verdin is attached to flight test division at Patuxent. His 3 October feat was his third official try to bring the Navy the speed record, his first on 29 Sept. averaging 742 mph, not sufficiently faster than the *Swift's* 737 to be a new record. The F4D is the first carrier plane to hold the maximum speed mark.

The Navy also holds the unofficial world's speed and altitude records for manned flight with the Douglas *Skyrocket* at 1238 mph and 85,235 feet. Since these were set at high altitudes, they did not conform to the low-level, four-pass rules of the Federation Aeronautique Internationale.

LCol. Marion Carl held the world's official record for the Navy in 1947 at 650 mph in the Douglas *Skystreak*. Lt. Al Williams held it in 1923 with a Curtis R2C-1. The Navy at various times has held dozens of world's records, in 1923 holding 21 out of 34 world records for seaplanes.

Verdin flew the *Skyray* in its normal combat configuration. A Navy Cross winner in World War II, he flew 75 combat missions from the *Saratoga*, *Enterprise* and *Lexington*. He was on the *Valley Forge* when the Korean war started and flew 40 missions in F9F's against the Communists. Before he made the speed runs, Verdin had about 20 hours in the F4D at Patuxent at speeds around 400 mph.

U-Boat to Go to Chicago

Dry-Land Exhibit Goal of Fund Drive

Got any souvenir torpedoes or Iron Crosses you picked up when you boarded the German U-boat U-505 when she was captured on the high seas by the aircraft carrier *Guadalcanal*?

The Navy is looking for souvenirs taken from the sub at the time of capture during the war, to use as displays when the U-boat is put on dry land and opened to public inspection. The sub, first ship captured by the U. S. Navy on the high seas since the War of 1812, is now at Portsmouth, N. H.

Funds are being raised, however, to take it to Chicago, where it will be set on permanent concrete cradles alongside the Museum of Science and Industry in Jackson Park. Visitors will enter the submarine through a hole cut in one end and exit through another. Movies of the capture will be shown in the room through which they will enter or exit.

Anyone with souvenirs from the submarine should contact RAdm. D. V. Gallery, Chief of Naval Air Reserve Training, Naval Air Station, Glenview, Ill. Search is also going on for men who were in the boarding party at the capture so they can participate in ceremonies in Chicago.

TO CARRY *out NavOrd Instruction 8710.7, Chief S. J. Sharpe at NARTU Memphis designed a jig which made it possible to modify 80 20mm feed mechanisms in two days. The jig attached to a milling machine cut a 37° angle on each feeder.*

Seaman Averts Gas Blaze

Shuts Off Flow after Workers Flee

NAF OPPAMA—Japanese civilian workers were removing a leaky valve from a gasoline storage tank for repairs. When the valve was removed, a gushing flow of high-octane gasoline spewed from the tank.

Dropping their tools, the civilian workers ran from the scene, leaving the gasoline to spurt unimpeded. George J. Thomas, seaman apprentice, was assigned as a fire sentry at the gas farm. Seeing the flowing fuel, he jumped into the sump and topped off the tank, stopping the flow of gasoline and averting a serious fire hazard.

For his feat, Seaman Thomas received a letter of commendation from Capt. W. W. Paul, air facility CO.

NEWEST AND LARGEST FOR JETS

EVENTS ARE moving even faster around California's Kearny Mesa these days than they did around Chantilly, Virginia, in 1862 when Kearny's troops pitched into Jackson's infantry and came off second-best leaving their general dead on the field behind them.

The reason for all this activity around the old general's namesake is that this is the area the Navy picked to build NAS MIRAMAR, one of its nine new master jet air stations.

Miramar backs up the Fleet by moulding carrier air groups into the hard-hitting fighting machines they are. Most of the carrier air groups that bore the brunt of the Korean fighting got their start here.

Miramar is part of a long range plan to provide home bases ashore for carrier air groups between deployments at sea. Each master jet station can simultaneously handle four air groups and about 500 aircraft. At least two major satellite fields are linked to the master station for gunnery, FCLP and other training purposes.

In addition to the need for plenty of "elbow room" for growth and flying without bothering civilian activities, the master jet station needs a location near overhaul and repair units, a seaport or industrial center, and heavy transportation facilities.

CARRIER *air groups and their aircraft is the around-the-clock business of NAS Miramar, shown in this composite photo. Nine master jet air stations support the Fleet.*

NAS MIRAMAR fits these specifications down to the last period. With enthusiasm that matches anything that Texas can offer, Capt. Donald L. Mills, Miramar's C. O., says "Miramar was selected for expansion because of the absence of obstructions, availability of level mesa land, and because there were no homes or built-up areas here to hinder operations. Metropolitan San Diego and its port are only 13 miles south and prevailing westerly winds permit economic development of dual east-west runways. Of course, I don't need to mention that Southern California climates makes for good year-round flying, and our inland location removes us from most coastal fog."

CINCPACFLT, *Adm. Felix Stump, inspects master jet facilities at NAS Miramar accompanied by station C. O., Capt. D. L. Mills, Cdr. J. A. Gage and LCdr. J. W. Clinton.*

Flight training is conducted on a 24 hour basis at Miramar. About 5,000 Navy men and 500 civilians support these operations. To house these men new concrete barracks have been completed, and a 3,000-man mess hall is nearing that point.

Besides the four CVG's home ported at the Kearny Mesa base, VJ-61, VC-61 and FASRON-12 are permanently based there. The station also has the responsibility for operating ALF Brown at Chula Vista, Calif. and BUAER's Motor Vehicle Pool. The pool provides a storage point for BUAER mobilization reserve vehicles required for western

U. S. and Pacific operations. It also repairs, rehabilitates or replaces vehicles from western BUAER activities.

THE MOTOR pool is one of the places in the Navy still using watch dogs to stand guard over the valuable equipment located there. If humans alone were to be depended upon, adequate security patrol in the area would be impossible because of the lack of adequate personnel. Since the dog patrols were adopted as long ago as 1948, pilferage from the motor pool has been very small.

Five of the original six watch dogs are still on duty. Twelve other dogs are also in Miramar's canine crew. Most have been obtained from the San Diego Shepherd Club or as gifts from individuals.

The five-man handling force is under the direction of D. M. Schoonhoven, AD3. After secure, Schoonhoven and his handlers stake the dogs out in certain areas. Others are set loose. They will sound a barking alarm if anyone other than one of the handlers approaches. The monthly cost of keeping all dogs is about $300—about the pay of one human guard.

An additional dog at Miramar is "Gumdrop." Unlike the Shepherd guards, "Gumdrop" is a Dalmatian, and was given to the crash crew as mascot by RAdm. G. R. Henderson, ComNABs 11.

Since last July, all-weather flying at Miramar has been facilitated by the installation of new CPN-4 GCA equipment. Ens. E. Mason of VA-145 holds the distinction of being the first to use it.

This gear is being used with the older MPN-1B gear to provide operational experience for the operators. Training approaches are made on the CNP-4, while actual IFR approaches will continue to be made with the MPN-1B until the new gear is fully operational.

To help keep the busy pilots of busy jets at Miramar off *Grampaw Pettibone's* "list," a wheels up watch is maintained at the end of the duty runway. Men from each squadron are assigned the job of warning any planes approaching for landing with wheel in the up position. Each is indoctrinated by Lt. (jg) L. O. Mosher and B. O. Cobb, ADC, of operations before his first watch. The man on duty holds the "roger" signal on all landing planes, except Dilbert's, with regular LSO paddles. If Dilbert comes around with wheels up, he gets wave-off and flare signals. Two planes have so far been saved at Miramar by wheel watchers.

The last plane recovered aboard the USS *Philippine Sea* from a combat strike over Korea was a Miramar photo *Banshee* piloted by LCdr. Finlayson of VC-61's photo unit "Mike." The unit returned to Miramar recently after being aboard the *Phil Sea* since last December. LCdr. S. N. May led the "Mike" unit which flew 225 combat missions

SUPPLY *Dept's. T. W. Johnson displays diving form at station swimming pool.*

SAN DIEGO *college students get "word" on aerial photos from Chief Hein and LCdr. Cormier, star of "Fighter Photo Story."*

EX-POW, *Army Sgt. John Nava is welcomed to Miramar on his homecoming by Lt. M. R. DeMille, crash and salvage officer.*

NEW CPN-4 *GCA equipment is operated by Lt. O'Donnell, Wysk and Raichle.*

during that period. Lt. (jg) L. H. York was high man on the totem pole with over half the unit's missions to his credit.

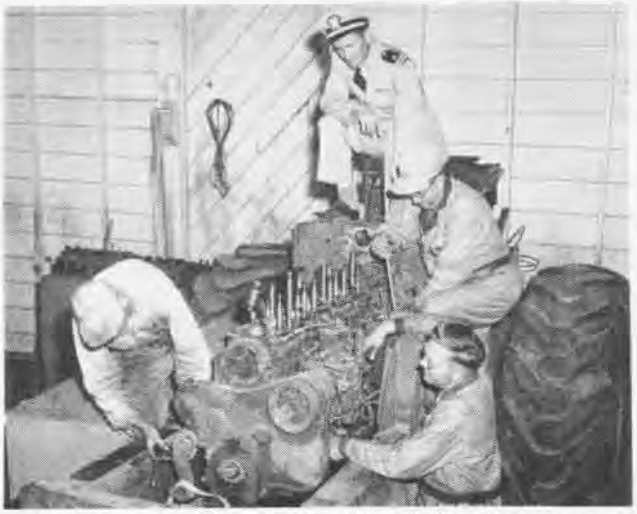
Like Iowa corn in July, Miramar is growing to take care of its big job. Present plant value is 42 million dollars with 28 million under construction on the 5,400 acre tract. When everything is completed, the total investment will approximate 90 million.

New construction methods have been used in building the many new facilities at Miramar. Concrete slabs, pre-fabricated on the building site, are assembled into floors, walls and roofs of the buildings. This method was used in constructing the new barracks, mess hall, warehouses, telephone exchange,

MIRAMAR'S *R. A. Lipple sports a "mark of distinction" courtesy of Joy Winsdor.*

at Chantilly. Nothing much more of note happened on the spot until just before War II, when the Navy made an airfield out of it. Marines took over during the war using it as an air supply depot and staging area for combat pilots and aircrews. The Marines moved to El Toro in 1947, and Miramar became a naval auxiliary air station in a reduced operational status.

In 1949 Capt. R. W. D. Woods lent his ideas and name to the Woods' Plan which conceived the all-weather master jet air station program. In addition to Miramar, other master jet stations are Brunswick, Oceana, Cherry Point, Cecil Field, Miami, El Toro, Moffett Field and Whidbey Island, Washington.



TRANSPORTATION *officer Lt. G. W. Shirley, inspects engine work on heavy equipment in NAS Miramar's maintenance shop.*

PILFERAGE *at BuAer Motor Pool is kept to minimum by tough guard dogs handled by Van Elsberg, Willis and Champion.*

parachute loft, operations building and the "White Hat" club.

Quonset has its huts, and Miramar has its hangars. The new "double barreled" hangar at Miramar is a prototype for others to be constructed throughout the Navy. It is arranged with the two hangar areas on either side of a shop building with the shops forming the hangar's center "wall." This building too is concrete with metal roofs and doors.

Back in the days of Spaniards and rancheros in California, Kearny Mesa was Rancho Mission, home of range cattle, jackrabbits and sagebrush. In World War I, the Army took over the old rancho, turning it into a training camp named for the Federal casualty

"VIP", *VJ-61's mascot is unconcerned by squadron C. O., Cdr. J. S. Harris.*

DEVELOPMENT of Miramar into a master jet station began with fiscal 1951 funds. Shortly after the Korean War started, construction was started in earnest. This is still continuing in accordance with the original Woods' Plan concept for jet aircraft.

Even though many of the construction projects at Miramar are not yet completed, the station is "two-blocked" in carrying out its mission of training Fleet squadrons for combat operations.

Capt. Mills puts it this way, "Miramar is the Navy's number *one* Fleet operation training air station in *direct* support of the Fleet, and we currently have on board more action area air groups than any other master jet station in the United States Navy."

STRANGE HOBBIES FOR MEN IN SERVICE

STRANGE hobbies sometimes find their way into the Navy or Marine Corps. Take, for instance, Corp. Melvin K. Becker, whose career as a bronco buster and rodeo rider, was interrupted by the war.

Or Sgt. Joseph C. Baumer with the 1st Provisional Marine Air-Ground Task Force's MAG-13, who swallows swords for the fun of it. Baumer appeared on a television show in California in his civilian specialty as a sword swallower. A Hollywood agent called him up and wanted to hire him for a part in a picture.

BAUMER SWALLOWS 24" SWORD FOR HIS PAL

The Marines let him off long enough to go to Movieland. There they wanted him to take a flaming sword, stick it down his throat about three feet and then pull it out, still burning.

Baumer tried to convince them it could not be done. The first time his crepe-paper beard caught fire. Next time he burned his lip. The third time he succeeded in getting it down but the director was unhappy because it wasn't aflame when he pulled it out.

"And I went back to the base and re-enlisted for six more years," Baumer says.

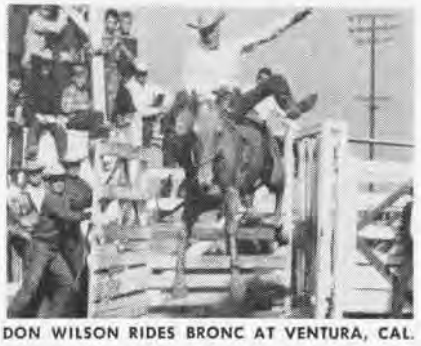
Becker, the bronco buster, is with the 2nd MAW's Group 24 and rode in the first East Coast All-Service Personnel Rodeo at Quantico in June. He owned a ranch in western Nebraska when he was drafted and had to fold it up. An orphan, Becker has been breaking horses and training trick ponies for rodeo acts since childhood.

BECKER DONS DUDS TO COMPETE IN RIDING

Out on Oahu, the first rodeo staged since 1937 saw John C. Grove, a seaman in Fleet Air Hawaii's air navigation office, come within two seconds of winning the bareback bronc riding event. A horse fan since childhood, Grove competed in many rodeos in the middle west. "Saddlebronc riding to the tune of 'Aloha Oe' is a difficult task," Grove opines.

