NAVAL AVIATION NEWS

RESTRICTED

Flight Line Snap
Marines' Airline
NavAer 00-75-R3

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RESTRICTED

SECURITY INFORMATION

VERTICAL AIR LIFT

Using a squadron of new HRS-1 helicopters, Marines in Korea made combat history by airlifting an entire battalion—1000 men—into battle in **Operation Bumblebee.** More details on feat are on pg. 9.

IS THIS YOUR STATION?

OVERBURDENED, arms aching, with his temper growing ragged around the edges, the pilot pictured above is the victim of a grave error in operations courtesy.

What's the error? As he trudges what may be a quarter of a mile to his plane for a cross-country flight, he is carrying his parachute, his map case and his luggage. Coupled with this, he was probably on his own in looking for the check-out sheet for the aircraft, and when he reaches the plane he will have to put the Val-Pak in the baggage compartment himself. On top of that, he will have to go through the contortions of strapping himself in the cockpit without help.

It's a good bet that while he goes through this experience, somebody is sitting in the line shack having a cigarette or simply flapping his lip.

Is the situation familiar?

This horrible example is described to point up the third most popular subject of pilots' ready rooms (flying and women share first honors), namely, what kind of treatment does the transient pilot and enlisted man receive on arrival at many Naval Air Stations?

Wide travel is the stock in trade of pilots and enlisted crewmen. It is for them that stations exist, yet the impression received at many installations is the opposite of the welcome mat.

True, many stations are limited by personnel shortages and equipment available. What costs nothing, however, is courteous, efficient service. Handling traffic with dispatch and speeding the transient on his way depends on training and attitude.

FROM the time a plane taxis to the flight line until it leave the line, there are many little items which make for top-notch service, reduce pestering requests for information and help, and above all create a happy impression of the station.

There's no beef about the way Commanders and Captains are treated on their travels. It is the bread and butter Ensign or J.G., or the crew chief or traveling enlisted man who needs attention. Pictures appearing here were made at NAS ANACOSTIA. They are for illustrative purposes only and do not reflect the type of service available at that NAS or NARTU.

WRONG *As pilot goes through contortions of strapping himself in cockpit flight line mech stands by bored stiff with proceedings*

RIGHT *It costs no more for flight line man to see to every need of the passenger and pilot; shoulder harness needs plenty of hands*

IN PLANNING a cross country flight a pilot naturally shops around among his friends for comments on what stations are best for replenishment services.

It is at this point that the frank opinions concerning NAS PODUNK or SNARK AFB are offered. Perhaps it runs this way, "Don't stop at the Air Station there, take the Air Force Base the other side of the city." Or the advice may be, "The Air Station is small, but they really take care of you. Too much business at the AFB 50 miles east."

Certain stations stand out with such consistency in poor service that one suspects that the condition may be deliberate to discourage transient traffic. A good station indicates efficient organization planning and a training program.

If service varied only slightly at our air installations there could be little to say or offer to correct the conditions. The chasm which separates the good from the bad is so great, however, that good and bad examples are presented here.

First consideration is size of an Air Station and the amount of traffic it handles. Generally speaking the biggest outfits are best organized, but there are exceptions even to this. The small station naturally has to combine many operations and line functions, but the results can be the same.

Our hypothetical case will involve Lt. (jg) J. T. "Jiggs" Arlin, pilot of a JRB, Ens. F. R. "Froggy" Sneedby, copilot, B. S. "Andy" Anderbut, AD1, Squadron mech along for flight time, and three passengers—a soldier, Marine and Airman all hitchhiking on leave with their baggage.

In traveling cross country Jiggs has planned to stop for fuel at NAS RONDON, 425 miles from home base, then proceed another 380 miles to NAS DAMBERG where they will spend the night before returning home.

From home to Rondon is an easy two hours and thirty minutes. The weather is good and the mood of the plane load of people is a happy one. Tower contact at Rondon is normal with traffic moderately heavy and Jiggs is number three in the pattern to land. On the ground a maze of crossing runways and taxiways greets him.

HE GLANCES frantically toward the hangars, wondering where visiting planes should go. The tower has forgotten him completely and is concentrating on other traffic. Jiggs takes a

BEST *impression a station can make is to have flight plan form completed as far as possible when pilot is ready for departure*

TRANSIENT *personnel at busy stations are logged in at passenger desk then called by priority in turn as plane space appears*

taxiway, only to discover that he has chosen two sides of a triangle to reach the flight line instead of the direct route.

Rolling along a line of hangars, he finally finds one with a variety of aircraft parked in front and assumes this is the visitor's area. Nobody is in sight. He stops and waits, then guns his engines impatiently to attract attention. Inside a shack he sees two seated figures obviously arguing it out as to who will take the chore. The loser opens the door, pauses to crush a cigaret in the butt kit and half-heartedly runs out to park the plane.

ENGINES STOPPED, Jiggs and Froggy disembark, followed by the passengers. The plane is chocked but the lineman has disappeared. Jiggs directs Froggy to line up some gas and heads for Operations after determining its most logical location.

Froggy goes to the line shack. The two men there have resumed a gabfest and with resignation accept the gas and oil chits. Meanwhile Jiggs has gone into the Operations Office. Questions about the location of the head and where a snack might be purchased are sketchily given by the man behind the desk.

Pilots and passengers finally find the greasy spoon snack bar. Jiggs is anxious to get underway again, so back they go to operations. He finds a blank flight plan form. In the meantime the old copy has disappeared so Jiggs has to ask each passenger his name, serial number and station again. Aerology efficiently fills in the weather. For some reason or other the weather offices are consistently courteous and efficient. That completed, the desk man says, "The Operations Duty Officer isn't here right now. I'll have to find him." Minutes elapse while the search goes on. The desk man returns with the flight plan signed with a drop of coffee near the signature.

As the group walks toward the plane, Jiggs spots the gas truck just pulling up to the aircraft. The lineman explains he had trouble finding the truck driver. By this time Jiggs and Froggy have given up. Andy the mech remarks that the only reaction he got in trying to get things done was, "Relax, sailor." Jiggs has given up on having the windshield cleaned. While the visitors get in the plane, the lineman stands by his fire bottle, making no attempt to remove the step and close the door. Underway finally, Jiggs goes through the runway routine again after begging the tower for instructions.

Exaggerated? Not by a long shot. Every pilot in his time has had this happen.

Two hours and 15 minutes later at NAS DAMBERG, Jiggs lands. The tower coaches him to a hangar bearing a big sign, "Visiting Planes." The lineman is standing by the door with the question, "Is there any baggage in the nose, sir?" There is, and a jeep backs up for the unloading job. Before he leaves the plane, a gas truck has come alongside for its job.

EVERY *time a motorist buys gas at a service station he has the windshield of his car wiped; why not the same for the transient pilot whose safety may depend on this item?*

In Operations, Jiggs surrenders the flight plan, fills out a questionnaire about staying overnight, service needed, departure time, destination and passenger space available. Then he and the passengers are handed a mimeographed sheet telling what accommodations are available for officers and enlisted, transportation to town and other pertinent information about the station and city.

Next morning Jiggs walks into Operations and states his name and plane number. He is handed a flight plan *already made out* with names, destination, etc. Jiggs has only to get the weather and fill in navigation dope. The passengers, a new set of them, are standing by and ready to go.

MAYBE *the lineman forgot the step for this* JRB *on purpose; this courtesy costs nothing*

At the plane, the windshield is clean and ashtrays emptied. The engines have been warmed up. Jiggs looks at the back of his flight plan copy. On it is a map of the field including all taxiways and runways. The lineman, obviously well trained, helps everybody in and closes the door.

WHERE'S *runway 20? No map appears on back of flight plan so pilot gets lost searching*

Jiggs is soon on his way—not to NAS RONDON, but to the Air Force Base nearby where he is pretty sure he will be refueled quickly and on his way home—a plane load of happy people.

GRAMPAW PETTIBONE

"In God We Trust"

If you're a skier, the approach of winter may be something to look forward to with pleasure. As regards flight operations, it usually produces a good many headaches. Since we can't do much about changing the weather, let's dust off one of last winter's accident reports and take a look at it.

This fellow violated just about every rule for safe winter flying, and somehow managed to survive.

On a January afternoon, he filed VFR from Denver to Salt Lake City in an SNJ, estimating three hours and 12 minutes enroute. Owing to headwinds and a moist airmass to the northwest, he was told by operations to check both gas and weather at Rock Springs, Wyoming, which is the last surfaced field with facilities enroute to Salt Lake City.

The pilot states that he had more than half of his gas left as he passed Rock Springs, and that he heard a weather report which gave Salt Lake City—4000 feet, overcast. This would require him to go on instruments in order to get over the Wasatch Mountains, and would necessitate an instrument landing at Salt Lake City. He also got word that Ogden weather had dropped to 1500 feet with snow. He had no instrument rating.

In spite of all this he entered the overcast and climbed to 12,000 feet and continued towards Salt Lake City. (IFR minimum is 13,000.) He soon encountered so much static that he was unable to hear the radio range, so he held the magnetic heading of Red Airway 49.

Without going into all the hairy details of the next hour or so, he called Salt Lake City Radio three hours and 15 minutes after take-off to report that he was lost and low on gas. A tower operator tried to tell him that they had no equipment with which to give him a steer.

By this time, both tanks showed empty, so he began a descent hoping that he would not run into a mountain and that he would have a little gas left when he broke out.

The first thing he saw was a snow-covered mountain directly ahead. He pulled back on the stick and started a sharp turn to the right. While in this turn he landed wheels and flaps up, airspeed 50 knots, power on, going up hill at an angle about 25 degrees from the horizontal attitude. The slope was covered with snow four feet deep and the SNJ slid forward, then turned slightly downhill, and came to a stop. It was damaged only slightly and the pilot was able to call Ogden Radio and report that he had just made a "forced landing." He was rescued by Utah Highway Patrol.

Grampaw Pettibone Says:

When last heard from, this pilot was heading for a Naval Aviator's Disposition Board. If he isn't conducting revival meetings now, he ought to be!

4.0 Record

Fighter Squadron 173 recently completed a full year of intensive operation without a single aircraft accident. During this period, the squadron was assigned to three CVB class carriers and flew a total of 7,545 hours. A good deal of night flying and instrument flying was done during this one year period, and 1,393 carrier landings were successfully executed.

Grampaw Pettibone Says:

Maybe this has been done before, but I'll venture a guess that this is an all time record for safe operations in fighter type aircraft. The squadron had two commanding officers during the period and both have been commended by Commander Air Force, Atlantic Fleet, for this splendid record.

Landing Accidents

A quick breakdown of all navy accidents for the past year by phase of operation reveals that 51% occurred during landing, 24% in flight, 11% in take-off, 10% in taxiing, and 4% in warm-ups and wave-offs.

If we are to make a big dent in the accident rate, a lot of attention must be given to reducing the number of landing accidents. Here's a list of suggestions that may help pilots and safety officers tackle this problem:

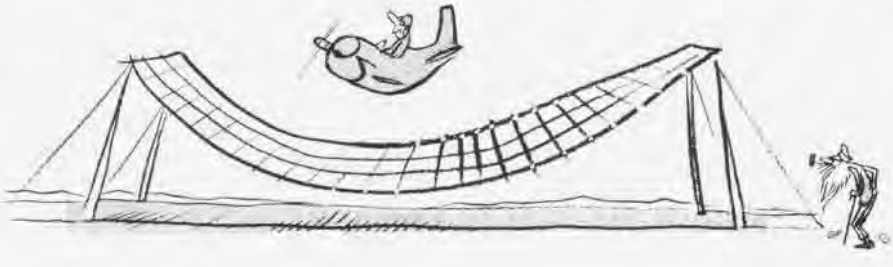
1. *Check-outs:* Be sure every new pilot gets the best possible check-out. Complete familiarity with any plane is impossible until you've flown it for a good

many hours, but a blindfold cockpit check is one way to find out whether a new pilot knows where to reach for the various controls, or whether he'll have to stick his head down in the cockpit and take out a search warrant for some particular item.

2. *Field traffic pattern:* Careful adherence to the pattern approved for the field and for the particular type of aircraft will simplify the landing, and reduce the possibility of mid-air collisions and near misses at busy fields.