Another Cherry Pointer with an odd hobby is Corp. Leon Ruderman, an amateur hypnotist who put on 86 performances in Japan and Korea during the war entertaining his buddies. Ruderman holds an MA degree in speech pathology and uses his hypnotic powers to entertain now, but later may use it to help in speech correction. (NA-NEWS, *Sept. pg. 18*)

The Navy's outstanding rodeo rider probably is Don Wilson, AD3, of VA-54. Wilson, this spring ranked the fourth highest bareback rider in the United States, competed in the national championships in Madison Square Garden.



DON WILSON RIDES BRONC AT VENTURA, CAL.

The 23-year-old Wyoming cowpoke belongs to the Rodeo Cowboys Assn., and has won many firsts and seconds in bronc riding, bareback riding and Brahma bull riding all over the nation. Since his Navy duties prevented him from competing much this year, he lost his near-top slot.

Popularity of rodeos in the U. S. will come as a surprise to many persons. Their paid attendance last year is claimed to be second only to the national sport, baseball. Prize money divided among winners of the more than 1,000 annual rodeos totals more than $3,000,000.

The itinerant printer, traveling from town to town, is one of the familiar figures in American progress. VR-21, based at Barber's Point, has a pilot who qualifies as the "Most Itinerant Printer of 1953."

He is Lt. Robert C. Larson, who flies 22,000 miles a month between Hawaii and Japan but finds time to pursue his profession of printing during spare time between hops. Larson, who is a journeyman pressman by trade in St. Paul, Minn., bought a small 7"x13" Japanese hand-operated press, plus 18 fonts of type.

TRANSPORT PILOT LARSON WITH HAND PRESS

Now he turns off baby announcements, wedding notices, stationery, calling cards, tickets and programs on the press. His biggest project was a four-color squadron insigne as a letterhead.

AD CRASHES IN GREEK CORNFIELD

COMFAIR, JACKSONVILLE—Out of the parade of diplomatic events that have taken place in various parts of the world, one recent, almost obscure, incident in Greece involving eight men of the U. S. Navy did its full share of bettering foreign public relations.

The event concerned the salvaging of a Navy attack-bomber of VA-15 which the pilot had been forced to land in a Greek cornfield while on a routine flight from the carrier USS *Franklin D. Roosevelt*.

Minutes after the wheels-up landing, the uninjured pilot and the damaged airplane were surrounded by curious citizens of the rural area. None of them spoke English, so the flyer used sign language to learn his position.

Pilots rarely carry wallets while flying, so, penniless and dressed in Navy flight clothing, the downed flyer set out for Larissa, a town 40 miles away.

Upon arrival and after explaining his predicament, he was given accommodations and prepared to wait for his ship to dock in Salonika, 85 miles away.

Meanwhile, in response to a radio message sent by the pilot before crash-landing, the *Roosevelt* dispatched a salvage party of seven men and an officer-in-charge. Mechanics, electronicsmen and metalsmiths were in the party flown to the Greek Air Force Base at Larissa.

From Larissa the men headed for the scene of the crash with a borrowed ten-wheel truck and a mobile crane. A tow-bar was flown in from the USS *Coral Sea* and, with the aid of 25 Greek airmen, the eight *Roosevelt* men began salvage operations, getting the aircraft in a towing position by putting the wheels down.

After towing the plane for just one mile the men had to halt operations because of obstacles in their path. An attempt to locate a map of the area failed, for no such map was ever made. As a result, members of the salvage crew had to measure the width of streets and buildings.

In doing so, they found that the proposed route was too narrow for the plane, and a new route skirting Larissa by 55 miles was used. Gullies, valleys and hills made the going rougher and on one occasion the men dug away the sides of two hills to allow passage of the plane. This was done, not with elaborate equipment, but with handshovels and sticks.

The Greek onlookers helped where they could and marvelled at the perseverence and industry of the Americans. Especially surprising to the Greeks was the fact that the Navy men took no break after lunch, as is the custom there.

After their first 15-hour day in 90° heat, the workers returned to their hotel in Larissa. Since they could not read the menu in the hotel dining room, they were led into the kitchen where they simply pointed out what they wanted to eat.

On the following day in the course of their journey, the little party towed, dug, cut away on hills and bridged a small stream. One bridge proved to have railings too high, so the center had to be built up with rocks and boards, allowing for wing clearance.

The last major problem facing the crew was a mass of entangling power and telephone lines. Obliging Greek authorities had their linesmen cut the wires and splice them up after the plane was rowed clear.

On the fourth day, the small caravan trundled into the Greek Air Force Base at Larissa with the dusty, prop-damaged and tire-worn plane.

Fitted with a prop flown in from the ship and checked carefully, it was flown back to the *Roosevelt*. The long sojourn, although tedious, saved the government a quarter of a million dollars worth of airplane.

In addition, these blue-clad diplomats left behind them an indelible mark of respect and friendship with the Greeks.

Pilot 14 Days in Turkey

Navy Flier Forced Down, Finds Allies

VA-25—Living two weeks in a small Turkish village where no English was spoken proved an interesting experience for Lt. James H. Snow, operating off the *Midway*.

While testing the Turkish air defense system during maneuvers, Snow's AD developed engine trouble. He was 450 miles into central Turkey and let down through heavy overcast to land on a small strip. His wingman followed him down and reported the landing.

Next day a plane with maintenance personnel flew to Cukurhisar airfield, where it found a complete engine change was needed. There were no facilities available, so Snow lived with the village leader while his plane awaited the new engine. During this time he visited their school, attempted to eat the food, which he termed "differnt" and entered into village festivities. No one spoke English in Cukurhisar and few if any had seen an American.

The maintenance crew made the engine change in two days and 14 days after the emergency Snow flew 1700 miles to the *Midway*, at Cannes.

Snow reported the women in the native village were not kept in seclusion. The Turks he termed an extremely generous and friendly people and the nation a "valuable ally and friend."

IF 'WILLIE LOVE 2' *flies any more combat missions, it is going to need a bigger fuselage to hold the bombs painted on her sides. The Marines gave a special citation to this durable F9F-5 Panther for flying 445 missions with the 1st MAW in Korea for a total of 1002 combat hours. The Navy took it over later and flew it on 96 more missions. Ranked as the oldest jet fighter in Korea, the jet has dropped 400,000 pounds of bombs, rockets and napalm on the Communists and worn out 16 cannons firing 100,000 rounds.*

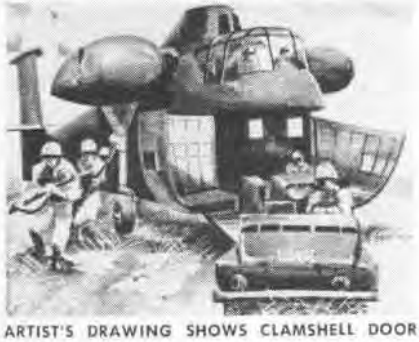
Bigger Chopper is Built

Marines To Get 26-Man Helicopter

The Marines are buying a new, bigger transport helicopter, the XHR2S, from Sikorsky Aircraft Corp., which will have about double the carrying capacity of the big HRS's now in use.

The one being built now will transport two combat assault squads, 26 fully-equipped men. Present troop-carrying helicopters used by the Marines, like the HRS-1, and the HRP used by the experimental squadron at Quantico, packed from eight to 10 men.

With the Marines' development of landing assaults by helicopter from carriers offshore, the accent is on bigger and bigger pinwheels. The Marines have pioneered in the use of helicopters for troop-carrying since World War II and used the tactic in Korea on occasion.



ARTIST'S DRAWING SHOWS CLAMSHELL DOOR

Chute Tragedies Open Eyes

Princeton Squadrons Practice Exiting

VF-153, PACIFIC—Two cases where combat pilots were drowned by faulty parachute technique after bailing out successfully over water have led pilots of this squadron and VC-61 detachment to practice getting out of the harness.

In both cases the pilots were recovered in a drowned condition, their legs entangled in straps and shroud lines, with one leg strap of the parachute still fastened. Navy training films dealing with bailout over water are detailed in their instructions of the proper technique to be used. The necessity of loosening straps before hitting the water is stressed particularly.

By suspending parachute harnesses from the overhead on the hangar deck, pilots of the squadron on the *Princeton* practice trying to seat themselves in the chute after the canopy is opened. They try to unfasten or loosen a leg strap when not seated well back in the chute, then try to unfasten the second leg strap after the weight of the body was shifted.

VF-153 PILOTS PRACTICE CHUTE SEATING

Results of the above experiment were quite illuminating and thought-provoking for all pilots who participated in or witnessed the demonstration. Similar experiments for all flying personnel are highly recommended, particularly if you're in the 200-lb. plus class and sport a pair of hips like an elephant.

Radar Tells Plane Speed

LSO Scans Dial to Gauge Approach

The Navy has taken the security wraps off a device which has been in use on most aircraft carriers for two years—a small radar which tells the LSO the speed of an approaching plane coming in to land.

The searching antenna is mounted on the superstructure of the carrier and a dial at the LSO's feet shows him instantly the speed of the plane. Jets, unlike prop planes, have only a narrow spread between too fast and too slow, so the radar helps the LSO know instantly how to signal the pilot.

MICROWAVE ANTENNA TRACKS INCOMING JET

Raytheon Mfg. Co., developed the radar under contract with Bureau of Ships. It is the first step in a system of carrier controlled approach which will permit pilots to land in almost any weather, as they do with GCA.

Marlin Gets New T Tail

Seaplane's Surfaces Ride Atop Fin

The first T-tailed seaplane, the prototype of the P5M-2 *Marlin*, is being flight tested for the Navy by Glenn L. Martin Co.

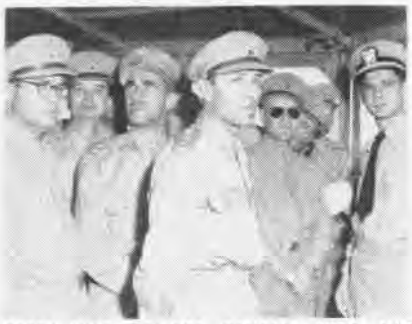
After the new tail, in which control surfaces are mounted atop the vertical fin, has been flight-tested, it is expected the entire *Marlin* production will be converted to the new style. Putting the horizontal surfaces on top of the fin has been used before in such planes as the Martin B-51 and B-61 *Matador*, the British Gloster *Javelin* fighter, Handley Page *Victor* jet bomber and Short S.B.5 variable-sweep research plane.

NEW MARTIN TAIL RIDES HIGH OVER SPRAY

The "T" type tail offers a number of advantages over conventional designs, engineers claim. Less tail area is required, thus cutting structural weight and aerodynamic drag, and making possible increased range.

Mounting the tail thus eliminates spray damage in a seaplane by putting it higher in relation to wing downwash and propeller slipstream. The bow chine line of the P5M-2 will be lower, cutting down spray height and its resultant damage to propellers. The pointed projection aft of the horizontal tail is electronic detection gear.

Turbo-cyclone Wright R-3350-32W engines with greater horsepower will be used in the P5M-2. Interior changes will make for greater crew comfort. Martin also has under construction for the Navy the XP6M-1 multi-jet *SeaMaster*.



GREEK WAR COLLEGE OFFICERS VISIT SHIP

Greeks Visit Big Carrier

Coral Sea Host to 3,500 In Six Days

USS CORAL SEA—More than 3,500 visitors—a new record—visited the *Coral Sea* during her six-day visit to the historic city of Salonika in northern Greece.

Individually and in groups, they came aboard the big flattop to see how the ship looked. They included Greek soldiers and sailors (some Korean war veterans), Greek War College officers, school students, Girl Scouts, Boy Scouts, orphans and just plain private citizens.

On the third day the carrier band played for a group of young women from the Salonika USO for a tea dance in hangar bay one, decorated with brightly-colored signal flags. The next night, RAdm. G. B. H. Hall, ComCarDiv Six, was host to 250 prominent Greek, U. S. and foreign officials and citizens.

Coral Sea "Fathers for a Day" guided wide-eyed children around the ship during their visits, showing them planes and helping them to ice cream, punch and cookies.

LCdr. A. E. Camarinos, legal officer of the carrier division, was interviewed —in Greek—by a representative of the U. S. Consulate for rebroadcast over the Voice of America. Greek citizens entertained *Coral Sea* personnel at a number of shore parties to repay the ship's hospitality.

Odds - Ends Make Model

VP-3 Man Builds P2V at Lyautey

COMFAIR, JACKSONVILLE — Hair curlers, wire, needles, coat hangers and tape helped James M. Byrne, AO2, of VP-3 build a scale model of a P2V NEPTUNE.

The little model has a 50" wingspan and fuselage length of 40". When he began the job in Port Lyautey, Africa, all Byrne had to work from was a silhouette taken from the *Pilot's Handbook* and balsa wood.

When he got back home it was nearly done. Innumerable coats of paint went to finish the model. He spent 1,000 hours on the little model. Byrne, a former Army GI and mail carrier, won a first and second place in the 1947 Armed Services photo contest for a picture of two privates pulling some KP duty.

BYRNE SHOWS CDR. GHESQUIERE P2V MODEL

WHEN THE *land armies are hard pressed the fleet also has to step up its effort. It was during such a big Communist push in June that Lt. Joe Lasseter of CAG-15 staff on the Princeton went out in his F9F on an early morning Korean hop and had to ditch it. Via TBM-COD aircraft and helicopter he was delivered back to the Princeton at noon. At 1430 that afternoon he was climbing back into another F9F cockpit for his second combat hop of the day.*

ENS. FULLER GIVES ROBERTS JET FLIGHT

Men Ride in VF-11's Jets

Plane Captains Get First Jet Hops

COMFAIR, JACKSONVILLE — Plane captains of VF-11, the *Red Rippers* squadron, recorded a first recently when they became the first enlisted men in this area to fly in jet fighters.

Since VF-11 has received its F3D *Skyknights*, the pilots have been taking their plane captains along as observers. If he is not available, the pilot will take another crew member for a familiarization hop, creating a keen competition among the men. The F3D's have replaced the F2H's the squadron used in the Korean war and pilots are training for all-weather flying.

Tender Goes Far to North

Onslow Rides 70-Knot Aleutian Gale

USS ONSLOW—Officers and men of this small seaplane tender believe their ship has operated farther north than any of its type in the Navy. This claim was made at latitude 65° 30′ North—the northernmost position during an Alaskan tour of duty.

The ship was completing a six-week stay at Port Clarence, where it supported VP-42 aircraft engaged in ice pack reconnaissance in the Chukchi Sea, north of Icy Cape. During the tour most pilots qualified for "Blue Nose" certificates. Some 20 patrols flown in six weeks ranged as far north as 71° 20′.

The *Onslow* had the dubious distinction of being the first AVP to be blown out of Umnak Island's Nokolski harbor. At 0100, with both anchors dragging and the anemomoter indicating 70 knots, it put to sea to ride out the storm.

After five months in the Alaska-Aleutian area, the ship saw nothing to refute the testimony of the unknown sage of other Arctic days who said, "It's pretty country, but it's all country."

BRITAIN'S BEST PLANES AT AIR SHOW

WORLD SPEED RECORD OF 737 MPH SET BY SUPERMARINE SWIFT

HAWKER HUNTER HELD WORLD MARK FEW DAYS BEFORE SWIFT FLEW

ATTENDANCE at the annual British Farnborough Air Show is always large for the simple reason that it is undoubtedly the most spectacular air show on earth. Not even the Soviets, whose annual air shows are elaborately staged, attempt to show anything like so much under such ideal conditions.

While the Soviet Air Force displays its wares every summer by the simple expedient of flying them over Moscow at flashing speeds, the British provide a more ideal setting for close study and photography.

Stressed at this year's show was the complete pattern of the Royal Air Force and Fleet Air Arm of the future with new experimental aircraft being almost completely omitted. In addition, the motif was apparent in the civil field with most of the transports shown being either in production or readied for production.

In retrospect, this year's show struck a more earnest note, indicating a leveling influence of development and production intentions rather than a continuation of last year's highly spectacular prototype parade. This was particularly true in the case of the increased thrust of their power plants.

As in the past, the event was staged at the Royal Aircraft Establishment (R.A.E.), Farnborough, Hampshire, by the Society of British Aircraft Constructors (S.B.A.C.), to promote the export trade of its member companies and to demonstrate the quality of British aeronautical products. Government sanction is provided by the Ministry of Supply, which makes available the facilities of the R.A.E.

Officials from overseas airlines and foreign military services were in attendance at the air show representing more than 90 different countries. On the public days, more than 170,000 eager Britains turned out to see their country's latest aviation developments. In general, the picture was most cosmopolitan, ranging from turbaned Indians to unobtrusive little gentlemen from Japan.

Cameramen Have Good Color

Photographers had a field day, notwithstanding the numerous bodies that blocked a clear field of vision. The variety of aircraft and the pageant-like atmosphere, influenced by the manufacturer's colored tents and canopies, resulted in a tremendous expenditure of photographic film. Further color was added by the variety of paint jobs the aircraft carried, ranging from the *Javelin's* camouflage of Navy gray and green to the orange, white, and pale blue of the Avro delta wings, the large four-engined bomber and four prototype research fighters.

Owing to the tragic accident last year of the D.H. 110 prototype, which resulted in the death of 30 people, the rules for this year's show were modified to restrict the height, speed and direction of the demonstrating aircraft. Most noticeable was that none of the aircraft was allowed to fly toward the crowd.

The spectacular part of the show, of course, was the piercing of the sonic barrier by the record-breaking swept-wing jet fighters, *Swift* and *Hunter*. Repeatedly during the week these swept-wing fighters dived at the field from an altitude of more than 35,000 feet, to produce the speed necessary for the cannon-like boom, that was heard around the field.

On the opening day, the turboprop *Wyvern* Navy strike-fighter was the first off, followed by the four-engined *Shackleton* reconnaissance bomber carrying a life-boat. Next followed the three commercial transports, the turboprop *Viscount*, the *Pembroke*, which feathered one of its two props on takeoff, and the *Heron 2*, the four-engined 17-passenger feeder transport.

Of the helicopters, only the twin-engined Bristol 173 with stub wings was of real interest. A Navy *Sea Hawk* jet fighter was featured briefly, followed by a selection of various powered twin-jet *Canberras*. The *Olympus-Canberra* was most impressive in its quick takeoff. This performance was surpassed by a second *Canberra* powered by Avon R.A. 14's as it soared skyward in an even steeper climb.

Of interest to light plane enthusiasts, was the performance of the *Pioneer* with its big flaps and slots. It took off in an incredibly short distance of some 60 yards and then climbed away

AIR INTELLIGENCE

at a snail's pace.

During the longer flight demonstrations, the twin-jet *Sapphire*-powered *Javelin* delta-wing fighter showed its stability during a snappy roll. The box-like Short S.B. 5 jet research plane with a fixed landing gear was flown with its variable swept-wing set at 60°.

A new aircraft to Farnborough with a definitely different configuration appeared in the form of a crescent-winged bomber called the *Victor*. With four *Sapphires* for power and a black fuselage surmounted by its unusual silver-colored wings, the Handley Page *Victor* made a number of unusually steep approaches with its tail flaps extended to present the crowd with new views of the crescent wing from a variety of angles.

A change of pace was punctuated by the flight of the bright yellow P. 111A, a gnat-like, delta-wing research aircraft. Powered by a single *Nene* jet, it proved unbelievably quiet during its fly-bys and most stable during a parachute drogue assisted landing. At the opposite extreme was the large clumsy looking Beverley "Flying Warehouse," which featured a short takeoff and a quick landing using reverse propellers.

Turboprop Airliner Is Quiet

A definite contrast to this ugly aircraft was provided by the four-engined turboprop Bristol *Britannia* airliner. This version of the *Britannia* appeared with *Proteus 705* turboprop engines and revised tailpipe exits. After a smooth takeoff with three of its four engines running, the gracefully designed transport seemed to slip through

STRANGE-LOOKING SEA MEW IS NAVY PLANE

the air with only a whisper of noise.

The ill-fated D.H. 110 of last year appeared in a new role this year and was billed as a heavy radar-carrying jet fighter now being developed for the Royal Navy. *(See inside front cover.)* While its long lines and light green paint job give the aircraft a graceful and pleasing appearance, the sheer bulk, estimated at 30,000 pounds, of the D.H. 110 seems rather large for British carriers. This fighter has the characteristic de Havilland twin-booms but its cockpit is offset to port, and an entrance hatch for the radar operator is on the top of the starboard side of the fuselage.

An entirely new aircraft, the *Sea Mew*, designed by Short specifically for the Royal Navy in an ASW role appeared in a rather interesting configuration. Not a pretty aircraft but seemingly practical in conception for CVE operations, it represents the first tangible result of the currently popular "stripped-down" design philosophy. The *Sea Mew* features a single turboprop *Mamba* engine, a fixed landing gear and a tail wheel that can be extended in landing to put the aircraft in a nearly tricycle landing position. A tail "stinger" carries detection gear.

The ASW Fairey *Gannet*, which is just becoming operational with the fleet, was flown around the field while continually feathering one propeller and then the other to demonstrate its ability to cruise on one unit of its *Double-Mamba* turboprop engine. This aircraft has the distinction of being the first turboprop plane to land on a carrier.

Black Jet Bomber Shown

A pre-production version of *Valiant* swept-wing four-jet bomber appeared with a black paint job. This latest *Valiant* B.2 is powered by Rolls Royce *Avon* R.A. 14's rated at approximately 10,000 lbs. thrust each. Features of the B.2 are a lengthened nose and long fairings trailing from the wing in a new landing gear. The largest successful flying boat in the world also put in an appearance, but the ten-engined turboprop *Princess* was seen only briefly as it circled the field.

As a grand finale for the daily air display, the crowd was treated to an unusual sight when the two white delta-wing Vulcans together with the smaller silver, red, blue, and orange Avro 707's flew by in an impeccable V formation.

—By Edward L. Barker

HUGE TAIL RECOGNITION FEATURE OF SPEEDY GLOSTER JAVELIN

FOUR-ENGINED AVRO JET BOMBER TRAILED BY FOUR PROTOTYPES

New J-46 Goes in Cutlass

Westinghouse Cuts J-40 Production

A new high power, low weight turbojet engine, the J-46, has been developed and placed in production by Westinghouse Electric Corp. for use in the F7U-3 *Cutlass* and other high-speed planes.

Earlier versions of the Chance Vought fighter have the J-34 Westinghouse engine. The company will concentrate on this jet and discontinue further development work on advanced models of J-40 engine. Production of current J-40's at the Kansas City jet plant will continue.

A FEW DAYS LATER THESE MEN SHOT A 201

Jet Pilots Set New Mark

'Hell Razors' Quartet Get 201 Hits

COMFAIR, JACKSONVILLE—VF-174, the *Hell Razors* squadron, has been doing just that with its gunnery tow targets. During a recent competition at Leeward Pt., Cuba, 16 out of 18 pilots won E's and the squadron scored an "Outstanding" mark with an overall average of 27.6% hits.

Four pilots smashed the ComFair Jacksonville and Atlantic Fleet Air Force record of hits on a single sleeve when they combined to place 201 hits in a target despite one gun on a plane not firing. The men, flying their new F9F-6 *Cougars*, were Lt. Charles C. McDaniel, Lts. (jg) Charles L. Greenwood and Walter L. Hatfield and Ens. Williard Ryals. Ryals was high man in the squadron.

Capt. William J. McElroy, an Air Force exchange pilot and Korean veteran, also won an E. Other E winners were LCdr. George Sult, the CO; Lts. John J. Godwin, Julien L. Suttle, Lts. (jg) Dempsey Butler, Herbert K. Gates and Joe Stell, and Ens. D. Lowell Embs, Randall B. Lynn, Albert Scholl, John Wasson and J. Victor Pongetti.

NEWEST *photo of the Navy-Convair XF-2Y-1 Sea Dart is this one showing it taxiing out of the water at San Diego on its small hydroski and tail wheels. The plane was given its first public showing recently. Hydroskis enable the delta-wing plane to taxi and break away from the water until takeoff speed is reached. Two J-33 jets with intakes located just aft of the striped area amidships drive the new seaplane.*

SMOKE JUMPER FLIES FOR NAVY

VF-31, JACKSONVILLE—"I'll take night flying anytime!"

That was the reaction of Ens. Lester McDevitt when his present assignment as a night fighter pilot was compared with his former job of a civilian "Smoke Jumper."

Ens. McDevitt spent three full summers as a smoke jumper, parachuting into the rugged Chelan National Forest of Washington state to fight forest fires before he came into the Navy.

In addition, the F3D *Skyknight* jet pilot spent six weeks of another summer receiving intensive fire fighting, parachute jumping, map reading, rescue and survival training.

He almost lost his life on one of his jumps. Assigned to help fight the destructive Snake River fire several years ago, the young smoke jumper barely escaped with his life when a sudden flash fire blocked his escape path.

Another time Ens. McDevitt participated in the rescue of a severely wounded hunter by parachuting in and helping carry the man on a stretcher through 60 miles of uncharted forests.

This hazardous occupation was begun by the Fleet Air Jacksonville pilot after he heard a chance remark on a train. Although he had fought forest fires several summers in California while in high school and worked two summers as a logger between college semesters at the University of Cincinnati he had never thought of smoke jumping as a future vocation.

When a strike was launched in the lumber camp he was working in during 1948, he caught a train and it was then he heard a service man talking of the aerial fire fighters. His training followed and soon he began jumping.

His first jump is still somewhat of a mystery to him. "I knew nothing of what was happening and I guess I was moving by instinct alone. I remember sitting in the airplane and then found myself landing in a rock slide."

After he stopped his downward progress and his chute collapsed, he scrambled on down the slide and paused for a quick inspection. " I must have been too excited to have been scared on the way down but the old knees started to shake more than a little then."

Landing in trees appears to be a considerable problem to the uninitiated, but according to Ens. McDevitt, if done properly, they are the softest type of landing to make.

Smoke jumpers use a different chute than Navy pilots. High maneuverability is provided by a Derry slotted canopy with two seven-foot slots in the rear of the canopy and "an average smoke jumper can consistently land in a 100 foot circle with ease."

Ens. McDevitt's confident attitude toward bailing out has eased some of the natural doubt possessed by fellow VF-31 pilots, and in addition he has given them parachuting knowledge.

Monterey Lands 60,000th

Training Carrier Closes on Boxer

The race to see which aircraft carrier has the most landings aboard became nip-and-tuck when the training flattop *Monterey* brought its 60,000th plane aboard off Pensacola. Top carrier at the time was the *Boxer* with 61,000.

NavCad Frederick Upham had the honor of being *Mr. 60,000* and collected the traditional cake. The LSO, Lt. (jg) H. L. Marr, who brought him in had made the 2,000th landing on the *Oriskany*.

With the *Monterey* still active training aviation cadets and the *Boxer* comparatively idle now that the Korean war is over, the honors for making the most landings may change hands shortly. The *Monterey* figured the 60,000 planes that had landed on its flight deck, placed end to end, would reach 380 miles.

VP-5 Honors Desk Cadets

Crew 'Zero' Finds Fun In The Work

NAS JACKSONVILLE—Many of the flight crews of VP-5 occasionally fly through instrument conditions, but VP-5's crew "Zero" flies through it all the time. Under low "ceilings" and with visibility restricted by cigarette smoke, the crew is on instruments continuously as they pound away on their typewriters.

The crew is composed of squadron office personnel, banded together to show their shipmates that they've got the group spirit too. Although it all started as a jest, their "plane commander", Lt. E. J. Murzic, says that they have a new feeling of pride and zest for their work.

In a ceremony that was both serious and humorous, Cdr. James Houghton, CO of VP-5, and other flight crews cited them for their achievements. They received awards for such exploits as using less typewriter ribbon than any other crew, never missing a liberty and setting a perfect safety award with no accidents in their swivel chairs.

Taking first place among their awards was the comment made by Cdr. Houghton who said, "Crew Zero's effort in maintaining a high state of efficiency and productivity greatly contributed to the squadron's winning the Battle Efficiency "E" for 1951-1952.

R6D DIRECTS PHILIPPINE RESCUE

VR-21, PACIFIC—This is the story of why Lt. Larry Hecker had to bring his FlogWing R6D back to NAS SANGLEY POINT in the Philippines to refuel a couple of hours after it had taken off for Guam.

Forty miles east of Manila, at 9,000 feet altitude he and his co-pilot, Lt. (jg) William L. Reinhard, heard the universal call for aid, "Mayday Mayday!", over their earphones. It was an Air Force C-119 *Flying Boxcar*, limping along on one engine and losing altitude fast on this overheated unit.