Landing Check-off Lists: "You can't remember all you know." Rely on the check-off list rather than your memory. Safety Officers: Does every plane have a readable and complete landing check-off list? Can it be seen at night? Are the items in the proper order?

Approach Speed: Probably the most important single factor in making a good landing is having the proper speed in the final approach. During the war, a



somewhat elderly ex-airline pilot with 14,000 hours was employed by one of the largest plane manufacturers to give check-out rides to pilots who arrived at the factory to pick up new planes. He consistently made perfect landings in a plane that was rumored to have a "built-in bounce", although he admitted that he could no longer pass a depth perception test. His secret—he was always within a knot or two of the correct approach speed. Safety Officers: Do all the pilots in your squadron know the correct approach speeds for various configurations and weights?

Touch-down: Land in the first third of the runway. If you've overshot, don't be too proud to go around again.

Maintain Directional Control: Don't wait too long to correct for a swerve. A quick, light application of brake when the swerve is just starting, is a lot more effective than a heavy boot after it is well under way.

Retracting Flaps: In normal wind conditions, wait until you have completed your landing roll-out and turned off the duty runway before retracting flaps. If you make a habit of doing this while you are going down the runway at 50 or 60 knots, you may reach for the wrong lever. Wait until you can *see* what you are doing.

P.S. Now that the landing's over, don't relax until you have her in the chocks. That will help to keep the taxi accident rate down.

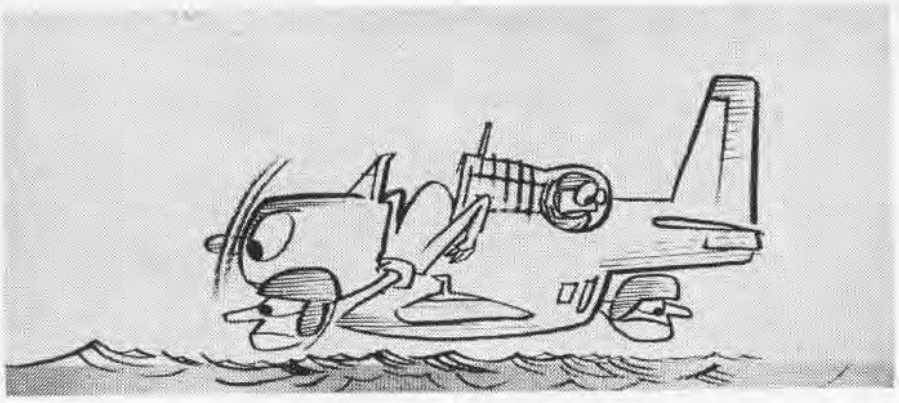
New Dilbert Posters

Here's a real safety scoop. A brand new set of seventy Dilbert Posters has just been published. One set will soon be on its way to each air activity. The new series is entitled MORE BONERS and was drawn by Robert Osborn, whose illustrations are familiar to readers of NANEWS. Before doing this series of posters, he visited a number of Naval Air Stations to get the word on Dilbert's latest boners.

Grampaw Pettibone Says:

You'll get many a chuckle out of these posters, and they'll help you avoid some of the pitfalls that beset Dilbert. Here's a suggestion on how to use the posters. When your set arrives, don't put them out all at one time in the ready room. The kit contains instructions for the local manufacture of a suitable display case. Rig up a good display, post the drawings one at a time, and change them on a scheduled basis.

If your outfit doesn't receive a set of posters sometime this month, the safety officer can order a set (limit one to a squadron) by using the regular order blank in the back of the Aeronautical Publications Index. The order number, just assigned, will be NAVAER 00-80ZZ-41.



Strike Two

During a night searchlight training flight, the pilot of a TBM-3S was orbiting a few miles away from the target submarine waiting for his section leader to complete a practice run.

It was a dark, hazy night and there was no visible horizon below about 1200 feet. The pilot glanced at his pressure altimeter during the turn and noted that it read approximately 500 feet. He then gave some instructions to a crewman over the ICS, using a lip mike which did not require him to divert much of his attention from flying the plane.

Seconds later the plane flew into the water. It did not break up too badly on impact, but sunk very rapidly. The pilot and two crewmen managed to get out and inflate a life raft. They were unable to locate the searchlight operator after the crash.

The section leader did not observe the crash, but when he completed the run and discovered that he had lost radio contact with his wingman, he commenced a search. Within a half hour he spotted flares fired by the survivors and started giving the submarine course instructions.

He decided to make a searchlight run on the men in the water to determine whether they were in a raft or floating in their life jackets. While making a flat turn preparatory to starting this run, he too flew into the water. The last time he looked at his altimeter it read 400 feet.

In this case, as in the first accident, the pilot and two crewmen got out without serious injury. The searchlight operator was not seen after the crash although the plane stayed afloat long enough for three complete inspections of the bilge compartment.

During the next half hour, the submarine picked up the six survivors from the two crashes. The body of one searchlight operator was found floating face down in the water the following day. He had evidently suffered severe injuries on initial impact, but his life vest was partially inflated.

As a result of these two accidents a number of changes are being engineered in the TBM-3S. The arrangement of certain switches and controls in the bilge compartment will be modified, so that the searchlight operator will be able to reach them without loosening his safety belt. A crash pad will be provided for the periscope which he uses.

A new type radio altimeter has been developed which is easier to read in the altitude range from 0 to 1000 feet and pilots are cautioned to test the operation of the radio altimeter over water or over terrain of known altitude immediately after take off.

Grampaw Pettibone Says:

We might as well face it. Flying around at low altitude on a dark night looking for a submarine is not one of the worlds safer ways of making a living. In fact, you'd probably be a lot safer washing the outside of the windows on the top floor of the Empire State Building. There the hazard is too much altitude rather than too little.

When an accident occurs in this type of flying, it usually happens without any warning. For this reason everyone in the crew must be protected as fully as possible and must take full advantage of the survival equipment available.

The allowance lists have recently been revised to provide protective helmets for all crew members in these planes. If you haven't received your helmet yet, take my advice and start screaming for it. You don't stand a Chinaman's chance of getting out of a sinking plane if you are unconscious from a sock on the old noggin!

AND THERE I WAS ....

Shoot the Chute

LIKE THE albatross around the neck of the Ancient Mariner, Parachute #506 plagued an innocent man for almost a year.

It all happened like this. One June 23, 1950, Sgt. Hubbard W. Scott of the U. S. Army borrowed a parachute at NAS OLATHE, in order to get a seat on an airplane bound from Olathe for Camp Stoneman, California. The understanding was that he would return the parachute to the naval air station by a returning Navy plane. The parachute was #506.

On September 20th, the commanding officer of NAS OLATHE, wrote a reminder to Sgt. Scott at Camp Stoneman asking for the return of the parachute. On October 18th, a rather warmer letter was written, via Sgt. Scott's commanding officer, requesting that the parachute be returned immediately.

On November 10th, the commanding officer at Camp Stoneman wrote a letter to Sgt. Scott's company commander in the 24th Infantry in Korea forwarding the correspondence for his action. On December 23, a hand-written letter, signed by the company commander of the 24th Infantry in Korea advised the commanding officer of the 24th Infantry that Sgt. Scott was evacuated to a hospital in Japan on August 12, 1950. On December 26, the commanding officer of the 24th Infantry forwarded all correspondence to the commander of the Eighth Army in Korea, who, on January 10 forwarded the request for Parachute #506 to the Japan Logistical Command.

On January 12, the rapidly expanding file traced Sgt. Scott to the Tokyo Army Hospital which, in turn, forwarded the request to Sgt. Scott's last known address, the Air Transport Group. On January 24, 1951, the Air Transport Group forwarded the tracer on Parachute #506 to the Mare Island Naval Hospital in California.

On January 29, the Mare Island Hospital forwarded the tracer to Letterman Army Hospital. On February 6, 1951, Letterman Army Hospital forwarded the request to Fort Lewis, Washington, where, the next day, it was forwarded to Madigan Army Hospital in Tacoma, Washington.

In Madigan Army Hospital, Sgt. Scott was a patient and, confronted with the imposing correspondence, promptly produced a receipt showing that he had properly turned Parachute #506 over to authorities at Camp Stoneman on his arrival in June of 1950.

(Parachute #506 by now has been forwarded to NAS OLATHE from a West Coast Naval Supply Depot—Maybe!)

Nothing to It!

ALL WEATHER SQUADRON, VS-23, operates aboard the USS *Bairoko* and proudly boasts that the carrier is the smallest and its planes the biggest. Operational readiness round the clock is its pride.

Recently two planes were rejoining the ship one evening at sea.

A worried CIC officer called the pilot's ready room with the query, "It's going to be darker than hell when those two aircraft rejoin us. Are the pilots qualified for night landing?"

"Hell," said the duty officer, "we haven't a pilot in this squadron that's not qualified to land aboard at any time."

Bad to Worse

A LOST F-51 pilot asked the NAS ST. LOUIS GCA unit for help one day when it was icing up badly and needed navigational aid. He got the steer.

In his haste to land on arrival at Scott AFB, the pilot cut out two transports on final, but forgot to lower his landing gear until prior to touchdown on the runway. As the wheels collapsed, the plane slid to a grinding halt.

The pilot jumped out of the plane. While clearing the cockpit, he accidentally popped his parachute, which billowed out, enveloping him and the tail of his plane.

The crash crew, anxious to free the pilot and put out the fire, dashed out on the field. Upon approaching the parachute, the truck was unable to stop and ran over the pilot breaking his leg.

Before you Navy pilots laugh at this Air Forcer's woes, consider the Navy flier who flipped his fighter over on his back in the dirt. Crash crews had to dig a hole under the plane so he could be extricated. In so doing they clipped him on the head with a shovel and had to call an ambulance.

Shoving him into the ambulance in haste, they closed the door on his leg, breaking his ankle. Some days it just doesn't pay to get up in the morning.

Wrong Pew

EIGHT PLANES from a carried-based squadron at NAS NORFOLK went out for a night stack exercise with GCA Unit #12.

Unknown to GCA, only seven of those planes scheduled came out.

An eighth plane did line up with the others for takeoff, however. The pilot was from the same squadron, but he had recently reported in and was supposed to be on a night area familiarization flight.

Routine procedure was followed as each aircraft took off. The pilot was given a VHF channel to shift to, told to climb out on a certain heading and hold at a fix at a given altitude until cleared for his approach. At the end of each approach he was re-stacked.

Not until all eight planes had made three approaches each did a plaintive cry come in from the bewildered eighth pilot:

"Hey, how do I get off this merry-go-round so I can go on out and fly my fam hop?"

LT. GEORGE CORNELIUS
NAS ANACOSTIA

Duenna

A WAVE striker for an aviation rate attending one of the schools at NATTC, Memphis, was asked by an instructor to tell what a thermostat is.

"A chaperone," she replied, "It turns off the heat."

LOS ANGELES—At North American Aviation, Inc., the old enemy, friction, has been licked by the development of bearings using a film of air 1,000th of an inch thick. These air bearings, used in guided missiles, start at the touch of a feather.

NAVY CREWS NICKNAME FLATTOPS

'BUSY BEE' NICKNAME WAS GIVEN THE BOXER BECAUSE OF HER MANY STRIKES IN NORTH KOREA

EVER SINCE the Navy put some planks on its old collier *Jupiter* and renamed her the aircraft carrier *Langley*, Navy men have been giving their ships nicknames. The *Langley*, appropriately enough, soon was dubbed the *Covered Wagon*.

Almost every flattop had a nickname, always unofficial, of course, sometimes salty, sometimes affectionate and occasionally derisive or unprintable. NAVAL AVIATION NEWS has noted a rebirth of the "nicknaming" fad since the Korean War started and did some research into names given famous and not-so-well-known aircraft carriers of the fleet.

Some of the famous old carriers of the pre-World War II days bore nicknames. The old *Lexington* was called the *Lex* or *Minute Man* by her crew. The *Enterprise* laid claim to the *Big E*, although some *Essex* men also called their CV-9 by the same nickname.

The history-marked *Saratoga*, on whose decks most early-days naval aviators at one time or another landed, was called usually the *Sara*. She also was the *Old Lady* to some. Because she had such a wide turning circle fleet maneuvers were complicated. The *Sara* sometimes was so hard to stay with in these actions her sister ships called her the *Sara Maru*, hinting darkly she was fighting for the Japanese Navy instead of our own.

Her war record was so marked with mishaps which laid her up frequently after Pearl Harbor, she won the unpopular nickname of *Reluctant Dragon* from some. She now lies on the bottom of Bikini lagoon.

Not all carrier nicknames were so grim. Crewmen of the *Bon Homme Richard*, now out fighting in Korea, lightly dubbed her the *Bonnie Dick* and the *Big Dick*. The CVE *Salerno Bay* and *Kadashan Bay* fell easily into the nicknames of *Sally Bee* and *Katy Bee*. *Happy Valley* was the handle tacked onto the *Valley Forge*.

"Big" was a popular word to attach to a carrier, especially the CV class ships. The *Franklin*, third ship in the Navy to be named in honor of Benjamin Franklin, took the nickname of *Big Ben*.

THE *Ticonderoga* was called the *Big T*. Because she spent much of her peacetime duty carrying around VIP's, the *Philippine Sea* was dubbed the *Show Boat*, although she usually is called the *Phil Sea* by her crew.

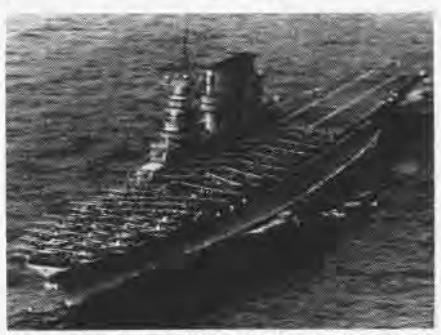
The *Terrible T* name was given the *Tarawa* and the new *Lexington* bore the name *Blue Ghost* because of her ghostlike wartime habit of appearing hither and yon in the Pacific. The *Randolph* was affectionately called the *Randy* or *Rudolph* and the CVB *Franklin D. Roosevelt* is either the FDR, the *Rosy Boat* or the *Foo Dee Roo*. Over in Korean waters, the *Badoeng Strait* was called the *Bing Ding*.

Another CVB, the *Midway*, has no well-known nickname, although she was called the *Medway* for a time because of her time spent on Mediterranean cruises and also because her name was misspelled that way atop a big cake at a French banquet. The *Princeton* is known as the *Sweet Pea*.

The CV *Wasp* naturally was nicknamed the *Bumble Bee* or *Stinger* while the famous *Hornet*, when she launched Jimmy Doolittle on his Tokyo raid, was called *Shangri La* by President Roosevelt. Another carrier, officially named the *Shangri La*, apparently has acquired no nickname as yet. The CVL *Cabot* was known as the *Iron Lady* and the *Boxer* earned the name *Busy Bee* for her activities off Korea. *Kearsarge* soon became the *Corsage*.

For her war record in the Pacific, the *Hancock* won the label of *Fighting Hannah* while the new *Yorktown* liked to call itself the *Fighting Lady* because some of the movie by that name was shot on her decks. Navy men of the earlier vintage liked to call the old *Yorktown* the *Yorky Maru* and the *Ranger* the *Ranga Maru*, for some unknown reason.

Men aboard the Essex-class carrier *Antietam* used a slogan-type nickname—



'OLD LADY' WITH SU'S, T4M'S ON HER DECKS

Go Get 'em Antietam. Besides the *Cabot*, other CVL's also took on pet names, like the *Cowpens* which went as the *Mighty Moo* and pointed a bull on her superstructure, and the *Monterey* as the *Mighty Monty*. Her antiaircraft batteries were pretty hot in the Task Force 58's Pacific war, so the *Bataan's* men dubbed her the *CVL-AA* and the *Battling Bat*. Another CVL, the *San Jacinto*, shortened her name to *San Jack*.

Proud of her war record off Korea, the *Leyte's* men gave her the nickname *Leading Leyte* when she steamed back to San Diego. The *Mindoro* called itself the *Mighty Minnie*.

Because of her peculiar way of waddling around the ocean swells, the little CVE *Bogue* won herself the nickname of *Bounding Bogue*, while another CVE, the *Prince William*, staggered around with *Pee Willie* hung on her neck.

Probably the worst maligned of all Navy carriers in the matter of nicknames was that unlucky CV, the *Intrepid*. Because of her habit of getting torpedoed or hit by bombs, her ship's crew or air groups gave her such assorted handles as *Increpid*, *Insipid*, *Dry I*, *Pond Lily* and *Decrepit*.

MARINE SALVAGE CREW STRIPS HELICOPTER

ATTEMPTING A *landing close to enemy lines, VMR-161's pinwheel came to grief; here three men of salvage crew survey wreckage*

SGT. ROSSON *removes tailrotor from damaged tail section of the helicopter; VMO-6 needed spare parts from the helicopter*

FOUR SALVAGERS *laboriously roll engine of wrecked helicopter up hill toward clearing*

WHEN AN HO3S helicopter crash-landing while trying to pick up Marine casualties in Korea, its pilot Maj. Kenneth C. Smedley was unhurt. The Marines needed the spare parts represented by the wrecked pinwheel to a four-man salvage crew of aviation mechanics was flown in by two HRS-1's to strip it.

The men were TSgt. R. V. Yeager, Sgt. Harold E. Pierce, SSgt. Francis M. Rosson Jr., and Cpl. Harry W. Davis. In addition to tools, they took sleeping bags, eating utensils, water and rations for three days, and weapons ranging from long-bladed knives to M-1 rifles. They had no communications gear.

They topped off their dismantling feat, 1000 yards from enemy lines, by capturing two North Korean soldiers, then as one man said, "Got the hell out!"

OFF GOES *the salvaged engine, dangling in net slung below VMR-161 transport pinwheel*

SMALL BUT *intricate parts salvaged from crashed helicopter are boxed by Cpl. Davis for removal later by squadron's pinwheels*

SHARP LOOKING *fighting men (?) are these two North Korean soldiers captured by salvage crew while dismantling the pinwheel*

Helicopter Invasion

Invasion by helicopter—practiced by the Marines in Quantico in HRP-1's—became historic reality in Korea when two separate "beachheads" were established by pinwheels.

Held up by stubborn Communist resistance in North Korea, the Marines moved in 260 men in their first helicopter airlift. So successful was the movement, the Marines than staged *Operation Bumblebee*, with its new HRS-1's making 160 flights to move in 1000 men—an entire battalion—in six hours and 15 minutes.

The air lift was made on October 11 and brought in Marine reinforcements to within mortar range of enemy lines. It was the largest helicopter airlift in history.

The Marines first big use of the 10-passenger Sikorsky helicopters came prior to the two "beachhead" operations. Marines in the front lines needed food and ammunition and their wounded had to be evacuated. LCol. George Herring, commanding officer of HMR-161, which had trained at MCAS EL TORO, led his planes to Hill 673 where they unloaded 16,000 pounds of supplies.

As they did it, wounded were brought over the top of the ridge from the front lines a few hundred yards away. Other helicopters brought food, water and ammo. The cargo was offloaded hurriedly and stretchers put aboard. Staying low below the ridge, they rushed the wounded to rear-area medical centers.

Other helicopters continued to rush in supplies. Heavy woven-rope cargo nets, filled with supplies, were attached to the undersides of the planes, and upon arrival, were lowered to the ground for waiting troops (*see photo, inside front cover*). They quickly and efficiently loaded the wounded for the return trip.

The helicopter unit's 16,000-pound airlift the first day would have taken 500 laborers 16 hours to accomplish.

When *Operation Bumblebee* was launched, Col. Herring again led it. In six hours, the helicopters brought the 1,000 men to the battle area, an operation that would have taken two days in trucks and on foot. The operation was 100% successful and was finished 25 minutes ahead of schedule.

Marine guns took no chances on enemy interference. They kept up a day-long barrage on enemy lines. Fighter planes blasted Communist positions on the next ridge. The first helicopter took off at 10 a.m., after early fog lifted. Within 18 minutes, the entire helicopter squadron was airborne with its cargoes of fighting Marines. Sixteen minutes from the first takeoff, Col. Herring was back over the rear airfield to pick up another load. The rotors kept turning while the troops climbed in with their equipment.

The helicopters returned, picked up new loads and took off again at one-minute intervals throughout the day, finishing the job at 4:14 p.m.

77 Saves in One Day

Helicopters from VMO-6 evacuated a record 77 casualties, all litter patients, from front-line positions in Korea during a single hectic day.

Flying Bell helicopters with a two-stretcher capacity, the Leatherneck pilots picked up wounded from hand-cleared landing platforms in the rugged mountains east of Hwachon reservoir and whisked them to rear-area aid stations.

MARINES put their new HRS-1 helicopters to work in Korea with a vengeance, airlifting troops to front line positions; here *Sitkoh Bay* ferries in one and an Air Force *Sabre* jet

KOREAN AIR WAR

MGEN. SCHILT, head of Marine air in Korea, visits *Death Rattlers* Bradley, Franklin, Simons, Whipple, Whitehead aboard the *Sicily*

CREWMEN of the *Essex* contributed 1,061 pints of blood in the recent drive, with corpsmen and nurses using the hangar deck

HOSPITAL Corps. Frank Dawson hands over 47,000-yen gift from *Bonnie Dick* in Japan

NAVY DOCTOR Reinertson presents new leg to 'Tiny', who lost his under a Marine truck

EMPTYING North Korean dirt from shoe is Lt. Walker after rescue by Toledo's helicopter

Busiest pilot was 1st Lt. Joseph C. Gardiner, Jr., who brought out 17 wounded Marines. Capt. Richard O. Hansen and Capt. Robert E. Luther brought 12 and 10 wounded respectively.

Since it started supporting the First Marine Division 14 months ago, VMO-6's Bell and Sikorsky helicopters have evacuated nearly 2,500 wounded men. In addition, many scores of downed allied airmen have been picked up from behind enemy lines.

A Good Turn

Japanese orphans at Synko-Gakuen orphanage in Yokosuka, Japan, were a little happier after the visit of the aircraft carrier *Bon Homme Richard* to that port recently.

The first class petty officer's mess decided to hold a benefit dance to raise some funds for the youngsters. Each man gave whatever he could afford and the dance raised 47,800 yen (about $133).

Frank M. Dawson, hospital corpsman first class and SSgt. Gustavius Lass were delegated to take the money to the orphanage, which contained refugee children from Okinawa and other Pacific islands, some 92 of them.

Dawson and Lass threw an afternoon ice cream party for the ill-clothed and shy youngsters. Most of their shyness disappeared, however, after a few mouthsful of ice cream. After the feed they turned over the *Bon Homme Richard's* donation to the minister in charge, who thanked the men for their thoughtfulness.

They Have Hearts Too

Fighting men, whose business in Korea has been killing enemy soldiers, also demonstrate daily that they have hearts too.

A Marine truck ran over an 8-year-old Korean boy at a First Marine Air Wing base. The lad, E. Song Un, had his right leg smashed so badly LCdr. Lawrence E. Banks, a Navy doctor, had to amputate it.

Some time later, sitting on the porch of a Pusan orphanage, he saw another Navy doctor, Capt. Bernhard R. Reinertson, step out of a jeep with a package. This, the lad thought, must be a "presento" (present) for him.

It was the best kind the boy could be given, a little artificial leg. "Tiny" helped the doctor adjust the leg and tried a few painful steps. It wasn't long, however, before he was running with the rest of the kids.

In another incident, a 7-year-old Korean girl, Lee Myang Ja, was accidentally killed by a Marine truck, the driver being held blameless because she had darted out in front of the vehicle.

Members of MAG-12's motor transport pool, however, were not content to leave it there. Capt. Kenneth M. Nix and MSgt. Nelson J. F. Cummings took up a collection among units and in a matter of minutes they had $50. They turned the money, converted into 300,000 South Korean wan, over to the child's parents with a sympathetic note about the girl's death.

Behind-Lines Rescues

With so much combat flying behind North Korean lines, occasional rescues of Navy pilots who are knocked down by enemy AA have to be made.

Lt. Thomas F. Allard was napalming some railroad cars when enemy fire hit his prop and cut the oil line. Climbing to 2,000 feet, he turned the plane over on its back and dropped out. Covered with oil which made his leather gloves slipper, it took three passes at the D-ring before he could pull the ripcord.

Small arms fire from the ground opened up as he floated down. He hit enemy soil and started running. Jumping into a trench, he ran into a Korean woman hiding there. She ran.