Reinhard relayed the emergency message to Navy and Air Force control towers in the area. Hecker turned the R6D toward the crippled transport. Lt. James Braun, navigator, spotted it hugging the coastline. Hecker slowed the speed to barely above stalling to stay behind the Air Force plane.

Still threatening to overrun it, he started weaving back and forth above but keeping it constantly in sight. Reinhard relayed messages between rescue aircraft already on their way and the C-119 which could not contact them.

The C-119 pilot said he was trying to circle Luzon's coastline and get back to an airfield. He did not have enough power to clear the hills and was down to only 1,500 feet.

Suddenly a calm semi-circular bay with a smooth, sandy beach appeared ahead and the pilot made his decision. He was going to ditch. The VR-21 R6D relayed this message and closed in on the descending aircraft. A passenger, Cdr. Robert Hare, of ComServForPac, who had a camera, was asked to take as many ditching photos as possible.

With one wing over the sand and one over water, the C-119 came down on the beach and rolled to a stop without damage, while the R6D circled, directing a Coast Guard PBM to a landing nearby. A crowd of Filipino natives surrounded the seven Air Force men who waded to the shore, one slightly injured. When the PBM landed the natives rowed the survivors out to it in primitive dugout canoes.

The Navy transport then headed back to Sangley Point to make another start for Guam, a bit behind schedule.

● NAS NORFOLK—The first Navy unit to be equipped with the newest modification of the *Neptune*, the P2V-6, is VP-21 which was the first Navy unit to receive the P4M Mercator in 1950.

WHEN YOU'RE *falling through space at 32,000 feet with nothing to save your life but a parachute, you are rather anxious that it works. That's why LCdr. Ray Hawkins, leader of the Blue Angels flight team, shook the hand of John Pizza, PR3, when the pilot visited NAS Brooklyn during an open house. Pizza had packed the parachute which Hawkins had used to descend successfully from his disabled Cougar F9F-6 jet over Mississippi. Hawkins later looked Pizza up at the chute loft and thanked him.*

AIRBETDIVS FILL NEEDS OF RESERVES

THIS CIC *equipment plays an important part in Airborne Early Warning operations. Students at AirBETDivs learn how to repair and maintain this electronics device.*

THAT OLD bugaboo—how to keep the "Weekend Warrior" Reservists in an adequate state of readiness—strikes hard in the field of airborne electronics. It's a recognized fact that the regular Navy has a training program unsurpassed by any other country, but, with time limited for training Reservists, this complex and continually-growing field is hard to keep abreast of in the Naval Air Reserve Training Command.

The obvious solution would be to provide the Reserve air stations with the latest types of equipment and let the instructors do the rest during weekend drills. The only fly in that ointment is that electronics equipment is expensive and there just isn't enough money available for CNARESTRA to authorize such an enormous undertaking under present conditions.

NARESTRACOM's solution for keeping the Reservists at a 4.0 level in technical knowledge in this ever-changing field has been the establishment of two Airborne Electronics Training Divisions (AIRBETDIVS) at NAS LOS ALAMITOS and NAS WILLOW GROVE. Patterned after the FAETUs, the two schools are designed to provide for the specific training needs of Reservists on 14 days annual training duty and to relieve the training load carried by the FAETUs which provide similar training for the regular Navy fleet personnel.

Instruction in the latest electronics equipment is also offered to enlisted and officer personnel on active duty in connection with the Naval Air Reserve Training program. These courses are from two to eight weeks in duration at both schools.

Each school provides a staff of five instructors—three ATC's and two ATI's. The AIRBETDIV at NAS LOS ALAMITOS is under the supervision of Lt. G. E. Talmage, Electronics Training Officers. Its staff consists of E. F. Keever, ATI; R. A. Furlong, ATC; A. M. Johnson, ATC; R. A. Brooks, ATC; and B. Alsip, ATI.

The AIRBETDIV at NAS WILLOW GROVE is headed by Lt. E. C. Jones, Electronics Training Officer, and is staffed by C. R. Bryant, ATC; J. Yuricek, ATC; D. L. McCarthy, ATI; C. W. Lillie, ATC; and R. H. Rothman, ATI.

The instructors at each division teach about 40 different units of electronics equipment, including ASW, AEW, navaids, IFF, fire control radar, search radar, communications and ECM. The training is at a maintenance and repair level, since aircraft and personnel necessary for operational training are not available at the present time at either school.

Instructors Trained at FAETU's

The electronics personnel at both schools are considered the very best available in NARESTRACOM. They all have attended electronics courses at either FAETULANT or FAIRBETUPAC plus additional courses offered at the larger manufacturing plants producing electronics equipment for the Navy.

At the schools students become familiar with the most recent types of airborne electronics equipment, as well as items presently in use in the Reserve squadrons. Maintenance training on a late-type of equipment, such as the AN/APS-20C radar equipment, has enabled Reserve electronics technicians to prepare for the latest-type aircraft being assigned their stations.

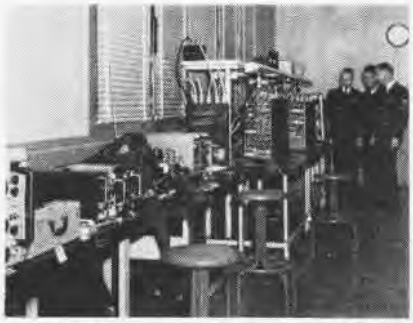
First classes convened in the fall of 1952 at both schools for stationkeeper personnel. At NAS WILLOW GROVE, classes were held in a makeshift classroom as the AIRBETDIV building hadn't been completed as yet. NAS LOS ALAMITOS started with a building which was stripped to the bare studding. Starting from scratch, no effort was spared in making the building an example of the very latest in technical school design.

The heaviest training to date at NAS WILLOW GROVE has been given by D. L. McCarthy on AN ARC-27 (UHF equipment) maintenance training. This accent on UHF equipment was necessary to provide trained technicians in the newest universal communications equipment now being installed in all military aircraft.

Neither of the schools has reached the peak of instruction as yet. Since training wasn't formally commenced until September of 1952, the majority of the pay and non-pay Reservists eligible for training had already completed their two weeks annual training duty or had obligated themselves for other types of training.

Attendance should pick up considerably after 1 January 1954. After that

ROYAL *Netherlands Navy personnel finish special electronics course at Willow Grove.*



FUTURISTIC *penny arcade is admired by instructors Keever, Brooks at Los Alamitos.*

STUDENTS *make critical adjustments on gear under watchful eye of R. A. Furlong.*

date, participation in one of the courses offered will be required as a part of the practical factor check-out for Reservists in pay units who are in training for advancement to AT1 and ATC.

Who May Apply for Training

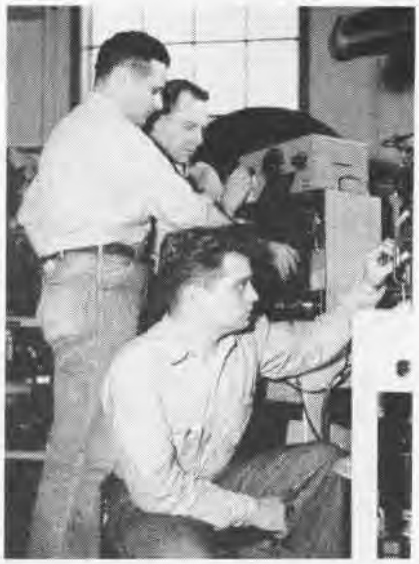
Naval Reserve petty officers in an aviation electronic rating, strikers and officers with a similar classification are eligible for this training. Eligible personnel are urged to apply for this specialized training through their squadron commanders. Members of non-pay units may also apply through their company commanders.

All electronics officers in a refresher training or in-service training status may perform their annual training duty at the AIRBETDIVS in lieu of the unit to which they're attached. All personnel taking this training, whether officer or enlisted, will be credited with taking their cruise with their own squadron for competition purposes.

The complexity of the subjects studied and the shortage of time available for actual laboratory and classroom work means that a 14-day course really consists of 14 days of intensive instruction. However, when the students finish their training, they are familiar not only with the equipment used in Reserve squadrons but also with the latest types of fleet equipment. They are trained to step into any electronics division in time of emergency and "turn to" without time lost in a lengthy training status.

Periodically, the AIRBETDIVS also conduct special classes. These are scheduled when new aircraft are assigned to the NARESTRACOM equipped with new electronics installations that require maintenance support.

As more and more eligible Reservists learn of the availability of this excellent training, NAS LOS ALAMITOS expects an avalanche of requests from students of the western half of the United States, while NAS WILLOW GROVE fills quotas from the eastern half. Complete information on curricula and method of application is contained in CNARESTRA Instruction 1552.6 of 19 June 1952.



WILLOW *Grove's Rothman explains use of test equipment to H. Jackson, W. Merritt.*

"IT EVEN *gets Milton Berle," R. A. Brooks tells E. F. Keever at Los Alamitos school.*

Opinions of AirBETDiv Students

At the completion of each course conducted at the two schools, students are issued a critique form requesting their suggestions for improvement of the courses. The following comments are interesting since they seem to reflect the opinion of the average class.

One officer wrote: "The course just completed was well-conducted and developed. The instructors were able to put their information across well. All were well grounded in their specialties and never lost sight of their objectives, regardless of the discussions arising from the class. I would be interested in taking another course of similar type, involving equipment not covered in the present course."

Another wrote: "It appears that the Navy, or someone else, finally realizes what it takes to make a course of study successful, as evidenced by the course just completed. The course was well organized but not routine, planned but flexible, thorough but not dull, theoretical and practical. There was enough theory to satisfy men in the business, but not so deep as to completely shut out men not daily associated with electronics."

One officer's idea was that "this course be made mandatory for all electronics officers in drill pay status to insure competence for active duty.

'DAUNTLESS DILBERTS' SPORT TACTICS—CHAMPIONSHIP PENNANT, WEAR HAT STREAMERS

RIVALRY SPICES NAVCAD FLIGHTS

NAAS SAUFLEY FIELD—There's nothing like a little competition to liven up flight training. Americans thrive on competition in their sports and daily life, so the idea has been put to good use at this basic training field.

Squadrons of 16 students and five instructors fly as a competitive team, vying with other teams for the best flying records. And for the winners there are prizes too—a cross-country RON hop for the best team, colored streamers worn on the winners' helmets, a ride in a TV-2 jet for the top pilot and their pictures in the station newspaper.

Points are worn or lost on check hops, being totalled with other flight marks to give the squadron its weekly mark. Degrees of aircraft accidents, major and minor flight violations, or tardiness and absenteeism are considered. The winning squadron flies a pennant from its flight briefing booth. The student of the week is picked by the senior flight instructor for his individual and teamwork ability in formation flying, leadership, cooperation and attitude.

Squadrons are organized on fleet basis, with operations, communications, maintenance and material "departments". Students handle their departments with a view toward a fleet squadron's organizational needs.

This competitive system was originated here by Cdr. T. Ball in February, 1953. Students and instructors all like it and it develops good flying habits as well.

The teams chose such colorful names as the "Dauntless Dilberts," "Aces Up," or "Black Jacks."

THE FORECASTER *said "Cold front over Memphis, moderate to severe turbulence, tops at 14,000, given flight of 16,000 should clear all towering cumulus." Upon entering frontal area, the visibility became very poor. Pilot asked for 20,000 hoping to go above since aerology and weather stations were giving severe weather at lower altitudes. The picture shows what happened to the radome on VW-2's WV-1 aircraft in the flight from Patuxent River into the weather.*

AL and AT Ratings Merged

EM Rating Structure is Streamlined

After 16 November 1953, aviation electronics ratings will be easier to remember. The Navy is consolidating the aviation electronicsman (AL) and aviation electronics technician (AT) into one rating, that of AT.

The change affects all rated AL's and strikers of the regular Navy, naval Reservists on active duty and temporary officers who hold the AT rating in their enlisted status. In addition, the ATA, ATG and ATO emergency service ratings are being abolished.

AL's and strikers who are graduates of AT schools will have their ratings changed to AT after 16 November and before 16 January 1954. Those AL personnel not A or B school grads must take an AT exam before changing rates.

BUPERS urges all AL personnel to prepare for the service-wide AT examination coming up in February. Changes in rating will be either in equal pay grade or to next higher AT grade, if both AL and AT exams are taken. There will be no examination in the AL rating after August 1954. It will be abolished 31 March 1958.

Dollar Saving Ideas Win

VP-6 Takes Hawaii Honors Twice

FLEET AIR HAWAII—The economy competition between squadrons of this command is stirring up active rivalry, with VP-6 winning honors for the second straight month in June.

The squadron was adjudged the most cost-conscious unit at Barber's Point, putting them atop the "totem pole" graph with 130 points. VR-21, VP-28 and VW-1 all had 90 points for active planning, new suggestions, testing and use of the best economy ideas. The squadron CO is Cdr. P. F. Bankhardt.

CAPT. VIEWEG GREETS CDR. BANKHARDT

'FROGMEN' HELP SALVAGE PLANE

"HOT PAPPAS" in crash and salvage crews at naval air installations may find themselves training to be "frogmen" in the near future. Out of the tragedy of the fatal crash of a National Air Lines DC-6 off Mobile, Alabama, has come an account of the feasibility of using "frogmen" in shallow-water aircraft salvage operations.

On 30 May, J. L. Harris, AOC, and other Underwater Demolition Unit One personnel reported aboard YSD-78 to commence diving operations in coordination with divers in standard diving dress. The lungmen were utilized as standby divers and, when necessary, could rig and reach divers in two to three minutes.

The free-swimming "frogmen," acting as messengers, were invaluable in running lines or wire and tools to the divers, assisting divers in tying onto large pieces of wreckage or searching out and leading the divers into new wreckage areas. The lungmen performed numerous duties which lessened the time and efforts of the deep-sea rig men in carrying out their tasks.

The free swimmers were able to carry out the searches for new wreckage more easily because of their speed of movement underwater and their ability to move quickly to any spot on a circling line and make investigations. They used 150-foot circling lines in these searches.

During periods of low visibility or bottom surges, the lungmen could work and search with a greater degree of safety because of their ability to move flat on the bottom where visibility was generally best and the rapidity with which they could anchor themselves to stable objects. The lungmen collected lots of minor cuts and scratches, but this hazard was minimized by using a full suit of heavy underwear and gloves.

The general procedure during the salvage operations was to have the lungmen search the area and rig the trace lines for the deep-sea rig. They would then surface and brief the diver on the area, standing by to assist as necessary.