Heading for higher ground, he ran into another woman hiding in clumps of bushes. He motioned her to keep quiet and indicated he would not hurt her. Friendly planes overhead finally spotted

HAILSTONES? Nope, antiaircraft. Lt. (jg) Thomas E. Davis shows flying isn't exactly safe over North Korean airfields in his AD

LUCKY (?) 13TH combat mission for SSgt. Wallace Cavert saw him come home alive altho enemy AA shell exploded inside his F9F

him and a rescued helicopter dropped him a sling, ending his 40 minutes in enemy territory.

Another pilot, Lt. Robert T. Walker, was down behind the lines when his engine took a direct AA hit. Bailing out, Walker played hide and seek and an ambitious Communist soldier for an hour while his wingmates kept additional Red troops at bay until his rescue by a USS *Toledo* helicopter, piloted by Lt. William Dixon.

Shown in the accompanying picture emptying dirt out of his shoes aboard the *Toledo,* Walker remarked "I can always say I personally captured a part of North Korea."

Belligerent Beetle

Although not equipped for night flying, a Marine "grasshopper" plane sped down a bumpy runway near the Korean front lines one night to spot enemy targets for friendly artillery.

A Marine infantry unit was getting heavy artillery fire from the Communists. Ground observers could not find the enemy guns and thought an aerial observer might help.

This was believed to be the first time that aircraft of this type had taken to the air to spot artillery fire at night in Korea.

Pilot of the plane was 1st Lt. James B. Armstrong, with Maj. Douglas Morton as observer. For an hour and a half, the pair circled enemy artillery areas calling down friendly fire on enemy gun flashes.

They also saw many enemy trucks rolling along the roads among the enemy lines. Maj. Morton switched part of the artillery on the vehicles, destroying many.

While the tiny plane was aloft, ground crews prepared the landing strip for a night landing. There were no lights on the field, so many empty gallon cans were filled with sand and saturated with gasoline. As the plane came in to land, the gas was ignited by three crewmen racing down the strip.

Break Out the Pinwheel!

The *Badoeng Strait's* helicopter was securely stowed on the hangar deck at the precise moment a huge wave plucked Mario Luis Steere, commissaryman second class, from the port flight deck catwalk.

Because of the heavy weather en route to Japan, the helicopter pilot and crewmen, like *Clementine* the pinwheel, were in a non-standby status in various parts of the ship.

When the word "Man Overboard!" was passed, air department and HU detachment personnel went into action. Five minutes Lt. Y. J. Dyson and his crewman, Dewey Sanders, AD1, were airborne and heading for the float light and dye marker that approximated Steere's position in the water.

Eleven minutes from the word "Man Overboard," Lt. Dyson deposited the drenched and thankful Steere on the vessel's pitching deck.

Set 'em Up

MSgt. Avery C. Snow from Mark Twain's home town is the first enlisted pilot in the Marine Corps to fly 100 combat missions in a jet fighter.

A captain in VMTB-232 during World War II, when he flew 102 missions, Snow passed his 100-mission mark in Korea and had to buy drinks for his buddies.

The rule around the officers club is that an officer completing his 100th mission buys the drinks. When Snow passed the mark he wondered if the same penalty applied to an enlisted man—but he didn't wonder long. His enlisted mates in the *Panther* squadron saw to it that he was permitted to set 'em up.

Soothes Savage Breasts

When the roar of its planes is not filling the air around the *Bon Homme Richard,* a 19-man band, under the baton of chief musician Jerry Cimera is usually offering spirited music to the crew.

Whenever ships come alongside the carrier they are serenaded by the carrier's bandsmen (*see photo*). Familiar tunes ranging from Gerschwin and Chopin greet oilers or ammunition ships as they replenish the carrier for her continuous air operations against Communist forces in North Korea.

Sometimes destroyer men shout special requests to the bandsmen, which makes the job of refueling a little more pleasant. The band converts to a dance band whenever the need arises. Recently they provided music for the petty officers' dance at the EM club at Yokusuka, Japan. At Sunday services, prior to nightly movies or at noon chow, the bandsmen are busy boosting morale.

One Stub Wing

The *Panther* jet Ens. Neil Armstrong was using to strafe trucks near Wonsan spun out of control and nosed downward, badly hit by AA.

Armstrong struggled frantically with the controls. The plane leveled finally at about 20', struck a pole and tore off three feet of its right wing.

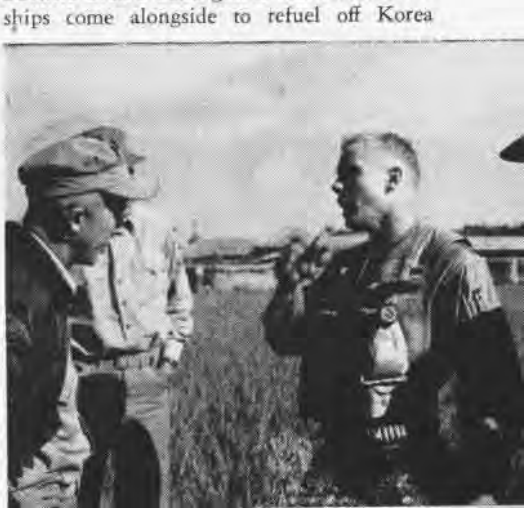
The pilot nursed the crippled fighter back to 14,000 feet and headed for friendly territory. Radio out, landing gear jammed and rockets hung, Armstrong bailed out.

Two days later, safely back aboard the *Essex* with VF-51 of Air Group Five, Armstrong commented: "Boy, 20 feet from Mother Earth at that speed is awful doggone low!"

FAST TEAMWORK paid off when Lt. Dyson, Sanders saved enlisted man washed off carrier

100-MISSION Snow buys the drinks for his mates for being first AP to reach the mark

BONNIE DICK'S band grinds out music while ships come alongside to refuel off Korea



ENS. NEIL A. Armstrong of VF-51 tells Col. Roberts how he bailed out of crippled jet

Mothballs Save Dollars

More Combat Ships to Be Reactivated

The ship mothball program is paying off not only in national security but in millions of dollars saved. Preservation and maintenance of 2036 ships has cost approximately 60 cents per thousand dollars of the original cost of the vessels.

More than 300 vessels have been reactivated since the outbreak of the Korean war and it is planned to raise the total to 381 by the end of the current fiscal year. Cost of activating these vessels will be approximately $120 million or just over 2% of replacement costs.

VF-884 Wives Do a Job Too

Spark Kansas City Blood Donor Drive

When blood-bank donors in Kansas City, Mo., fell far below requirements, the wives of Reserves in VF-884, then fighting over Korea from the *Boxer*, decided to do something about it. They took over the Red Cross donor drive for three days and added 203 pints of blood to the national store.

The project was headed by Mrs. Glenn Carmichael, widow of the squadron commander whose death in action had been reported a short time before.

MRS. CARMICHAEL SIGNS UP FIRST BLOOD DONOR

VF-884, composed largely of Kansas City men, was first squadron at NAS OLATHE to be called to active duty. After the unit sailed for Korea, squadron wives formed a close association to keep the men up to date on news from homeside. Each morning at nine, they all stop to pray for their husbands. They regularly exchange news received from the front in individual letters.

Privateers Flying at Malta

VP-24 Bases at Mediterranean Island

FAIRWINGS, LANT—An Atlantic Fleet Air Wings squadron of *Privateer* patrol bombers is now operating from the war-scarred island of Malta in the Mediterranean in support of the U.S. Sixth Fleet.

The squadron is VP-24, formerly based at NAS PATUXENT and led by Cdr. J. S. McKeon. Planes and pilots share facilities established by the British during World War II. The squadron flies PB4Y-2's fully equipped for ASW.

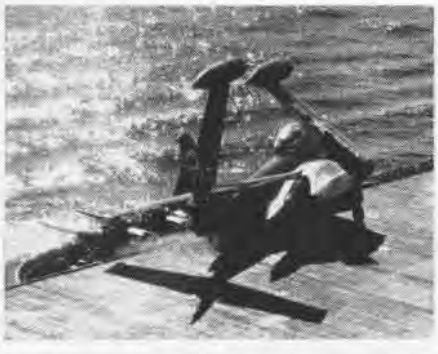
Tender Rejoins the Fleet

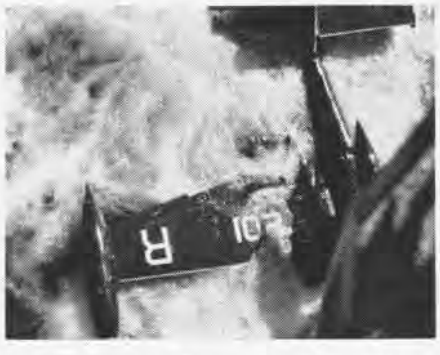
Valcour Repaired after Its Collision

FAIRWINGS, LANT—The USS *Valcour*, seaplane tender aboard which five lives were lost in a collision last May, has rejoined the active fleet after four months under repair at Norfolk Naval Shipyard.

The 1700-ton *Valcour* was rammed amidships by the 6,642-ton merchant collier SS *Thomas Tracy* in sight of land off Virginia Beach. Both ships caught on fire. All hands in the *Valcour* were rescued except for five men killed in the initial gasoline explosions or who were drowned. Commanded by Capt. Eugene Tatom, the tender is one of five servicing antisub patrol planes on Fleet Air Wings Atlantic.

ESSEX F2H PILOT ESCAPES A DUNKING





LT. (JG) ARCHIE *B. Treadwell was taxiing his F2H Banshee down the flight deck of the carrier Essex off the Korean coast for respotting when the brakes failed. The above five pictures show what happened. Before he knew it, Treadwell was at 0 feet flat on his back. Climbing free of the sinking jet, the pilot was rescued by the planeguard helicopter a few ship lengths back In the last two photographs, Lt. Treadwell is shown sitting in the cockpit of his floating airplane as it passed along the Essex's side*

MARINES' KOREAN AIRLINE

FRESHLY ARRIVED REPLACEMENT TROOPS BOARD VMR-152 TRANSPORT HEADING FOR KOREAN FRONT

YOUR attention, please! *Trans-Korean Airlines* announces the on-time departure of the north-bound trunk liner for the First Marine Division via Chunchon, Hongchon and Hoengsong. All aboard, please!

These are familiar words at the main terminal of *Trans-Korean Airlines,* nonprofit military organization of the First Marine Air Wing in southern Korea. From this terminal planes carrying thousands of pounds of supplies, mail and troops take off around the clock for points north—and the battle front—maintaining an air supply route between the front and the supply port of Pusan.

Boss man of this unique outfit is Capt. John Brooks, USMC, one time American Airlines employee and presently chief of the air freight and passenger division of the First Marine Air Wing.

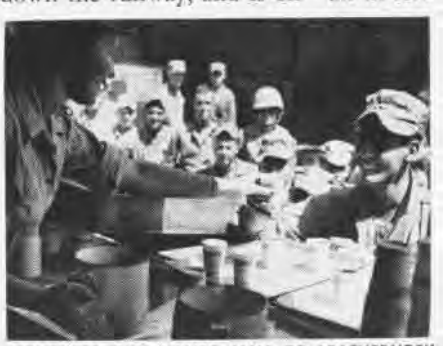
Captain Brooks pointed out that in addition to its regular supply flights, the airline devotes a large share of its flight capacity to transporting rotated personnel to and from the battle front, a policy which began early last spring. And to the Marines, rotation is a serious business.

Once a month a partial turnover of the division's personnel takes place. Fighting men leave the division for return to the United States, while others arrive to replace them. This is a busy period for *Trans-Korean Airlines.* But thanks to carefully organized and developed plans, the changes do not lessen the battle efficiency of the division.

It all starts with a dispatch from the forward area to the airline, telling how many men are expected to be moved together with their equipment. The airline then determines how many planes will be needed and also estimates the time required to complete the operation. Then flights are arranged so that the troops can be moved quickly and so that logistic support of the various units served by the air wing can be maintained.

Once the operation begins, the terminal is a beehive of activity. Big, four-motored transports glide down the runway and roll up to the chocks without even cutting their engines. Ground crews swarm over the plane, unload its cargo, load on new cargo and assist passengers with their equipment.

Seasoned combat veterans disembarking from the transport swap wisecracks with their replacements who, only a few hours before, had left their ship at Pusan and, who, in a few more hours will be at the front. When the last man is aboard, the cabin doors slam shut. The pilot guns his engines, taxis down the runway, and is off—all in less than 20 minutes from the time the plane's wheels first touched the runway.



RED CROSS GIRL HANDS JAVA TO LEATHERNECK

Pilots participating in the operation, unlike their counterparts of commercial airlines in America who are not permitted to fly more than eight hours a day, often stay aloft for 12 hours, frequently not even leaving the flight compartment. Some pilots fly as much as 150 hours during the month, compared to the 85-hour limit under commercial rules.

ASKED WHY Marines depend almost exclusively on air travel to transport its men and supplies, Maj. Henry Huff of Hattiesburg, Miss., member of VMR-152, said: "The object of these lifts is to take the replacements to the forward area and bring those boys who are due for replacement back to the same ship while that ship is still at Pusan. In this way, veterans return to the States on the same ships which brought their replacement to Korea."

Last month the airline reached peak efficiency when it transported about 6,000 men in four-and-a-half days.

Although *Trans-Korean Airlines* cannot boast of nattily dressed hostesses, plush covered seats or hot cooked meals, it can boast that in its comparatively brief existence it has conducted a volume of traffic which would be envied by many commercial lines. It also can boast a 100 per cent tally in satisfied customers. Complaints to date: none!

MARINES FIND GEAR AS THEY HEAD FOR HOME

But perhaps chief boast of the airline is its slogan: "We take anything, anywhere, anytime!!"

And they do; small fields a specialty.

• NAS ALAMEDA—After 13 months in the Korean combat area abroad the general command ship *El Dorado,* TACRon 3 arrived to train fleet squadrons in close air support.

• VIEQUES ISLAND, V. I.—"Lantflex 52", the first major Naval Fleet exercises since the outbreak of the Korean war, was held recently. Two opposing forces, supported by powerful surface, air and submarine units of the Atlantic Fleet fought a mock war from the Virginia Capes to Puerto Rican waters.

SPIRIT OF GIVING BRIGHTENS CHRISTMAS

ONE OF *the fifty Japanese orphans pays a visit to Santa with his "daddy", Charles R. Hoffman, during Bairoko Christmas party.*

GUNNER *Mike Jordan instructs his "Daughter for the Day" in the proper way to tackle an American dinner aboard the USS Bairoko.*

THE GENEROSITY of Navy men and women isn't confined to Christmas Day alone. Young victims of war-torn lands are clothed and fed and helped to happier lives every day, thanks to Navy personnel all over the world. But at Christmas time the spirit of giving overflows, bringing joy into the lives of less fortunate people. Typical of the parties which every naval air station and ship gives each year, NAVAL AVIATION NEWS presents the story of Christmas 1950 as it was observed at home and abroad.

At first it didn't seem much like Christmas Day to the ship's company of the aircraft carrier USS *Bairoko* in far-off Japan. The Christmas trees with their bright lights and shimmering tinsel hardly helped to make the men feel that it was a special day. Home and loved ones were 7,000 miles away. At noon a metallic voice sounded over the public address system. "All hands acting as hosts for the Japanese orphans, lay up to the Quarter Deck." Fifty men had volunteered to play "Daddy for a day" to 50 orphans who were to be guests at a Christmas party aboard the *Bairoko*.

The day began to take on real meaning as the shy kiddies came aboard. After a Christmas dinner that would be hard to top, old Saint Nick arrived with a bag full of gifts for the children. The little ones lined up with their "Daddies" to receive presents including clothing, shoes and toys. Over $670 was contributed for the party by the crew and every man agreed it was worth it when they saw forlorn expressions replaced by happy smiles on the little orphans' faces.

Thousands of miles away in the Mediterranean area, the carrier *USS Coral Sea* was playing host to 125 orphan children from Naples, Italy. The children were served a big turkey dinner aboard ship under the watchful eyes of the men. Later, Santa Claus arrived via the ship's helicopter with his gifts. The delightful reactions of the orphans were heartwarming for men who were missing their own children.

TWO OFFICERS *at NARTU Norfolk examine childrens' toys and ample food baskets that made a merry Christmas possible for eight enlisted men and their families.*

AT HOME in this country, the men of the Naval Air Reserve Training Command were not satisfied with merely distributing toys and gifts to the children of station personnel. They wanted to bring holiday joy to others whose Christmas might not be so merry.

NARTU MEMPHIS, NAS NEW YORK and NAS MINNEAPOLIS personnel extended the yule spirit to children of local area orphanages with turkey dinners and gifts. Officers and men of NARTU MEMPHIS purchased a new electric sewing machine for the Dunlap orphanage from contributions amounting to nearly $500. At NAS NEW YORK Santa Claus arrived with his gifts in a helicopter furnished for the occasion by the Coast Guard at Floyd Bennett Field.

At NAS WILLOW GROVE, the Marines of the Marine Air Detachment

collected over 500 old and new toys for their annual "Toys for Tots" program. The Leathernecks repaired the toys, where necessary, while on "off duty" status. The little tykes of three orphanages in the Philadelphia area were the lucky recipients.

Out in the San Diego area members of the St. Louis Reserve Attack Squadron, the first unit from that locality called to active duty, were unable to return home for the holidays. The ex-Weekend Warriors spread happiness to a group of California orphans at a big Christmas party.

WHILE CHRISTMAS is considered primarily a day for the kiddies, the holiday was brighter for 23 families because of the generosity of station personnel at NAS SQUANTUM. Contributions totalling $1524.44 were used to purchase food baskets for each family. Costing about $25 apiece, the baskets contained an 8-pound ham, canned goods, fresh eggs, flour, tea, coffee, fruit and candy.

Down at NARTU NORFOLK the Navy took care of its own needy families. A committee of eight enlisted men selected eight of their own men with large families and contributed to a merry Christmas with food baskets and toys for the children.

One hundred needy youngsters were entertained at dinner and movies by the men at NAS OLATHE. A personal touch was lent to the gifts of new, warm clothing by tagging each present with the child's name and signing it "from Santa Claus."

An all-out drive for contributions of food for 25 family baskets was conducted by personnel at NAS DENVER. Containers for canned goods were placed in strategic locations and donations were taken up to buy the perishable items. One needy youngster who was to enjoy a real Christmas dinner through the Navy's thoughtfulness decided that he might join the Navy when he got old enough.

Radio Station WAKR, Akron, conducted a "Shara-Christmas" Fund show to which one hundred men from NAS AKRON donated their services as collecting agents. The show continued on the air throughout the night and Navy personnel collected about $16,000 in voluntary contributions from homes and clubs in the community.

That was Christmas 1950 as the Navy shared it. This year, too, needy youngsters will spend a happier Christmas Day, thanks to the big hearts of Navy men and women.

• NAS JACKSONVILLE—CAG-4 is back at Cecil Field after a five-month Mediterranean cruise aboard the carrier USS *Oriskany*.

WHEN THE ROOSEVELT ARRIVED AT LISBON TWO CORAL SEA PLANES CARRIED WELCOMING MESSAGE

BIG CARRIERS 'BATTLE'

WHENEVER the battle carriers USS *Coral Sea* and USS *Franklin D. Roosevelt* get together in a foreign port, each tries to out-do the other with pranks.

It all started last January in Oran, Algeria, when the *Franklin D. Roosevelt* relieved the *Coral Sea* in the Mediterranean. The *Coral Sea* gave her sister ship a reception, complete with phoney "Arabian Princes and visiting Admirals".

This time, in Lisbon, Portugal, the two carriers met again and both sides were prepared. The *Coral Sea* sent out two *Skyraiders* with huge letters, "Welcome Stranger" printed on their sides. After spending only one month out of the last 12 in United States, the carrier naturally was glad to see her relief.

The *Coral Sea* also sent out a "showboat" and as soon as the two carriers were at anchor it sped over to the *Roosevelt*. It bore signs "Welcome Frooty-Roo" and "Welcome, Building 42, NNSY", which was a sly dig at the *Roosevelt's* recent activity in the Norfolk area.

In addition, the motor launch towed a small punt (*see photo*) rigged as a miniature carrier. In it was a fake "admiral" casually throwing planes off the miniature flight deck. The *Coral Sea* showboat then went into her act—each to represent a country that the *Roosevelt* will visit.

ADMIRAL LAUNCHES PLANES FROM TINY CARRIER

The *Roosevelt,* in turn, dispatched a convoy of boats to the *Coral Sea* with the signs "Granby Cleaners" and "Tours to Portsmouth and Virginia Beach". But the one that received the biggest reception was the sharp character in a zoot suit with a wolf's mask holding a sign "Your Wife is Fine".

It appears to be a strict unwritten rule that the pranks come first then the two crews get together for inter-ship visiting and athletic contests. During the present rivalry, the *Coral Sea* is out in front, taking the basketball game 82 to 62. On the last day, softball and baseball games were played.

As a fitting conclusion to the *Coral Sea's* long tour of duty in the Mediterranean, the commanding officer of the *Roosevelt* presented to the commanding officer of the *Coral Sea* a lease for 1000 feet of Pier Seven, Norfolk Naval Base, good will until the *Roosevelt's* return, upon payment of the names and addresses of all Mediterranean "belles" from 16 to 60. It was further stipulated that if the USS *Midway* CVB-41 is attached to Pier Seven, eviction without delay is allowable.

HS-1 Formally Commissioned

Squadron Has Hand-Picked Crews

NAS BOCA CHICA—The first Navy helicopter scouting squadron was formally commissioned recently at this station. Squadron personnel are hand-picked men from all over the Navy.

Captain E. W. Parish, Jr., representing COMAIRLANT, read the formal orders establishing the new squadron and gave an address stating that "this is an event which had been long in coming and awaited with much expectation." Cdr. Joseph T. Watson read his orders appointing him CO of HS-1 and accepted command, followed by an inspection.

PILOTS SAVE OWN LIVES

CAG-5, ESSEX — Survival training paid off for two combat pilots from this air group operating off Korea. Because they knew what to do in the emergency, both men are alive today.

Lt. B. E. O'Brien of VC-11 ran into trouble immediately upon being catapulted in his AD-4W late on 14 September. The catapult bridle snagged in his tail hook and wrapped around the horizontal stabilizer. The *Essex* was unable to land him back aboard, so with two crewmen aboard, Lt. O'Brien had to figure out his own salvation—and theirs.

Owing to violent erratic movement of the stick, he was unable to unfasten his parachute chest strap. Both crewmen were set for ditching, so O'Brien put the plane down near the DDE *Cony*. The plane floated for so many minutes all three were able to get clear. A crewman assisted the pilot, who was weak from fighting the buffeting.

On leaving the aircraft, they were confident they would be picked up immediately, so did not take the pararafts. Only Mae Wests were used—a fact which almost cost a life. In the darkness, the DDE had difficulty finding one crewman because of swells.

O'Brien reported he has made a practice of snapping his parachute chest straps, with leg straps unfastened. Since he had some difficulty getting out of the chute harness, he recommended the chute be put on when first entering the aircraft, then taken completely off, with chute harness open and ready to slip into when at an appropriate altitude.

The second survival incident reported was that of Ens. Neil A. Armstrong of VF-51. While strafing enemy troops near Wonsan, he tried to pull out at 1,000 feet. The elevator controls were shot out, so he used trim tabs to effect recovery. During the low pullout, the *Panther* hit wires or cables and a telephone pole. The starboard tip tank and about two feet of wing were knocked off, the port tip tank and the droop nose dented. Arming wires were lost from the HVAR rockets.

He jettisoned two ATAR's and 20 mm ammunition, dumped fuel from the port tip tank, but failed to fire the HVAR's. The plane started to stall in a clean attitude at 170 knots. Gear and flaps could not be lowered.

He was instructed to fly to an emergency field 170 miles south. When he found he had lost all aileron control and could fly only with full left rudder and elevator trim tabs, he pulled the pre-ejection lever and threw maps and knee pad from the cockpit.

At 13,000 feet and 170 knots, he pulled the ejection seat face curtain. The ejection was satisfactory. As he kicked away from the seat, the oxygen quick disconnect stuck, but released manually.

About 4,000 feet was used to stop tumbling and attain a horizontal, face-down, spread-eagle attitude, after which he pulled the ripcord. From this position, the jolt was not severe and all survival and flight gear was retained.