'HE'S THE LAZIEST BIRD I EVER SAW'

Yankee Ingenuity Shows

Trade Winds Fan Trading Instinct

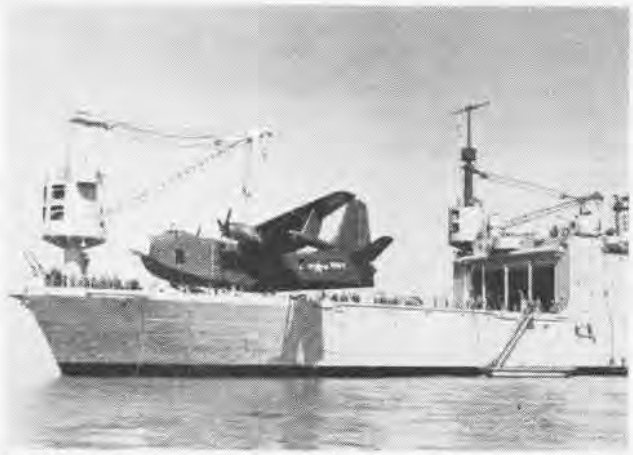
If Lt. Clifford Nelson of VR-21 had lived in the days of old Dobbin, he would have been known as the best horsetrader in town. But even with old Dobbin gone, Lt. Nelson has found a natural outlet for his trading instincts.

In 1950 he was transferred to VR-21 and the Hawaiian Islands. With the islands' continual turnover of service personnel, a shrewd operator can find a happy hunting ground for used car trading. The navigation instructor started out buying a 1934 Plymouth for $75. Within three months he sold it for a profit and got a 1939 Ford.

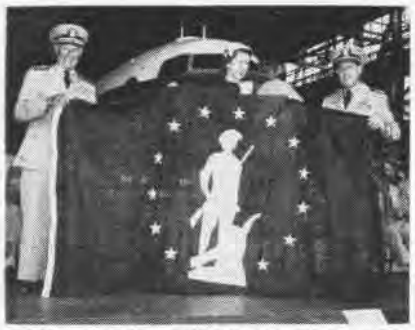
He never drove the Ford. Two days later he sold it for a handsome profit and bought a 1941 Buick which he kept for four months. In the meantime, he repurchased his original Plymouth at less than he bought it for originally and resold it a few days later without taking a loss. His next move was to turn in his old Buick on a shiny 1949 Buick Roadmaster.

Lt. Nelson estimates his total cash outlay in the various swaps was $865. The retail value of his present car is $1875. By simple arithmetic that puts the able trader more than a thousand dollars ahead in his deals.

● NAS JACKSONVILLE—The "boot" stage has been passed by VJ-2 which celebrated the end of the first year of hurricane hunting operations.



AS NAVY *planes get bigger and heavier, techniques of handling them on aircraft carriers or seaplane tenders change and the ships have to be modified to take them. With the arrival of the P5M Marlin in the fleet, cranes on the seaplane tenders had to be lengthened and made stronger to hoist them on the deck. The crane was moved from the starboard side to the stern and the boom made longer. Techniques used by seaplane squadrons to come alongside for hoisting aboard also changed—the Marlins taxi astern of the carrier instead of on the starboard quarter and are pulled up to the crane by cable. The forward crane on the Salisbury Sound is used mainly for hoisting up the ship's boats for stowage above the hangar on the tender.*



RADM. GLOVER, GREENSLADE WITH FLAG

Corpus Wins Treasury Flag

90% of Workers Sign to Buy Bonds

NAS CORPUS CHRISTI — Because 90% of its 4,000 employees had signed up under the U. S. Treasury's savings bond campaign, this air station received a Minute Man flag from Asst. Treasurer of the U. S., Catherine Cleary.

The flag was accepted by Capt. John F. Greenslade, commanding officer of the air station, which is the first NAS in the country to win the award. Corpus also was the first command in the 8th ND to win the flag and the first military installation in Texas since World War II to gain that high mark.

Device Shows Plane Lights

Jax Chiefs Develop Training Device

NATTC JACKSONVILLE—Many are the pair of star-gazing lovers who thought they'd found an extra "flirtatious" star or dashing comet, only to realize they were watching an aircraft with its blinking lights. Dreamily they would watch it wink its way across the horizon and disappear. But hardly ever would they stop to think of how and why the lights were blinking.

That particular system in modern aircraft has been one of the headaches of the training schools of the Navy—how to represent it in the classroom.

The Jacksonville Naval Air Technical Training Center, Aviation Electricians School, Class "A", recently developed a new training aid by which students, both Navy and Marine enlisted men, can visually study this complicated system of electrical switches, wires, and lights. Prior to its construction, students were unable to visualize the actual workings of the system until they came in contact with it on a modern aircraft.

CURLIN, DAVISSON, CONN SHOW OFF DEVICE

Now they are able to receive their lectures in classrooms and watch the system in operation, including wooden wheels and tailhook which moves up and down, and showing just what happens when each of the switches and relays are moved.

The new training device is technically called "a mock-up panel of the Flasher-coder Unit". The unit is designed to provide two separate flashing sequences of an aircraft's exterior lights. One sequence is the normal flashing of the position lights. The other flashing sequence enables the pilot, upon selection in the cockpit, to flash Morse Code signals with the fuselage lights. This can be done manually or automatically.

The device was constructed chiefly through the ingenuity of three instructors at the school: George H. Curlin, Richard L. Conn, and David E. Davisson, all aviation electrician chiefs.

Propwash Starts Up Engine

Guam Mercy Flight Aided by Brown

COMFAIR HAWAII — The mercy plane carrying an Air Force dependent, Mrs. Constance L. McBurney, from Guam to Hawaii for emergency polio treatment stood on the runway at NAS AGANA, three of its engines turning over. The fourth would not start because of a burned-out starter.

LCdr G. W. Brown of VR-21 was passing through in an R6D en route to Barber's Point. LCdr. Jack Buffington, OIC of VR-23's FlogWing detachment, notified Brown of the emergency. The VR-21 pilot parked his R6D 10 feet in front of the Air Force C-54, set the brakes and turned up the engines.

The propwash caused the propeller of the dead engine to spin, starting it. The mercy plane took off with Brown close behind. After refueling at Kwajalein, the unorthodox starting procedure was used again to get the balky engine going and the polio patient was delivered to Honolulu.

WATTS "SAPS" COW WHILE WIFE LOOKS ON

Marine Has Private Cow

Daughter Requires One-Animal Dairy

MCAS CHERRY POINT—A farmer's son, now a Marine corporal, is probably the only man stationed at an air station who has his own private cow.

The problem is a baby daughter who has to have fresh cow's milk. Corp. Bobby Watts, who lives a few miles off the station, had to drive 30 miles after work to get milk before he worked out a deal with a dairyman, S. V. Simmons of New Bern.

In return for feeding the cow, Watts was loaned the milk-producer so he could save all that driving. Now he keeps it on his place and does the early-morning and late milking chores like a true farmer's son.

Weather Brief Made Easy

FWC San Diego Uses Route Display

The Fleet Weather Central San Diego pilot weather briefing office graphically displays the weather enroute along the two most traveled airways from San Diego. Pilots flying from San Diego to the San Francisco area, or from San Diego to El Paso can visualize route conditions at a glance before departure.

Permanent information on terrain elevation in the airways' center is painted in a solid color on the back of a large sheet of plexiglass. Terrain elevation 10 miles on either side of center is shown with a fine line. Minimum enroute IFR flight altitudes are also indicated on the plexiglass.

Enroute weather conditions are drawn on the front of the display with colored wax pencils. These notations follow the color schemes of normal cross sections, and are corrected hourly upon receipt of airways weather sequences around the area.

THIS IS A BLACK-AND-WHITE PRINT FROM FIRST AERIAL COLOR PHOTO EVER TAKEN OF NIGHT CARRIER OPERATIONS WHILE AT SEA

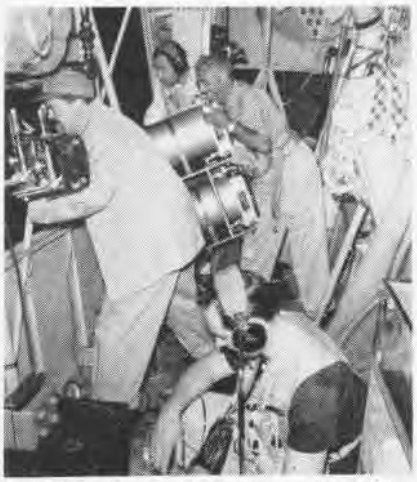
800 BULBS SNAP CARRIER AT NIGHT

IT TOOK three separate night attempts, some 1,600 photoflash bulbs and hours of planning to shoot a color photograph of the carrier *Antietam* launching a jet at night. Above is a black-and-white picture made from the 8 x 10 color shot by the U. S. Navy and Sylvania Electrical Products Co., which made the bulbs—the first aerial photo in color of planes being launched at night.

On the first attempt off Norfolk, the photo blimp from ZP-1 at Weeksville lost an engine and battled high winds back to base. The next night the carrier and blimp rendezvoused at sea. The 800 flashbulbs were placed on the 45 long poles to light the deck. Others were clamped to plane bomb racks or aimed down at the ship's sides and wake. The ship's radar, however, accidentally fired all the bulbs on this attempt. There were not enough bulbs aboard to make a second attempt.

Two weeks later, on a night with choppy sea, a third try was made. As the red F9F was catapulted off the bow, a company photographer, Jimmy Burns, triggered off the 800 flashbulbs. A radio relay tripped the camera shutters on the two K-37 aerial cameras and two Speed Graphics in the blimp. They had been set at 1/100th second at f 8 for the large #2 bulbs.

Other photographers were Joe Costa and George Burns. They called it the most difficult project they had ever tried, but they achieved a real "first."



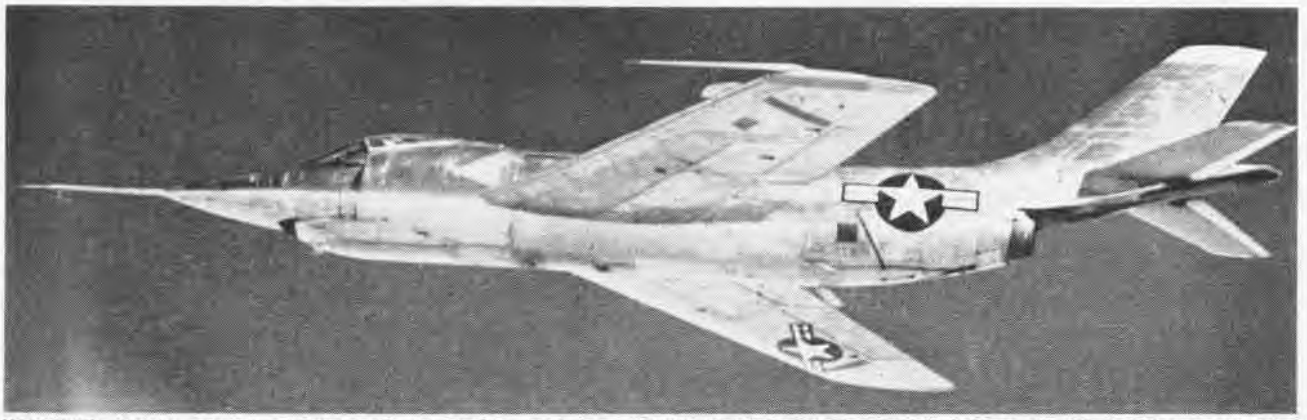
PHOTOGS *Burns, Costa aim cameras from ZP-1 blimp gondola at Antietam below*

LT. AL *Barber, left, flew Cougar photographed catapulting from carrier deck*

BLIMP *soars over Antietam with her forest of flashbulb-loaded poles for shot of carrier*

NAVY, *Sylvania personnel load bulbs in 45-foot poles used to light up carrier*

BARTU MEN HEAR THE PATUXENT STORY



MCDONNELL XF3H-1 DEMON, SHOWN HERE IN FLIGHT, WAS ONE OF THE NAVY'S NEWEST FIGHTERS SHOWN TO THE BARTU UNIT AT NATC

As the big R5D from NAS Columbus taxied up to the FlogWing Terminal at NAS Patuxent River, it was dwarfed by VR-1's gleaming new *Super-Constellation*. Twenty-one pairs of eyes peered with more than casual interest from the R5D at the R7V-1.

That's how the tour of the Naval Air Test Center began for two Columbus pilots and 19 Reserves attached to AGU (L) 602 (BARTU) at Cincinnati and it ended with them getting a preview of the Navy's latest fighter planes. The one-day tour of NATC Patuxent River was the beginning of a number of visits these Reserve specialists will make to neighboring industries and naval installations. It's part of their training, preparing them to step into BuAer Production Program billets with a minimum of waste time in case of mobilization.

The trip was arranged by RAdm. A. M. Pride, Commander NATC, and Capt. N. O. Anderson, BuAer Coordinator for Naval Air Reserve, to demonstrate the types of tests conducted on airborne equipment prior to delivery to the fleet. The Reserves, skilled aircraft production men in civilian life, were brought up-to-date on the latest specialized and technical information available at the test center.

The unit visited Electronics Test, Armament Test, Service Test, Flight Test and Tactical Test where they listened to explanations of the tests being conducted and had a chance to examine at close range the Navy's latest air weapons. Two planes which caught and held their attention were the F4D *Skyray* and the F3H *Demon* which are currently being tested at the center.

Like their skipper, LCdr. J. M. Pederson, about one-third of the unit holds civilian jobs at the General Electric plant in Cincinnati. Whenever they got a chance to take a good look at the Westinghouse engines in the planes, their scrutiny was more than that of a disinterested observer.

Unlike the Reservists who belong to squadrons which take their annual cruises together, the BARTU men receive their annual training duty at BAGR, BAR and BuAer offices. That's why, as one of the Reservists remarked, the trip to NATC Patuxent River was the first time that the men of the unit felt they were taking their training together as a group with a common purpose.

GE ENGINEER *Pederson, center, gives Westinghouse engine a thorough examination.*

Weekend Warrior Is Rear Admiral

The annual cruise at NAS Lakehurst is a time that the Commanding Officer of WS-65 at NAS Akron will always remember. Karl L. Lange, CO of WS-65, became the first Naval Reserve officer qualified in both lighter-than-air and heavier-than-air to attain the rank of rear admiral.