He experienced extreme difficulty with oscillation in the chute but was able to dampen it, making an easy landing in a rice paddy near the end of the runway at K-3 field. The plane crashed three miles north and exploded.

New Twist in Air Transport

Marines Load Plane within A Plane

MCAS CHERRY POINT—A helicopter recently made the trip from this station to Puerto Rico in a few hours. The versatility of the Leathernecks made it possible by opening the yawning "clamshell" doors of a Fairchild *Packet* transport plane and inserting the helicopter.

KING-SIZE PROPELLER TAKES RIDE IN PACKET

After the 'copter was secured, a full set of spare parts and an operating crew were taken aboard and the Packet took off with its unusual cargo. Besides transporting the helicopter, the *Packet* squadron has handled many unusual loads which formerly were impossible to move by air. The all around adaptability of the big plane is making it a valuable weapon to the Marine Corps which stresses extreme mobility in its military tactics.

'Dead Eye Dicks' Form Order

33 Gunners Qualify for Unique Society

NAS BARBER'S POINT—A new and distinctive society, *The Order of the Fallen Drone*, has been formed here. To be eligible for membership, a man must qualify as a *Dead Eye Dick* by deliberately shooting down a pilotless aircraft while a student at the FAIR-WING TWO gunnery range. Members are issued cards giving the date of qualification and, in the background, a flaming drone is shown in a dive.

The order was formed by Lt. O. S. Braddock, FAW-2, gunnery officer, as an incentive to students undergoing aerial gunnery training. A regular ceremony is observed when a man receives his membership card. Although 739 students have gone through the course, only 33 memberships were earned.

BOY, THESE THINGS CAN BE LOTS OF FUN

SO YOU THINK *you know your Corsairs? Take a good look at this Chance Vought plane and try to guess what model Corsair it is. The smooth nose looks like the old F4U-1, but it actually has a chin scoop. It's the Navy's new AU-1 low-level attack-type plane suitable for close air support. It originally was to be the F4U-6. Its P&W engine is the R-2800-83WA, with single-stage, since superchargers are not needed at low altitude.*

CARRIER HELICOPTER PICTURES ATHENS

JACOBUS VAN DER HOOP, vacationing in Athens, took this picture of Navy helicopter

THE ACROPOLIS in Athens perches on a fortress-like hill; Navy men on liberty swarm over the partly restored ruins, ready with their cameras and voluble local guides

WHEN JACOBUS van der Hoop of Rotterdam, Holland, visited Athens, Greece, he was fascinated by the contrast of a Navy helicopter from the aircraft carrier *Franklin D. Roosevelt* flying over the ancient ruins. He took a picture of the craft. At the same time Chief Photographer O. K. Calhoun was snapping the scenes below. Negatives of these superb shots are missing. Can anybody tell NANEWS where they are? Names will be protected.

THE MOST striking ruin atop the Acropolis hill is the famed Parthenon; groups of sailors stand near ancient well excavations

MANY OF the ruins of Athens have been restored; here is what remains of the temple of Jupiter as seen from Navy helicopter

AD-5 MODEL IS VERSATILE

LATEST SKYRAIDER MODEL CAN BE TRANSPORT, AMBULANCE, AEW, RCM OR OTHER TYPE AIRCRAFT

A NEW MODEL of the *Skyraider*—which already has gone through 22 different versions—has been announced by the Navy and Douglas El Segundo—the AD-5.

The first "multiplex" airplane ever built, the AD-5 was designed for easy conversion aboard carriers into more than a dozen combat types. This "12-in-1" utility is accomplished through packaged conversion kits supplied as equipment with each airplane.

Basic structure of each airplane is a universal "chassis" designed for quick and easy interchangeability. The attack bomber can be changed swiftly into a passenger transport, or by conversion kit becomes an aerial ambulance with litters. For emergency evacuation or combat assault, it can carry many troops and their equipment.

The AD-5 is capable of being changed into day and night attack types of ASW hunter-killer combinations. It may be converted into an airborne early warning or radar countermeasures plane, a tow target or photographic plane, a transport, ambulance, or high density evacuation plane.

Earlier models in the famed *Skyraider* lines—the AD-1, -2, -3, -4—required actual structural changes to make their usages as -Q, -N, -W, and -S versions possible. The new AD-5 can be switched from one model to another in simple "erector set" fashion.

A unified cockpit in the new model permits direct communication between crew members and complete interchangeability of stations. Free access to installations is provided so adjustments may be made in flight. Earlier models of the *Skyraider* have distinguished themselves in all phases of the war.

BECAUSE HE *was the 2000th man to donate blood at Key West Naval Base, Joseph Mazzone, AD3, was awarded a cake by Capt. Edward H. Eldridge of NAS Boca Chica. Asked if donating blood hurt, he replied, "It didn't scare me half as much as meeting the old man". Key West collected 3,000 pints, sending it daily to Miami via PBY*

FLAW Completes First Year

Carries Out Various Missions for Navy

FLOGWINGLANT/CONTL is beginning its second year of providing air transportation to the Navy. This unit was established as a separate command after the outbreak of the Korean conflict.

The transport squadrons of the Wing flew over seventy million passenger miles and more than seven million cargo-ton and mail-ton miles in their first year. Over three hundred trained plane commanders and co-pilots, including forty refresher pilots attended the Plane Commander Co-Pilot School at ATTU CORPUS CHRISTI. The ferry squadrons of the Wing delivered almost five thousand aircraft, flying for 40,000 hours over a distance of eight million miles. No fatal accidents occurred during transport operations and only one fatality while engaged in the ferrying of aircraft.

LT. RJTH *R. Mason of Los Angeles, the first woman ever to be admitted to a Navy Air Intelligence School, was recently graduated at Alameda. In civilian life, Miss Mason was an interior decorator. She was the first Wave to report aboard Fleet Air Alameda in WW II when she was on the staff of VAdm. T. L. Sprague who is again her commanding officer at Air Forces Pacific*

LOOKING LIKE *an arrowhead in reverse is the Navy's new 59,900-ton carrier, the USS Forrestal (CVB-59), an artist's conception of which is shown above. Now being built at Newport News, Va., the Forrestal will have a retractable bridge, four catapults, two forward and two amidships angling outboard, four elevators. Overall length will be 1040 feet, a beam of 125 feet at waterline, extreme flight deck width at one point of 252 feet and will carry 3500 men. Air conditioned quarters, escalators to the flight deck and a television system to aid in landing aircraft will be on this 30-knots-plus vessel.*

FAST JETS SPEED UP FOREIGN AIR FORCES

RECOGNITION

ONE OF THE MOST GRACEFUL JET FIGHTERS FLYING TODAY IS THIS SWEPTWING HAWKER P.1067

PICTURED on the following two pages are six recently-developed foreign jet fighters that will add punch to the air defenses of the Western powers. These planes represent the cream of rapidly expanding research programs in the countries represented. All are now slated for quantity production.

Supermarine Swift. The ancestry of this plane can be traced visually from the *Attacker*, through its swept-wing counterparts Supermarine P.510 and P.535, the latter with tricycle landing gear, to the RAF production model illustrated here. The first British swept-wing type ordered for the RAF, the *Swift* will be a worthy successor to Supermarine's World War II triumph, the *Spitfire*.

The *Swift* is the first of its counterparts to carry the Rolls Royce axial-flow *Avon* rated at better than 6000 lbs. thrust. Its thick fuselage, tapered to a slender nose forward but only slightly tapered aft, will readily distinguish the *Swift* from other operational swept-wing types.

Hawker P. 1067. Like the *Swift*, the P.1067 culminates a long line of experimental and operational types. Hawker's first jet venture, the P.1040, was first flown in September of 1947. The two models VP413 and 422 developed from the P.1040 were built as Navy fighters and were slightly modified for production as the *Sea Hawk*. Greater wing and tail span gave the *Sea Hawk* better carrier performance.

The Hawker P.1052 was next developed as a swept-wing version of the P.1040 with the same fuselage and the same *Nene* power plant. Streamlining was completed in the P.1081 by sweeping back the tail surfaces as well. A first cousin, the P.1072, was developed as a night fighter with its *Nene* turbojet augmented by an Armstrong-Siddeley *Snarler* liquid rocket motor.

Slight changes in the fuselage of the P.1080 and the substitution of an Avon axial-flow jet engine completed the development of the Hawker P.1067 illustrated on this page. This plane has been ordered in quantity for the RAF and should become one of the world's outstanding performers. Its recent appearance at the Farnborough Air Show created a sensation. Casual flypasts at this show indicated speed well in excess of 600 knots.

It is expected that the P.1067 will carry heavy armament, possibly four 30mm cannon as well as a substantial rocket load. Its short take off run and high rate of climb make it a formidable interceptor. The dorsal spine extending from cockpit to fin provides a striking recognition feature.

Sea Venom 20. A carrier-based version of the *Venom* NF 20, this plane brings its all-weather capabilities on board the carriers not only of Great Britain but also those of the Australian and French navies. Its cockpit is larger than earlier *Venoms* to accommodate search and interception radar.

Together with earlier *Venoms* and parent *Vampires*, these planes have been adopted as first-line fighters by air forces and navies of many countries. Its *Ghost* engine, considerably more powerful than the Vampire's *Goblin*, gives it an exceptional rate of climb and generally capable performance. Jettisonable wing tip tanks, straight trailing edge, and extended horizontal stabilizer, distinguish this plane from the *Vampire*.

Avro-Canada CF 100 Canuck. The Canadian aircraft industry has put forward an exceptional airplane in this twin-jet all-weather fighter. Its two *Orenda* turbojets housed in jet pods close to the cockpit produce better than 6000 lbs. of thrust each. Its long tip tanks and capacious internal fuel tanks are said to give the *Canuck* unusual range. The *Canuck* was designed to carry heavy armament including four 30mm cannons. Its performance and equipment are such that the *Canuck* may prove an outstanding Arctic interceptor.

SAAB J-29. This Swedish fighter, nicknamed the "flying barrel", belongs in the same class as its swept-wing counterparts in the U. S., British and Russian air forces. Powered by a Swedish-built de Havilland *Ghost* engine, the J-29 achieves a speed in excess of 600 knots. Unique features are its high variable-incidence tailplane and its shoulder-high swept wings placed well forward on the fuselage. Its prototype, known as the SAAB 1001, first flew in September of 1948. Its manufacturer, Svenska Aeroplan Aktiebolaget, is said to have available extensive underground facilities for the production of this plane.

De Havilland 110. A swept-wing departure from the *Vampire-Venom* family, this all-weather fighter powered by two *Avon* turbojets made its first flight on September 26th, a few days too late to provide another sensation at the Farnsworth display. Its sharply swept wings and vertical tail surfaces give it a deadlier appearance than its single-engine predecessors.

Other features are the high horizontal tail plane, an off-center cockpit to provide room within the fuselage for the radarman next to the pilot, and a heavy double exhaust pipe extending well aft of the wing's trailing edge.

• NAS NORFOLK—GCA Unit #12 completed its 20,000th approach on 7 August, with Lt. (jg) Paul H. Mozley of FASRon-102 bringing in an R4D. Since it came here January 1947, the unit has completed 1,751 actual instrument approaches.

• VR-3, MOFFETT FIELD—Kids like circuses, so 40 officers, enlisted men and women collected enough money to treat 45 underprivileged children of Santa Clara county to the Shrine-Polack circus.