Admiral Lange was commissioned an Ensign in the U. S. Naval Reserve Flying Corps on 11 February 1918 and was designated Naval Aviator No.

PUTTING *her best foot forward, Ruth Kraft leaves ship's hatch at NAS New York.*

CO's OF *units at Lakehurst watch as RAdm. Karl L. Lange receives stars and congratulations from VAdm. C. E. Rosendahl.*

NOSE OF *Banshee at Los Alamitos makes odd-looking contrast to front of unorthodox car built by K. R. Clements in spare time.*

547. Released from active duty in 1922, he continued active participation in Reserve activities, assisting in the establishment and organization of the U. S. Naval Reserve Station at Squantum. At the same time, he took HTA training and soloed 7 October 1923.

In civilian life he was employed by Goodyear and handled landing and refueling operations of the *Graf Zeppelin* at Los Angeles on its around-the-world flight. He was on a two-week tour of training at Lakehurst when the *Hindenberg* crashed. He had made two round-trip flights on the airship between the U. S. and Germany as an observer.

During WW II he served as Executive Officer at NAS MOFFETT FIELD; CO, Tillamook, Oregon; Chief of Staff and Aide to Admiral C. E. Rosendahl and on special assignments in airship experimental work.

Built His Own Jeep

K. R. Clements, PN1, assigned to the Command Liaison Office at NAS LOS ALAMITOS, got an emphatic "No!" in answer to his requests for a jeep to carry on his duties. Budget limitations being what they are, it was humorously pointed out that the only way to get a jeep these days is to go ahead and build one.

So build one he did. With the investment of $10.00 for a 1937 Willys sedan, several tanks of welding gas and six months of off-duty time, a small liaison car was produced suitable for puddlejumping about the station, light hauling and the advertising of the NavCad program. Clements accomplished the job with much assistance from his father, an Oldsmobile mechanic.

The $10.00 relic boasted a very fine Jeep engine which roared back to life with a new timing chain and minor adjustments by Clements' father. Although unconventional, the car is quite legal. It's licensed as a jeep and is fully insured.

It's not intended as a speedster, but Clements has had it up to 70 miles per hour. The only thing that keeps him from making it go faster is the thought of his wife and three kiddies waiting for Clements to return home at night.

Station Roundup

● NAS NEW YORK—Airmen recruits, graduating from boot camp, selected Ruth Kraft of Bayside, New York as their "Sweetheart." She presented a pennant to Frank De Rosa whose platoon was selected as the finest by Capt. Ben Scott Custer, Commanding Officer of the Reserve station.

● NAS COLUMBUS—New planes can be seen around this station these days. The old faithful *Able Mables* were replaced by *Corsairs*. When the new R5D arrived, the station crash truck and a yeoman's chair were used to paint the big "C" on the tail. The tail section of the plane was too large to fit in the hangar and the painting was done outside. Use of the chair made some old, sea-going men turn green and mutter ominous things about the Navy's air arm.

"GOODBYE *old friend," Joe McCann says to faithful AM at the Columbus air station.*

REPRODUCTION *of bosun's chair hauls Albert DeAngelis, AM1, up to paint "C" on R5D.*

ORMEROD WAVES GOODBYE TO OLD SQUADRON

10 Years in One Squadron

Mechanic Trots Globe With VP-134

VP-34, ATLANTIC—In May, 1943, Howard Ormerod, then an aviation mechanic third class, reported to VP-73, since changed to VP-34, at Port Lyautey, North Africa. Today, after 10 years of duty with the same squadron and more than 3,000 hours in the air, he has left the squadron to serve with FASRON-109.

During his service, the squadron flew PBY-5A's on ASW hops out of Port Lyautey, operated out of Floyd Bennett Field to guard against V-2 rocket attacks, from San Juan, Puerto Rico, and back to Port Lyautey, Greece and Italy, up to Newfoundland and finally to Trinidad. It was at the latter place when he transferred to the FASRON. As a real "plank owner" in the squadron, he was awarded a captain's meritorious mast for his long service by Cdr. F. L. DeLorenzo.

VADM. JOHN *Dale Price, Chief of Naval Air Training, "turns over" his command to Dave Domizi, 16, and his "chief of staff," Barry Burr, 15. The boys, who were winners in the Navy carrier event at the National Model Airplane Championships held at NAS Willow Grove last summer, received trip to NAS Pensacola.*

SAD SAGA OF SOMNOLENT SAILOR

VR-21, PACIFIC — Consider the plight of Fireman Eugene C. Brock, who wanted to fly from Guam to Kansas City, for 30 days leave.

He got as far as VR-21's terminal at Barber's Point, Hawaii, on his homeward flight. There he was given a reservation for 0130 on a stateside-bound R6D. Since he was pretty sleepy and had two hours to kill before departure, he lay down on a bench and went to sleep.

He awoke suddenly to hear the loudspeaker bawling, "Flight leaving immediately . . . All aboard." Scrambling to his feet, Broch glanced at his watch —0130. This is it, boy, he said to himself as he raced for the plane—California, here I come!

The flight orderly stopped him at the loading ramp. "Name and loading number?" The answer was a mumbled "Brock, number three." He entered the R6D, sat down and resumed his dreaming of USA.

Came the dawn in more ways than one. Brock awoke hours later to hear the flight orderly calmly informing him he was on his way, not to the states, but Kwajalein.

Here's what happened: Brock's eastbound plane, scheduled to leave at 0130, was delayed because a 2230 westbound flight was held up until 0130. A passenger named Crock (William P. MM1) was headed for Japan aboard the westbound flight and even more coincidental, had a similar loading number. Consequently, when the sleepy Brock climbed aboard the 0130 flight, the orderly mistook his name and number for Crock.

To compound the tragedy, "Wrong Way" Brock was confined in Kwajalein dispensary for a week after arriving there. His luggage went on to Moffett Field and waited 11 days before he finally picked it up.

THE "WHIRLING *dervish" look is what Lt. James T. Williams is looking for. When he qualified for six weeks training at helicopter school, Lt. J. McGregor gave him this whirlybird bonnet at NARTU MIAMI. Rotor on bonnet is battery equipped and spins like mad hatter whenever contact is made.*

PACKING *a couple of belly tanks for extra range, this FJ-2 Fury is now flying for the Marine Corps. VMF-235, the Death Angels, was the first squadron to receive the swept-wing North American jet. By summer half a dozen fighter squadrons will be equipped with the plane, outgrowth of the FJ-1 and F-86.*

RECOGNITION *experts may spot the differences between these two planes but to a beginner the B-47 and its big sister, the YB-52 (left) are similar in many respects. The YB-52 has eight J-57 jets to six J-47's in the Stratojet. The Stratofortress has a more pointed tail, fatter fuselage, lower horizontal stabilizers. It lacks the JATO exhaust ports on its sides. Thrust of the J-57 jet has not been revealed but it probably nearly doubles the 5,600 pounds output of the J-47 which powers the Sabrejet and other fighters of the USAF as well as the B-45 bomber.*

INTREPID VA-145 CHUTISTS FACE CAMERA

Attack Pilots Try Chutes

14 VA-145 Fliers Jump at El Centro

VA-145—If the world needs adventurous men, VA-145 can supply them.

Recently, while temporarily stationed at El Centro, about 50% of the *Skyraider* pilots voluntarily hurled themselves into space from the Navy Parachute Unit's R4D.

All 14 parachutes opened and the pilots found that, like a visit to the dentist's chair, the pain was more mental than physical. They escaped with only a few bruises.

The idea behind the undertaking was simply to find out how it felt. The jumpers say the experience has erased the fear of bailing out and may someday save them the hazards of a rough-terrain ditching.

Men in the picture, front row, were Lts. (jg) Gerhes and Turo, Ens. Thomas, Peterson, Boehmer. Top row, Lt. (jg) Armstrong, Ens. Hall, Ball, Holland, and Coffman. Men not pictured who made the jump, were Ens. Taylor, Selleck, Montague and Brunskill.

Carrier Store Widens Out

Windham Bay Profits To Show Rise

USS WINDHAM BAY—This carrier, although only a TCVE, claims its ships store is equal to the best afloat.

The tiny little cubbyhole that formerly served as a store was hard on morale and cost the ship plenty of man-hours standing in line to be served—easily 2,000 a month. The new store in the crew's lounge is equipped with display lights so that men can window-shop even when it is closed, thereby speeding up sales.

The new store has paid off in increased sales and profits, the former expected to pass the previous peak of $17,000 a year ago August. Profits go into the recreation fund and all hands aboard thus benefit.

The store now has to be restocked only twice a week instead of twice a day, a boon to the storekeepers who run it. The disbursing officer likes it because only one collection a day has to be made now instead of two.

ROBIN'S NEST AND EGG NESTLE IN PLANE FLAP

Bird Nest in VR-22 Plane

Robin Lays Egg in Turkey Flap

NAS NORFOLK—Springtime is mating season and airplanes are just as desirable as trees for nesting places, VR-22 reports.

During a routine flight, a plane crewman saw a few feathers sticking out of the heater duct of the TBM-3R transport plane. Inspection revealed a blackbird had built a nest there.

Still later another incident was discovered. A nest complete with a robin's egg was found in a wing flap of another plane. The robins picked the right plane, as the plane was on the ground in a pool status, for special flights.

Every morning there is evidence of more nests under construction. A heavy screen has been improvised to cover the heater air-intake as a precaution against further nests.

FAVORITE *haunt of Sgt. James W. Brandon, Jr., of HMR-361 at NAS Kaneohe Bay, Hawaii, during the hot weather is the cold storage lockers at the mess hall. Reason: Brandon gets homesick for his old Alaskan home at Anchorage during the heat waves. Even the Pacific's cool waters are too hot for him.*

HELICOPTER HORSEMEN BUSY IN KOREA

ONE OF TOUGH FLYING JOBS FOR HMR-161 WAS TO CARRY HEAVY BARBED WIRE COILS

MARINE "horsemen of the sky" paused momentarily to acknowledge their second anniversary in Korea, then whisked off in their whirling "workhorses" on the many missions still before them.

Right now, they're primarily engaged in hauling essential supplies to new mountain-peak outposts and other areas throughout the division. The work continues to be hazardous since many landing areas, cut out of sharp ridges, are barely large enough to set the 'copter's four wheels on. Sometimes they can't land at all and have to hover just above the ground while loading and unloading. In one day recently they hauled over 66,000 pounds of cargo to these outposts.

Two years ago on Sept. 2 Marine Helicopter Squadron 161 landed at Pusan to become the first such unit to operate in Korea. The 287 officers and men brought with them 15 Sikorsky transport 'copters, HRS-1's.

They also brought with them a Latin motto, "Equitatus Caeli"—Horsemen of the Sky. *(See inside back cover.)* They didn't know then, however, how appropriately the description would fit the squadron during the succeeding two years.

They were the first to experiment in lifting complete units, up to and including a whole battalion of fighting Marines and their equipment from the rear to the front, bringing another back. They also flew the first night helicopter troop lift in history. Each operation was a success.

In a five-day period last February, HMR-161 'copters hauled more than two million pounds of food and ammunition in support of two front-line Marine regiments. The operation, designated *Haylift II*, was carried out without a hitch.

They were also called on to lay communication wire, make reconnaissance, do artillery spotting, resupply inaccessible hilltop outposts and even aid in anti-guerilla patrols.

Greatest of all, however, is their complete success in what is normally considered a secondary mission—air evacuation of the seriously wounded.

For the record, Marine 'copters have never restricted their mercy flights between front-line aid stations and rear areas to daylight hours only. They've responded promptly to urgent calls during the night as well, often in drenching rain and blinding fog, a hazardous job in any pilot's manual.

On July 24, only a few days before the cease-fire was effected, the flying workhorses set a new mark in air evacuation of wounded during a 24-hour period. Sixty-three gravely wounded Marines were lifted to rear aid stations, 12 of them during darkness.

Copter Races With Death

On the very night of the cease-fire, an urgent call was received to evacuate a Marine who had accidentally stepped on a land mine. It happened just 15 minutes before the front was stilled by the truce. A Marine chopper virtually began a race with death.

Capts. Harold W. Hawkins and Rodney E. Montgomery, Jr., rushed the wounded Leatherneck from the division area to the *Haven*, a Navy hospital ship in Inchon harbor.

The weather was so bad that the pilots couldn't see the ship when they reached it. Flares were set off, but to little avail. Finally, the ship literally "talked" the 'copter in to a safe landing by radio. The pilots could not get back off the ship until late the next morning when the weather cleared.

In another instance, two Army casualties at an aid station near Seoul needed immediate air evacuation to a hospital ship. The weather was so poor that no 'copter squadron in Korea would order their pilots to fly.

But Marine Capts. Robert J. Bury and Kenneth N. Peterson, HMR-161 pilots, volunteered to attempt the flight. Staff Sgt. Kenneth O'Brien asked to go along as crew chief.

To get to Seoul from their converted rice paddy field in the forward area, the flying horsemen had to fly their chopper over jagged mountains and then follow low along railroad tracks to find their way, disregarding ever-dangerous wires and powerlines. Picking up the two casualties, whose lives hinged on the success of the mission, Bury and Peterson sped for a ship they could not even see.

When they did reach it, they couldn't tell one end of the ship from the other in the dense, hovering fog. They approached dangerously low and first attempted to land on the bow, believing it to be the stern where the 'copter platform is located. After tedious minutes of blind maneuvering, they finally landed with their human cargo.

How many lives and limbs of fighting men in Korea have actually been

saved by helicopter evacuation will probably never be known. HMR-161 alone evacuated more than 2,600 casualties before fighting ceased late in July. Three hundred of these were night missions.

Lt. Horace G. Love, a Navy doctor serving with the First Division, summed it up this way:

"When it comes to saving lives and limbs of combat casualties, Marine helicopters have proved to be greater than penicillin, the myecins or any other wonder drugs."

Dr. Love, who spent six months with front-line battalions of the U. S. Marines and Korean Marine Corps, called the Marine helicopter system of evacuation from front-line aid stations "the greatest innovation in military medical history." He predicted that such a system would eventually be adopted in civilian medical practices.

Chopper pilots and crews also feel strongly about casualty evacuation. Capt. David S. Boesch, declared that evacuating the wounded is the most gratifying mission the aerial workhorses can perform.

"We seldom worry about any hazards involved when it comes to lifting casualties," Boesch explained. "We feel that our own problems are secondary to the saving of a life."

This was undoubtedly the same feeling LCol. Russell R. Riley had when, upon his own initiative, he landed his chopper in the middle of a mine field to take out casualties.

Col. Riley was flying supplies to the front lines last February 24 when he passed over a field in which a brush fire was flaming. It had been started by enemy white phosphorous shells.

Mine Field Takes Toll

Suddenly there was an explosion which called his attention to a Marine fire-fighting party in the field. The men had entered a mine area and detonated one of the mines. Three casualties resulted.

Riley hovered his 'copter only long enough to survey the situation, then sped to a supply point, dropped his cargo and returned at once to the mined area. Disregarding the fact that the area was obviously heavily mined, he landed his four-wheeled 'copter near the casualties and quickly evacuated them.

After leaving them at a medical company, the colonel returned again to the mine field to evacuate the third casualty. Another chopper had already done the job, but he landed a second time to evacuate the remaining fire-fighters rather than allow them to go again through the mine-ridden field.

Since the cease-fire, the "horsemen of the sky" have done less evacuating, but no less workhorse missions. They evacuated wounded and sick prisoners repatriated through operation *Big Switch* at Freedom Village. And there are still occasions when Marines are seriously injured through accidents, requiring immediate removal by air.

Despite its many close shaves and seemingly impossible missions, HMR-161 has still managed to maintain an amazing safety record. By the end of Korean hostilities, the squadron had chalked up more than 17,500 hours off the ground. Unit casualties have numbered only two pilots and three crew members.

During the same period, the whirling workhorses made 20,000 flights, carrying over 6,400,000 pounds of cargo, 36,000 pounds of mail and nearly 60,000 passengers.

Col. Owen A. Chambers, the squadron's commanding officer since March, added up the impressive and unsurpassed record when he explained, smilingly, "It's an old saying that the 'copter can do anything a horse can do."

But Leathernecks of the First Marine Division believe firmly and appreciatively that their choppers, the flying workhorses of HMR-161, can do much more than any horse—and better!

—By 2nd Lt. R. B. Morrisey.

ROCKET LAUNCHERS FLOWN IN BY HMR-161 POUNDED COMMUNISTS, THEN WERE EVACUATED

MARINE GUIDES CHOPPER PILOT TO LANDING TO PICK UP WOUNDED MAN IN STRETCHER

Modified Release Coupling

A modification of the Robb Quick Release Coupling has been designed by Harold G. Funk, BMC, of the USS *Lake Champlain*. This modification facilitates the break-away from a tanker and eliminates the need for personnel to remain near the tanker's hose, thereby eliminating a safety hazard.

Prior to the modification, men had to straddle the filling connection and manually push the release collar toward the female fitting of the tanker's hose. This in turn released several ball bearings from their annular groove on the male fitting and permitted the separation of the two parts.

With the modification installed, a blow with a bronze mallet shears a copper wire and by means of two cammed surfaces drives the release collar outboard and gives impetus to the separation of the two halves.

Turboprop Engine on Sale

The Navy's T-34 turboprop engine, built by Pratt & Whitney Aircraft, is being released for sale to private airlines in the U.S. and abroad.

The T-34 is the most powerful single unit propeller turbine engine to be offered for sale. It develops 5,600 hp, which it delivers 90% to the propeller and 10% via jet thrust. The Navy authorized the release for sale to airlines.

The engine is scheduled for two R7V-2 transports which is slated to fly later this year. Although the engine consumes about the same amount of fuel as conventional prop engines, it provides faster cruising. Future transports may use this type.

Modified Blow-in Door Cover

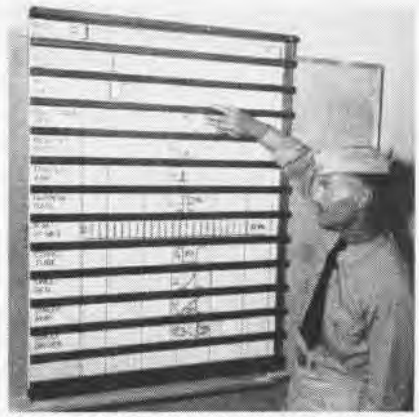
NAS NORFOLK—J. E. Rushford and W. L. Werner have designed modified blow-in door covers for F9F aircraft, which have been approved for optional adoption by other activities. The device has been approved under the Navy Awards and Incentives Program.

The approved modification calls for making the covers smaller and removing the 10 cleco fasteners. These have been replaced by bongee and hooks, four required.

New "Pulse-Time" Trainer

The increasing complexity of Navy airborne electronics equipment has brought about the development of a special training aid at the Airborne Electronics Training Division of NAS LOS ALAMITOS. The device, designed by R. A. Brooks, ATC, an instructor at the AirBETDiv, aids in the explanation of the various pulse relationships existing at different time intervals within radar equipment.

The "pulse-time" trainer is readily adaptable to any radar maintenance training course and provides a graphic means of



MOBILE INSERTS SHOW PULSE RELATIONSHIPS

presenting complex data in a form that is readily assimilated by the student. It consists of a series of horizontal tracks in which plexiglass inserts, inscribed with various pulse shapes, may be moved back and forth to demonstrate changing pulse relationships during time variations. The white-lettered backgrounds can be removed and others substituted to conform to the data for the radar concerned.

The unit at NAS LOS ALAMITOS is designed to hang on a blackboard so it can be removed and set aside when not in use. Dimensions are not critical and any activity having access to a few woodworking tools, some plexiglass and plywood could easily construct one.

The device has elicited considerable favorable comment from students who report it is a distinct aid in enabling them to grasp the material presented in this manner. It also saves time for the instructor, since he doesn't have to draw innumerable outlines on the blackboard while covering this phase of training.

LT. FRANK NELSON, *Special Devices Center, and Harry Foster, Erco engineer, go through checklist prior to a "flight" in the new flightronic trainer, first of the P2V-5 simulators to be delivered to the Navy.*

Tool Ups Rocket Efficiency

MCAS CHERRY POINT—A locally made "punch tool" has increased the success of rocket firing in Marine Training Group 20 from approximately 65% to 95%. This has been done by reducing the possibility of pigtails working loose during flight. T/Sgt. J. R. Evans suggested a tool that would do the job.

The tool is approximately four inches in length and has a hole drilled in one end to receive the pigtail. The end with the hole has two protrusions opposite each other, and the hole is lined with bakelite.

These protrusions are lined up with the "retraining rivets" of the pigtail and struck lightly and carefully to cause an indentation on the lip of the pigtail, thus binding the rivets, preventing them from popping out while plugging in or vibrating out when in flight.

Four Engines Rack Up Time

NAS CORPUS CHRISTI—Four engines on an R5D with an average of 1,529 hours on them! That is the record of #56544 when Lts. Vaughn G. Short and Harold H. Kelly of VR-24 turned the engine logs over to Acceptance, Transfer and Training Unit.

This broke the previous record of VR-21 with 1,492 hours on each of the four engines of another R6D. Lt. Short, the assistant maintenance officer of VR-24, credited the record to the fact that during the last 18 months the squadron has been operating under a lower BMEP cruise control evaluation program for the P&W 2000 engines. Old #56544 had been operating the entire heavy maintenance cycle under this evaluation program.

VR-24's record doesn't represent the highest time on a single R5D engine, but it is believed the highest time ever put on four R5D engines in the Navy.

Starting F3D After Flameout

NAS MOFFETT FIELD—Air Development Squadron Five has developed a way to start an F3D which might otherwise necessitate a long maintenance job.

Recently an F3D stopped for a short time at Moffett Field. It was needed at its home base at El Toro, but when the pilot tried to start up his engines for takeoff, neither engine would turn over.

At that point, C. E. Johnson, AMC, line chief of the adjacent VX-5 line, came to the rescue with an AD-4N. The AD was tied with its rudder at the nose of the *Skyknight*, off at an angle of about 30°. At 2400 rpm, the AD gave the F3D pilot better than 20% rmp, enough turns for a successful start of the two recalcitrant engines.

Johnson quickly taxied the AD to the other side, ran up enough to turn over the other jet engine, and the F3D was on its way.

Target Safety Webbing Design

THE LONG standing problem of a suitable safety webbing system for banner and sleeve tow targets appears to be solved. The Naval Air Development Center, Johnsville, has developed an improved style.

For some years air-to-air gunnery exercises have had an element of risk involved where shot-off targets and firing aircraft have experienced too many "near misses". Indeed, there have been a number of serious collisions.

The old safety webbing, although adequate for slow speeds and .50 calibre gunfire, was not up to modern performance and 20mm fire. Several fleet units have attempted to improve the old assembly with varying results.

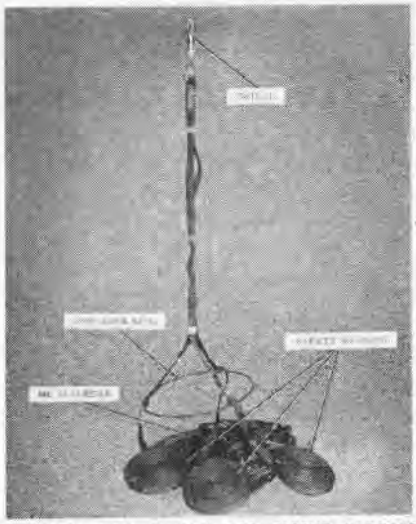
BUAER considered a type for banners constructed by VU-7 to have the most promise and established a project at the Naval Air Development Center to extend the safety webbing studies to perfect systems for both sleeves and banners.

Generally, banner targets are relatively free from twisting, owing to their six foot spreader bars and off-center counterweights. However, tow cables, whether steel or nylon, impose a rolling moment on the target that frequently twists the safety webbing down to bullet diameter. NADC redesigned and improved an existing small, free-running swivel that takes out all line rotation and yet is rugged enough to withstand normal target drops.

In addition to cable twisting, sleeve targets themselves often contribute substantial rolling instability. Satisfactory safety webbing systems for sleeves have long been a particularly severe problem. By employing a spreader ring 75 feet forward of the nose ring to insure separation of the webbing and including the new swivel at the cable attachment point, NADC has provided an assembly completely twist-resistant.

The safety webbing assemblies developed by NADC employ nylon webbing in place of the former cotton material. Thus, even though webbing footage is substantially greater than in the old assemblies, the increased unit strength of nylon results in no bulk increase over the former.

The new assemblies, with 900 feet of nylon line plus target, readily pack into the NADC-developed Aero 1A banner target carriers and the Mk 1 Mod 2 sleeve target containers.



WEBBING AND SWIVEL FOR SLEEVE TARGETS

Flight trials to date have demonstrated the effectiveness of these new safety webbing systems.

Cargo Tie-Downs of Nylon

The Navy has developed a new cargo tie-down device for use on transport planes and helicopters aimed to replace the present steel wire or cotton webbing tie-downs. The new device is made of nylon strong enough to withstand 8,600 pounds of pull.

NYLON WEBBING STRAPS HOLD HEAVY GEAR

Not only would the nylon tie-downs be able to hold more weight but they would be cheaper to procure, lighter and more easily stowed when not in use. For instance, an R7V would carry 72 of these straps, a 240-pound weight savings and $650 cheaper to buy.

Fleet Logistic Wings Atlantic and Pacific both have tried out the new tie-down straps and found them durable and easy to use. Each end of the 20-foot nylon tape—similar to parachute risers only stronger—has a holding device and full-swivel hooks strong enough to hold 5,000 pounds. These tie-downs are the first produced making use of nylon to replace weaker cotton webbing or heavy and stiff steel cable.

Fasron-6's New Tail Stand

In keeping with their squadron's current *cost-consciousness* program, two FASRON-6 men have designed and fabricated an F9F tail stand which is expected to save hundreds of dollars in man-hours and material.

Credited with the design are Edsel Bear and Arthur Raney, both AMS-1's, who claim that 12 of their tail stands can be built for approximately $1,600.00, the price of one factory built stand.

Three F9F squadrons supported by FASRON-6 are currently using the locally built stand. It is used for mounting and dismounting the F9F tail section and to provide safe stowage while the tail section is disengaged from the fuselage.

An engine stand used to support the J-48 turbojet engine was also designed and made by Bear and Raney. Routine checks can be performed while the engine is mounted in the stand which is also ideal for the storage of engines after they have been removed from aircraft.

Gun Trainer Ups Scores

FAETULANT, NORFOLK—Do you know how long a second is? Can you gauge accurately when your machine gun has been firing for one second. Sounds easy, but Navy gunners don't seem to be able to.

To remedy this condition and prevent burned-out gun barrels in training, Richard H. Storm, TD1, at NAS QUONSET POINT fleet airborne electronics training unit, developed an electronic timing device to teach correct burst firing.

The device works with the Mk 18 Mod 6 gunsight trainer. It was while using this trainer that it was discovered gunners had little conception of how long a second was. The trigger timing trainer was made inexpensively of standard items such as a one-revolution-per-second clock and two grips with trigger switch. Scores or number of hits attained by students trained with this device have improved noticeably. It helps the gunners concentrate the pattern of fire and avoid overheating gun barrels.

AVIATION ORDNANCE

BuOrd Wants All RUDAOE's

Activities are urged to submit RUDAOE's to BUORD when ordnance gear does not operate satisfactorily. Your reports are important to you and to the Bureau.

BUORD is constantly working to improve standard components and to develop new aviation ordnance equipment. Operating activities should consider themselves testing activities. When any failure occurs, it should be at once reported in an RUDAOE. This is the first step in corrective action.

When an RUDAOE comes into the Bureau of Ordnance, it is checked against the files to see if similar failures have occurred. If there have been similar reports and a remedy has been determined, an answer is prepared and mailed to the originator of the RUDAOE.

If there is evidence of an abnormal material or design failure, the RUDAOE is sent to the Research and Development Division where ordnance engineers go to work to find out why the equipment failed. When the design section is satisfied with a probable answer, it is evaluated by various testing or operators activities. If the tests are favorable, a change or modification of design is prepared and forwarded to the manufacturer of the equipment. Thus another problem will have been answered and a more efficient piece of equipment will have been produced.

Bomb Director Is Available

Bomb directors Mk 3 Mod 4 may be requisitioned through regular supply channels in accordance with the instructions contained in OP 1820. Test units Mk 44 Mod 0, stock number J942-T-954-440, and line maintenance repair part sets, stock number J942-NL-22835, used to support this equipment are also available for requisition.