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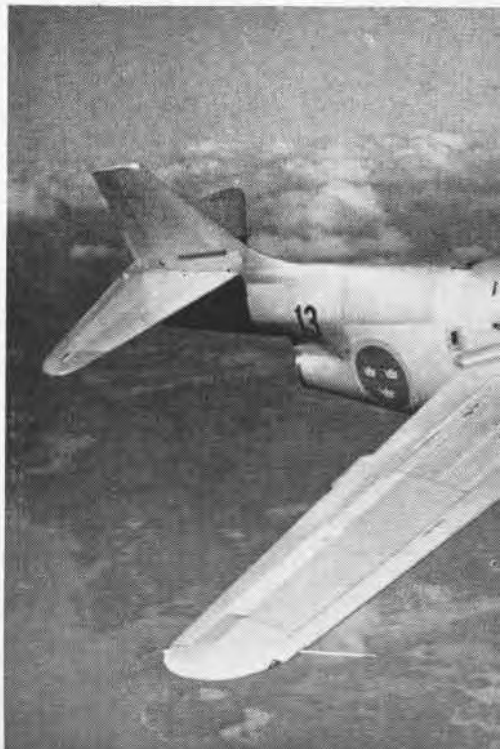
● BRITISH HAWKER P. 1067

● BRITISH DE HAVILLAND 110

● SWEDISH SAAB-29



● CANADIAN AVRO CF-100

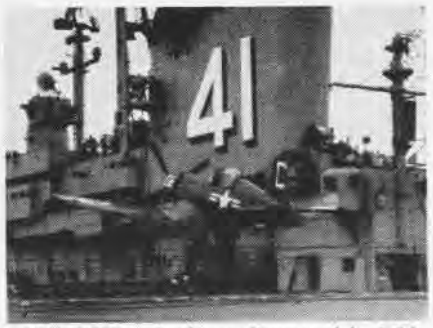
GN JET FIGHTERS

t fighters have not distinguished them-
e type of war being fought in Korea, the
on jets. On this page are some of the
et fighters, under development or in pro-
world. Fastest probably is the new Hawker
close to 700 mph and now in production
vo other swept-wing British fighters, the
0 night fighter and Supermarine Swift, are
Swedish Saab-29 claims 670 mph speed.

● BRITISH SEA VENOM

● BRITISH SUPERMARINE SWIFT

FIRST MIG-15 *captured by the United States was this broken-up Soviet-type jet found on the tide flats near Hamchon, North Korea. It lay in 17' of water during salvage operations and was photographed at low tide. Planes from a British carrier spotted the wreck on 13 July and the Royal British Navy, ROK Navy, U. S. Navy, U. S. Army and U. S. Air Force all collaborated to salvage it. Although broken up, the Mig was shipped back to Wright-Patterson AFB for analysis. During salvage, UN aircraft were fired on by ground units ashore. What appears to be wing insignia are coils of rope used by salvage workmen. A piece of the engine lies behind the cockpit and the tail assembly was 350 yards away.*



A NEW WAY *to land was discovered by LCdr. W. J. Lahondey of CVG-6 during flight operations on the USS Midway. His F4U-4 bounced over arresting gear cables and three barriers to snag the top cable of No. 3 barrier with its tail hook. The plane settled without a scatch, its right wing tip about four inches from the island superstructure.*

Soccer Field Hosts Plane

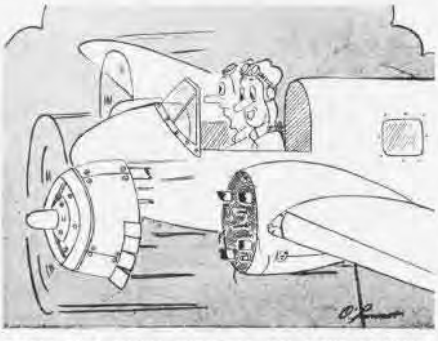
Annapolis Players Help in Emergency

As soccer players concentrated on each others' shins on the flood lighted field at the U. S. Naval Academy at Annapolis a little private plane circled, obviously in distress in the driving rainstorm.

Soccer coach Glenn Warner deployed his players to wave white shirts in the air to indicate the field was available for landing purposes.

In the plane was Robert Y. Ritchie, a motion picture producer who, with Mrs. Ritchie, was on his way to Houston, Texas. He landed with room to spare. Only the odor of gasoline was left in his tanks.

At noon the next day Ritchie took off with a partial load of gas and without his wife to assure an easy takeoff from the short field. A short time later, with full gas load and Mrs. Ritchie aboard he took off from a private airport outside the town, on his way to Houston again.



OOPS! TOO MUCH THROTTLE ON PORT ENGINE!

Chief Educated at Fast Pace

Completes 15 Courses in 27 Months

NAS SAN DIEGO—Playing poker during off-duty hours may prove profitable for some men, but Gershon Smith, ADC, believes in filling the blanks in his education in his spare time. In the past 27 months, he has completed 15 correspondence courses.

Not satisfied with this record, the Chief, who is assigned to the Flag Administrative Unit of COMAIRPAC, has also successfully completed three General Education Development tests—high school level, college level, and the 2CX course which entitles personnel to two years of college credit for in-service purposes. He plans to keep right on until a sheepskin is mailed back.

NAVAL AVIATION NEWS *ran an article on carrier crews spelling out their ship's names on the deck in last month's issue. The payoff picture, from the Bairoko, came too late to be included. It shows the men spelling out "Bairoko", only in Japanese.*

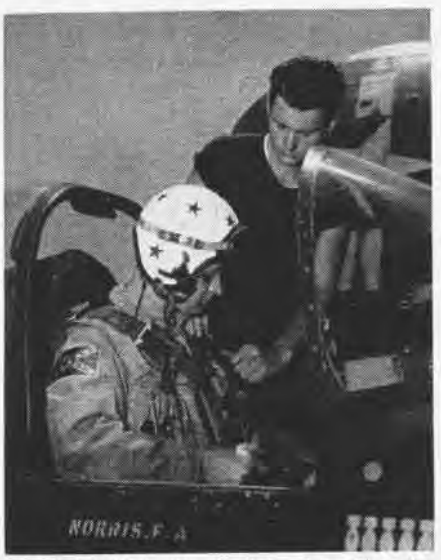
FIREFIGHTING *training at NAS Atsugi looks like the real thing. Every morning NAS sailors turn out to fight a practice fire by dumping about 200 gallons of contaminated gasoline on a junked plane fuselage. Water is used for practice because the cost of foram is prohibitive for training. Personnel of the crash and rescue crews are on duty 24 hours and off duty 24 hours. There are two 15-men crews*

LONG BEFORE sunrise, Airman Norris pulls on his clothes below decks on the carrier *Boxer*

NORRIS makes a minor adjustment in the *Corsair's* motor before the plane leaves deck

HERE HE polishes *Corsair's* belly tank to keep plane clean and to ward off any rust

PLANE CAPTAIN ON BOXER OFF KOREA



PLANE CAPTAIN Norris helps his pilot, Lt. (jg) John W. White, adjust shoulder straps

ONE OF the finest enlisted man-officer relationships aboard a Navy carrier usually exists between plane captains and pilots. On these Navy mechanics, much of the pilot's safety depends; they are like a boxer and his second.

On this page, we show a typical day in the life of Airman Felix A. Norris, plane captain with a former NAS MEMPHIS Reserve fighter squadron, then flying *Corsairs* off the *Boxer* off Korea. Norris arises in the wee hours of the morning and is on the job until late keeping his pet plane in flying shape.

His squadron was ordered to active duty shortly after the Korean war started and the past summer was active in daily dawn-to-dusk strikes and close support missions over enemy territory in North Korea. The plane captain takes pride in his plane and pilot alike.

AIRPLANE engines have a habit of eating up oil; here Norris changes plane oil supply

MANNING THE brakes on his fighter-bomber, Norris keeps a wary eye out as deck crewmen respot the plane on deck for a strike

IN YOKOSUKA harbor, Norris dons his whites for a little shore liberty after the *Boxer* finishes a long tour of war zone duty

RESERVE TOURS MAKE GOOD SEA YARNS

THE SECOND all-Reserve Carrier Air Group to hit the Korean front started their Korean tour off with a field day. Carrier Air Group 15, commanded by Cdr. R. F. Farrington, arrived in Korean waters on 15 October aboard the carrier USS *Antietam*. That day her pilots flew their initial strikes against the enemy.

Within a few days, the *Antietam's* pilots were giving North Korean state railroad operators their biggest headache in weeks. Freight trains, moving war materials in their cars, caught the full impact from the hard-striking Navy planes of the *Essex* and the *Antietam*. The planes dived, strafed, rocketed and dropped napalm bombs on the trains and their vital loads of materials for front-line troops. From Wonsan for almost 100 miles north, hard-punching Navy planes and fast jets struck enemy supply routes.

Total score for the day was one locomotive destroyed, another toppled from the tracks and five others damaged, one very badly. Fifteen loaded rail cars were wiped out and another 24 riddled with gunfire, which left several others in flames. Two trucks were sent reeling off the road and two others were stopped dead by damage.

The squadrons of CVG-15 and their CO's are: VF-831 from NAS NEW YORK, LCdr. Anthony J. Denman; VF-837 from NAS NEW YORK, LCdr. Roland H. Kenton; VF-713 from NAS DENVER, LCdr. Robert L. Doering; VF-653 from NAS AKRON, LCdr. Cook Cleland; and VA-728 from NAS GLENVIEW, LCdr. Soule T. Bitting.

Five men in VF-653 could spin many a tale of old times in off-duty hours. They were serving under a skipper who had once been their civilian boss. Prior to being recalled to active duty in February, all five worked for the Cook Cleland Airport of Willoughby, Ohio. Some of the various duties the men performed at the airport are still carried on in the Navy.

Leonard De Franco, ADAN, was a mechanic's helper at the airport. He is a mechanic's striker in the Navy.

Ensign Samuel McKee was the first employee of the Cook Cleland Airport. He worked at the airport on weekends and in the evenings after school as a prop boy. After LCdr. Cleland taught him to fly, he qualified as an aviation cadet. When he received his wings, he was assigned to duty involving flying with VF-653. He is the squadron's aircraft maintenance officer.

Frank Snowden, AD3, has the same comparative job in the Navy that he had at the airport—aircraft engine mechanic.

HE THOUGHT *he wasn't in the picture and was almost right. LCdr. Robert L. Doering, CO of VF-713, spins tall tale at informal meeting in ready room aboard Antietam.*

Lt. Thomas Davis, Training Officer of VF-653, was a flight instructor at the airport.

Arthur Barker, AD1, worked as an aircraft mechanic and did all the banner advertising flying for the airport.

Other former "Weekend Warriors" were busy spinning sea yarns aboard the USS *Antietam*. They would have plenty of time to practice before their Korean tour was ended. Members of VF-713 shown in the picture below are: *row* 1, Lt. (jg's) Charles E. Gillette, Maurice A. Nettleton and H. G. Goodell; *row* 2, Lt. Dwight "E" Wilson, Lt. (jg) Fred E. Johnson and Lt. William E. Jones; *row* 3, Lt.'s Robert Olsen, Robert R. Guy and Frank W. Gibbs; *row* 4, Lt.'s Earl W. McKinney and Richard G. Park; *row* 5, Lt. (jg) John F. Fox, PN1 Leslie A. Brand and Lt. (jg) Robert C. Bartlett.

Other Reserve pilots aboard the *Boxer* were chalking up records that would make good sea yarns when they got home. The *Boxer's* pilots were in the home stretch of their Korean tour.

While they were busy hammering away at the Chinese communists, Kansas City's own Reserve fighter squadron still found time to help flood victims

NEWEST CARRIER *to make her appearance in the Korean war, the Antietam's all-Reserve Air Group flew its first strikes against the Communists in Korea on 15 October.*

LT. PETER MACK *discusses his itinerary with Cdr. W. W. Townsley and LCdr. T. H. Rentz at NARTU Anacostia prior to take-off.*

VIRGINIA'S GOVERNOR *John S. Battle and Capt. Alvin O. Preil, CO of NARTU Norfolk, hold trophy won by Air Reserves' exhibit.*

in their home area. The "Bitter Birds" of VF-884 made a spontaneous contribution and forwarded a money order to Capt. James H. Flatley, Commanding Officer of NAS *Olathe*. They directed that the money be given to an appropriate relief agency. The "Bitter Birds" heard of the Kansas flood disaster in July through letters from their families and delayed newspaper accounts.

The squadron, formerly commanded by LCdr. Glenn F. Carmichael of Kansas City who was killed in action in May, is now commanded by LCdr. Gordon E. Hartley. After training on the west coast, VF-884 joined other Reserve squadrons for assignment to the USS *Boxer*.

The pilots now average over 60 combat missions each, and the missions have included numerous close support hops on the front lines, strikes against bridges, rail lines, rolling stock and communications and spotting for naval gunfire.

The squadron was looking forward to the day when it would leave the combat area and hit its old home base with its store of sea tales.

Weekend Warrior Flies on Peace Tour

Lt. Peter F. Mack, Jr., member of Congress from Illinois, is representing the citizens of the United States in general and the people of the Springfield and central Illinois area in particular on a goodwill flight around the world.