Ordnance Loading Device

NAS JACKSONVILLE—Initiative coupled with ingenuity on the part of two VP-3 enlisted men is paying big dividends for the squadron's ordnancemen who load belts of 20 mm ammunition into P2V-5 *Neptune* bombers.

Edward A. Baron, AO1, designed a "funnel" type device to expedite loading and unloading. Manufacturing of the unit, which took less than three hours, was handled by Grady Hughes, AM1.

Constructed from 14-gage galvanized iron, the new "feeder" type loader is inserted one foot forward of the aircraft's

HUGHES, BARON DEMONSTRATE THEIR LOADER

bomb-bay, and acts as a guide to prevent shells from snagging on sharp edges within the loading zone.

Safety scores rocketed when the possibility of live round ammunition exploding was curbed with the advent of the funnel which also prevents belted ammo from being broken from protruding pieces of equipment.

Distortion in the links, such as spacing and alignment of the shells, previously contributed frequently to malfunction of the ship's guns.

With the adoption of Baron's idea, ordnancemen are able to expedite maximum loading by 40 to 50%. Two funnels, one on each side of the aircraft, are used in loading.

● USS CORAL SEA—This carrier claims a "first" in naval aviation. An F2H-3 *Banshee* flew off the flattop towing a target sleeve in its wake, believed to be the first time this new model *Banshee* has done this. Pilot was Lt. Emmett M. Cooke.

New Rocket Connector Rings

An all-plastic jack-plug electrical connector is now being furnished on all new rocket motors. It is also being backfitted to old motors during overhaul and rework. This is being done to overcome the inherent weakness of locking pins on die-cast electrical connector plugs which permitted rocket electrical connectors to become disconnected from wing receptacles during flight, a regular cause of misfires.

Since large stocks of old type plugs may be on hand a successful "field fix" originally recommended by Air Group Seven is concurred in by BUORD for interim use. A simple retaining ring is obtained by cutting seamless tubing of proper inside diameter to the correct length and slipping the ring over the plug before connecting it to wing receptacles.

BUORD is issuing an instruction covering this "field fix."

F2H's Adjustable Reflector

Owing to the increased use of jets for bombing and rocket firing, an adjustable reflector was needed. To meet this need, sight unit Mk 8 Mod 4 was designed.

This sight unit is identical to Mk 8 Mod 0, but instead of a fixed reflector, it has an adjustable one. These Mod 4's were made in limited quantity and all F2H aircraft should have them installed.

Early in 1954 a modification kit containing the adjustable reflector Mk 8 Mod 0 will be available. This adjustable reflector added to the sight unit Mk 8 Mod 0 makes it sight unit Mk 8 Mod 5. Enough of these kits are being produced to modify all sight units Mk 8 Mod 0. This adjustable reflector can offset the piper $-15°$ to $+250°$.

Ordnance Pamphlet 1688, Part 1, is being revised to incorporate the change over from sight unit Mk 8 Mod 0 to sight unit Mk 8 Mod 5.

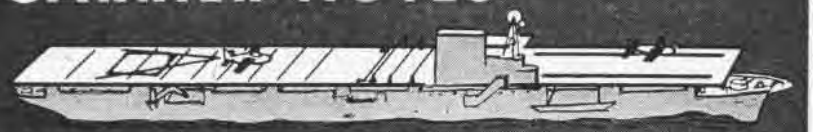
Contribute Your Comments

Comments on the improvements in maintenance techniques are requested in order to improve the effectiveness of aviation ordnance fire control publications among fleet maintenance personnel. This information will be incorporated in the handbooks for aircraft fire control system Mk 6, aircraft fire control system Mk 16, bomb director Mk 3, bombsight Mk 23 and gunsight Mk 18.

Address all comments to Naval Ordnance Plant (Publications Department), Arlington and 21st St., Indianapolis 18, Indiana.

● USS MINDORO—Tests were conducted aboard in cooperation with NATC PATUXENT RIVER on the Navy's new twin-engine, carrier-based XS2F. Purpose of the tests was to determine operational limitations and handling qualities aboard CVE's.

CARRIER NOTES



BUREAU OF AERONAUTICS—SHIPS INSTALLATIONS DIVISION

S2F-1's Shipboard Trials

Shipboard carrier suitability trials of the S2F-1 airplane were conducted aboard the USS *Mindoro* 31 August to 2 September. Catapult launches and arrested landings were successfully conducted with various store loadings and varying winds over the deck.

Participating pilots were unanimous in their praise of the carrier suitability features of this ASW airplane. The excellent pilot visibility afforded the pilot in carrier approach coupled with a unique "tail down" method of catapult launching help to make this aircraft more suitable for CVE type carrier operations than current ASW type aircraft.

Fleet delivery of this versatile airplane is scheduled for the very near future.

T. O. 48-52 Revised

Technical Order 48-52, which imposed a 35-landing limit on the detachable arresting hook point, NAF 60H10-1XX, is being revised. The new T. O. will wipe out this limit and instead impose a restriction on stretching of the metal in the hook shank slot.

It has been found that this deformation or stretching is progressive during the life of the hookpoint, and a limit of 1.94 inches has been established on the hookpoint shank slot width measured at the centerline of the boss hole. Hook points will be changed when this limitation is exceeded.

Piston Valve Purge System

A marked reduction in the peak acceleration of H4B and H4-1 catapults has been obtained by the use of a piston valve purge system developed by the Naval Air Material Center. The system provides a solid column of oil adjacent to the catapult ram by pumping oil directly from the sump tank into the piston valve. This action evacuates aerated oil and reduces hydraulic shock when the catapult is fired. Purge system kits are scheduled for availability in September 1954.

H4 Catapults

In order to reduce the launching interval and to improve operating characteristics of H4-1 and H4B catapults installed aboard CVA-41, CVA-43, CVL-29, CVL-48, and CVL-49, high capacity Vickers pumps are replacing existing Oilgear type pumps. The following tabulation illustrates the improvement in launching interval.

	Launching Interval (Seconds)	
Catapult	Current	Improved
H4-1	44.1 (6 pumps)	30.5 (7 pumps)
H4B	45.0 (4 pumps)	36.3 (4 pumps)

LIKE A BABY *sucking on an old-fashioned nipple is this F2H as it uses the inflight refueling system of an AJ-1 tanker plane to replenish its jet fuel supply. Another Banshee flies alongside to await its turn. A funnel-shaped attachment at the end of the tanker's fuel line catches a probe on the jet's nose and the gas is fed from tanks in the AJ's belly. The probe-drogue system also is used by the British.*

LETTERS

SIRS:

On pg. 15 of the August issue of your fine magazine you mention that Lt. (jg) Marvin H. Warner, in seven months on the *Valley Forge*, flew 88 photo missions for a one-cruise record.

Two of the three photo pilots from VC-61 attached to Air Group 11 on the Philippine Sea in Korea exceeded the 88 missions during their cruise from 5 August 1950 to 13 March 1951. Lt. Ray Hosier flew 93 missions and Lt. Bill Moffett flew 98. In addition, one other pilot in CVG-11, flying straight fighter bomber strikes, flew 92.

On a slightly different subject, mention has been made several times of pilots who have made 100 carrier landings on one cruise. The rarity of this feat is no longer so rare.

VF-113 left San Diego for Korea 5 July 1950 with 21 pilots. Two were dropped from the squadron, one was killed in Korea, and two were wounded and grounded for a part of the cruise. The remaining 16 *all* had more than 100 landings on that cruise. The other *Corsair* squadron, VF-114, had a like number of pilots and about the same number of hundred landers. Several of the pilots in VA-115 also hit the century mark. So it's no longer a trick.

J. T. O'NEILL, CDR.
CAG-3
FPO, NEW YORK

SIRS:

I do not know whether this is any kind of record for duty on various carriers, but it might be interesting to publish and see if any challengers step forward.

The log book of Lt. George C. "Old Groany" Watkins, operations officer of VF-24, shows that he has flown from 16 different carriers in the past seven years.

By this I mean not just making one or two landings but actual flight operations, both in squadrons and during special aircraft suitability test work. The carriers are the *Ranger, Tarawa, Badoeng Strait, Bairoko, Shangri-La, Rendova, Franklin D. Roosevelt, Leyte, Midway, Wasp, Coral Sea, Boxer, Kearsarge, Princeton, Antietam*, and *Yorktown*.

In making these carrier landings, he flew TBM, F9F-5, F2H-2, AJ-1, AJ-2P, and F9F-6. He made the only elevator boost-off catapult shot ever tried from a carrier with the AJ-1, the initial carrier landings with the last two types and the first night landing with the F9F-6.

In his 3,700 hours of flight time, almost exclusively in carrier-type aircraft, and nearly 300 carrier landings, he has yet to have an aircraft accident.

LCDR.
USS YORKTOWN

LETTERS

SIRS:

I read with interest the story of the "Old R5D Now Most Modern" in the August issue of NANEWS. In the article it states that it had formerly been assigned to Secretary of the Navy Knox and is now returned to VR-1 for evaluation of new instrument arrangements.

In command of what I believe was Secretary Knox's first flight in an R5D was W. E. "Slim" Larned who relieved me as C.O. of VR-1 and is now Captain, USNR. That 18,000 mile flight was made in R5D BuNo. 39137. I am wondering if the plane mentioned in the article is the same one that Slim flew with Secretary Knox. If so, it is an interesting cycle from VR-1 back to VR-1 in approximately 10 years.

C. K. WILDMAN
CAPTAIN, USN.

¶ The R5D mentioned in NANews' story is BuNo. 39148. Old 137 is no longer on the Navy's list of aircraft.

SIRS:

The enclosed picture illustrates that not only does CompRon Four lead the way—but Navy Air in general. Miss America of 1954, Margaret Ay of Pennsylvania, is engaged to a line officer serving at Newport, R. I. Her escort here Lt. (jg) Wm. A. Dunn of VC-4 wears "Wings of Gold" as well.

I hope that this picture proves newsworthy to your publication.

LT. E. D. BLACKWELL, USNR
VC-4
NAS ATLANTIC CITY

* It certainly is newsworthy, Mr. Blackwell. —Ed.

SIRS:

Your inside August cover shows two photos of the *Boxer*, one in Yokosuka and the other in operations off Korea. The *Panther* coming aboard and engaging the barricade shows the letter "H" on the starboard wing.

To my knowledge, the letter "H" designates CAG-15 which had its first cruise on the Antietam and is presently aboard the *Princeton*. I don't believe CAG-15 was ever aboard the *Boxer*.

Perhaps on that particular day the *Boxer* had "ready deck" and the *Panther* coming aboard was an emergency from the *Antietam*. Both ships were operating with CTF-77 at the same time.

R. J. SCHAPPERT, JR., LT.
AVIATION SUPPLY OFFICE
PHILADELPHIA, PA.

SIRS:

I happened to be reading your article on "Carrier Deck Noises Are Dangerous." Being a radioman, I know a little about how bad noises can be.

I was on a destroyer in 1949 during *Portrex* operations and had an eardrum refracted because of a 5" gun. Now I am deaf in that ear.

I would like to make a suggestion on how to cut down on noises that cause deafness on the flight decks of our carriers.

At this station we have earphones that have a large rubber cover over them. I have found out long ago that when these headphones are put on the outside noises are reduced to almost a complete zero. There is one difficulty with the phones—the rubber covering is too shallow and it bends the earlobes back. It doesn't take long for one's ears to start aching.

If these rubber covers were made right into the cloth helmets that men wear on carrier decks and the strap under the chin tightened snugly then there would be practically no noise at all.

HARVEY H. JOHNSON, RMSN
NAS CORPUS CHRISTI

¶ BuAer Airborne Equipment division is working on an idea like this. It has been evaluating several kinds of flight deck helmets to cut down high intensity noise. It hopes to have a helmet for issue in the near future to deck crewmen.

● NAS WHIDBEY ISLAND—The last of the P4Y-2 *Privateers* in service with operational patrol squadrons on the west coast have been replaced by new P2V-6 *Neptunes* at this station. VF-17 has completed the changeover to the new *Neptunes*.

CONTENTS

● THE COVER

This month's cover, another in the series of "Faces of Naval Aviation", features the aerographer's mates who put the weather on the pilots' flight plans. Subject is Neil O'Connor, AGC, of NAS Anacostia.

● BACK COVER

Four Banshees from VF-171 photographed in a spectacular backlighted shot by 2nd Lt. D. C. Doster, USMC, when he was attached to a Marine photo detachment aboard the Coral Sea.

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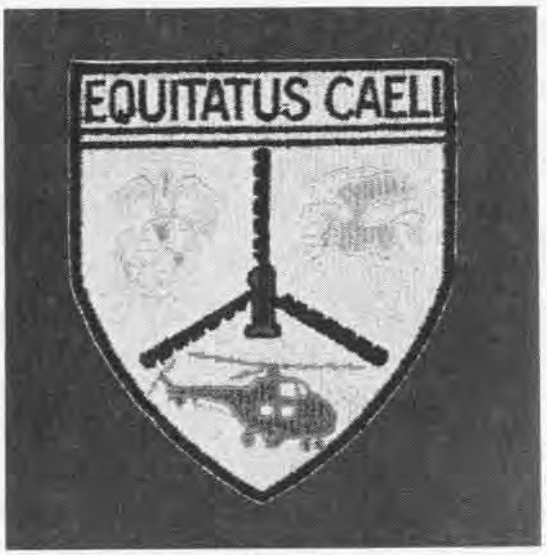
MARINE INSIGNIA

Four Marine squadrons feature this month's cover. All Weather Training Squadron 20 features the night-flying bat flying in front of a moon, with lightning flash. HMR-161, the Marines' first big helicopter outfit, first and only one in Korea, has a "chopper", Marine emblem and Pegasus under its motto, "Cavalry of the Sky." Tactical Air Control Squadron 2 has a headset-equipped Kiwi with sheriff's badge and pistol, on a UN emblem. Sylvester the Cat, with spyglasses and litter, feature famous VMO-6's helicopter-Grasshopper rescue missions which gained it fame in Korea.

VMFT(N)-20



HMR-161

MTACS-2

VMO-6

AIR . . . SEA . . . GROUND

We need a proper balance in our armed forces. This balance should be conditioned not upon enemy intentions but upon his capabilities. We must not allow any preconceived plan of operation to harden into some sort of intellectual Maginot Line.

—Secretary of the Navy Anderson