The "Abraham Lincoln Area Good Will Tour" organization, a group of public-spirited citizens of central Illinois, is sponsoring the flight. None of the equipment or expense for the trip is being furnished by the government. The tour is an expression of friendship and good will to the many peoples of the world. The plane is the same Beechcraft Bonanza used by the late Bill Odom in establishing the present long distance non-stop light plane record of over 5,000 miles in 1949 from Honolulu, T. H., to Teterboro, N. J.

Lt. Mack is a member of FASRon-665, based at NARTU ANACOSTIA. He is a fighter pilot, attack pilot and patrol pilot all wrapped in one. He flies both jets and "prop jobs" and is an all-around member of the "Weekend Warriors."

Norfolk Wins Education Award

NARTU NORFOLK presented an outstanding display in the Education Class at the recent Atlantic Rural Exhibition. The exhibit took first place and did an excellent job of publicizing the activities of the Naval Air Reserve Training program.

There were 252,000 paid admissions for the duration of the Fair and it was estimated that approximately 90% of this total entered the building in which the Reserve exhibit was being shown. Many a future gunner got a terrific kick out of getting rotated in the TBM turret. The jet cutaway along with the survival gear caught the eye of the older folks. The Fair presented an excellent opportunity to do a little recruiting for the Reserves. Approximately 3,000 pamphlets were distributed with return mail cards.

Minneapolis Likes Education

Results of the NAS MINNEAPOLIS off-duty educational program definitely show that "education is here to stay." Since the program began in May 1947, 3,026 Reservists have made advances in all lines.

Ninety-one USAFI correspondence courses and 512 USAFI self-study educational manuals have been requested. Reservists have passed 531 GED high school and first year college level exams and received credit for them in their service records.

Organized Reserve officers and station officers applied for 1035 correspondence courses within the same program.

More than 109 station personnel have been enrolled in off-duty classes offered under the auspices of the station's educational program. Included are courses in Spanish, mathematics, speech, meteorology, navigation, carpentry, commercial art, ceramics, boatbuilding and applied psychology—all featuring use of USAFI textbooks.

During the same period, 578 stationkeepers advanced in rate and 106 changed rates. Twenty-nine USN personnel at the station also advanced in rate and 11 changed their rates.

Station Round-Up

- NAS NIAGARA FALLS—For two years Naval Air Reservist Reinold F. Mueller, chief repairman, hadn't missed a weekend drill with his squadron, VF-851. On drill days he arrived in his chief's uniform, adorned with gold chevrons for 12 years of good conduct. It was rather disconcerting to some of his friends when he showed up for drill recently in civilian clothes. He explained patiently that his house had burned to the ground the night before and the smoke ruined his uniforms.
- NAS BIRMINGHAM—Winner of a recent recruiting contest, Wallace L. George, AR, of VF-681, brought in four qualified Reservists. His prize is an all-expense paid weekend trip to New York City.
- NAS DENVER—Five cadets and two seniors of Italy's civil air patrol inspected planes and equipment used in training "Weekend Warriors" at this station recently. They are participating in the civil air patrol's foreign exchange program.
- NAS LINCOLN—Personnel at this station and NAS SPOKANE are justly proud of their Naval Air Reserve training programs. Both stations boast a perfect safety record for the year ending June 30, 1951.
- NAS BIRMINGHAM—One of the most impressive displays at the Alabama State Fair was this station's display of a 14' x 3½' model of the *Commencement Bay*.
- NAS OAKLAND—Second Class Petty Officer Joseph E. Buchman and Airman Recruit William G. Buchman make a father-son combination of stationkeepers at NAS OAKLAND. They recently teamed up for a new project—donating blood for the armed forces overseas.

LOOK AND LIVE

WITH SHARP EYES AND A SWIVEL NECK YOU CAN LIVE TO BE AS OLD AS GRAMP

WHEN IFR, young Ensign Page
Glanced like a hawk from gage to gage.
But when the rules were VFR,
His mind sometimes would wonder far.

A mid-air crash—then sudden death—
I'll make it short to save on breath.
The sky was clear, no battle raged,
He simply had his "eyeballs caged!"

When flying on IFR, a pilot is usually very alert as long as the weather conditions are such that he is actually on instruments. Knowing that a given amount of airspace has been assigned to him, he tries to stay where he belongs by good navigation and careful attention to his altitude and speed. In short, he's "all business" as long as he is actually in the overcast.

Accident records indicate that in less demanding situations such as taxiing and flying in VFR weather, pilots devote considerably less attention to controlling their planes. There is at least one case on record where both pilots of a multi-engine plane fell asleep at the same time on a long flight in good weather—simply because there seemed to be so little to do.

DON'T BE A TAXI-DERMIST! LOOK WHERE YOU'RE GOING!

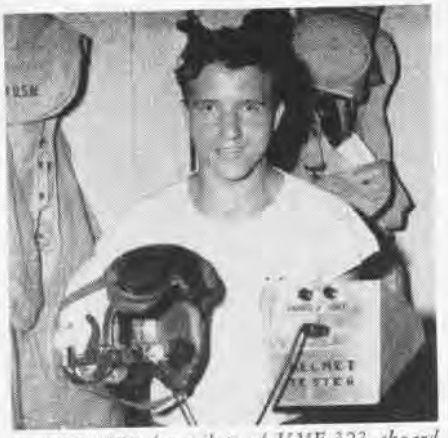
There are many reasons for remaining alert and keeping a sharp lookout when flying VFR. One of the most important is that you have no exclusive rights to any particular chunk of airspace. When the weather is clear, an IFR clearance will not guarantee separation from uncontrolled traffic. Other planes may climb or descend through your assigned altitude. You may encounter another plane cruising at the same altitude and on a converging course. Even though you are right where you're supposed to be, you have no guarantee that the surrounding airspace is clear of other planes. You may "vant to be alone," but it doesn't always work out that way.

Perhaps this is as good a time as any to call attention to the amount of airspace that you should scan to comply with ICAO and Civil Air Regs. There is probably more of it than you think. To begin with, when flying straight and level, you are responsible for looking over the airspace in a 220° arc from directly ahead to 20° abaft the beam on either side. The remaining 140° in the airspace around your plane are not your worry as long as you don't do any maneuvering. An aircraft approaching you from within that arc is in the position of an *overtaking aircraft*, and as such is required to maneuver so as to pass well clear and to your right.

If you are maneuvering either in flight or on the ground, your responsibilities are somewhat greater. Civil Air Regulations require that you clear your position before starting any maneuver. This means that you must look over any of the airspace or airfield, *before you use it*. In the case of acrobatics you must first look above, below, ahead, and behind your plane. When taxiing you must not only avoid objects ahead and to each side, but you must be careful to see that your slipstream or jet blast does no damage to persons or equipment behind you. The "S" turn is still the best insurance against a taxi collision. When in doubt as to clearance, it pays to wait for a signalman.

Check yourself on your next flight and see just how safe your habits are. Do you always look before you start a turn? When overtaking, do you pass to the right and well clear of the other plane? In short, are you sharp-eyed and swivel-necked? If you are, you'll probably live to a ripe old age.

PORTRAIT OF A PILOT WHO WILL LIVE TO A RIPE OLD AGE



A TIME-SAVER *for pilots of VMF-323 aboard the Sicily is this device invented by Sgt. J. A. Lovullo. By plugging helmet extensions in the test box, pilots can tell if their earphones and lip mikes are working. The unit is kept in the ready room and pilots check their equipment every few days.*

He Wasn't Seeing Things

Cpl. Kills Killer with Fishing Rod

MCAS, CHERRY POINT — Marine Corporal Robert Waddle was seated at the breakfast table with his wife in their rented bungalow at Minnesott Beach, N. C. The couple's 14-month old child was playing on the kitchen floor and all was serene.

As he ate his ham and eggs, Waddle suddenly noticed a movement behind a kitchen cabinet. An ugly brown head appeared, complete with beady eyes and forked tongue.

Calmly he asked his wife to take the child and leave the room. When she questioned his mysterious request, Waddle pointed to the evil head—now in full view. She scooped up the baby and left hurriedly.

The Leatherneck than grabbed his fishing rod and assaulted the creature. Soon the situation was well in hand and Cpl. Waddle discovered he had killed a four-foot copperhead.

THIS FLYER *wants to be a flier. He's Dick Attlesey, world's champion 220-yard high hurdler, taking first place over tough competition in Paris stadium while touring with an AAU track team. Attlesey, a stationkeeper at NAS Los Alamitos, is a seaman recruit and wants to be a naval aviator. He plans to enter the 1952 Olympic trials to be held at Long Beach, California.*

132 ROCKETS ON AN A2D

CLOSEUP OF LAUNCHER SHOWS EXIT DOORS OPEN, EXHAUST PORTS AT REAR, ALSO SPECIAL PYLON

THE NAVY is developing a low-drag streamlined rocket launcher to carry the 2.75" *Mighty Mouse* rocket, designed to knock down high performance enemy bombers with one hit.

The 2.75" rocket with folding fins was announced some time ago. Shaped charge and other heads are being designed for anti-tank and ground support uses, thus making it a more versatile weapon than its original air-to-air concept.

One of the new rocket launchers, which carries six missiles, has been air fired successfully and 12 and 24-rocket packages soon will be ready for test.

All rocket launchers will be compact, light weight and highly streamlined to keep drag to a minimum. The six-tube launcher was developed by armament laboratory at the Naval Air Development Center, Johnsville, and is shown in the accompanying photos mounted on a special high speed pylon.

It and other launchers under design also can be carried on existing bomb racks, and all can be jettisoned if necessary. Power to ignite the rockets is drawn from the plane by a pigtail equivalent to the HVAR pigtail.

The rockers with fins folded back are inserted in the front end of the launcher tubes; the rocket exit doors then are closed and the package is streamlined and ready to go. At firing, the rocket head eases the spring-loaded door open and the rocket leaves, the door then closing. Rocket blast opens an automatically-closing door at the rear of each rocket tube.

A project to evaluate the above six-tube launcher as well as another type whose tubes are sealed with a frangible cover will be set up with the Operational Development Forces, Atlantic.

Several of these packages can be loaded on general purpose airplanes, thereby greatly increasing their slugging potential. For example, the A2D can carry 132 rockets in 22 of these packages.

TWO STREAMLINED ROCKET LAUNCHERS ON F2H-2

• NAS COLUMBUS—A flight of F6F's on a hop spotted a house afire near the station. They reported it to Columbus tower, which relayed the distress message to firefighters.

IDEA OF *the month: NAS Alameda has developed a new way to raise cancer drive funds. E. O. Anderson, ALC(AP) dreamed up the idea of having pilots contribute to the drive —or else meet many "unavoidable" delays. An IFR plan for single-engine cost 25¢, multi-engine, 50¢. VFR plans cost 15¢ and 25¢ and a fee of 25¢ was collected from people wanting rides. Here Anderson puts the bite on AMC's Trujillo and R. Tugwell*

CORSAIR IS WINTERIZED IN 'CRASH' JOB

WINTERIZED NIGHTFIGHTER CORSAIR, THE F4U-5N, IS SHOWN HERE OPERATING ABOARD CARRIER

A "FIRE DRILL" in Washington is a rush priority task. It is also variously known as "crash program" and "hit the fan."

A dispatch from Bureau of Aeronautics triggered one such rush job at the Chance Vought Aircraft Corp. plant in Dallas in September, 1950.

The three-months-old war in Korea looked as though it would extend into the winter months. The Bureau wanted immediate detailed information on the possibility of equipping F4U-5N *Corsairs* with de-icing equipment for wings, tail surfaces, propellers and windshields.

This proposal was a challenge, for de-icing boots had never before been applied to high speed Navy fighter aircraft. Boots were common on commercial transports and low speed bombers, but not on fighters in the high performance category.

It was a Friday that the dispatch was received. Chance Vought decided on Saturday to tackle the job. This "line stopper" project—so called because it caused the F4U-5N production to grind to a halt—took priority over all other projects in the plant.

Target date for delivery of the first 26 "winterized" *Corsairs* was set for 31 Dec. Six were turned over to the fleet 12 Dec.; the rest on schedule.

Following delivery of the first planes cold weather testing was instituted at NAS ARGENTIA, Newfoundland. A Navy unit assigned to this phase of the project arrived at Argentia 14 Jan. and departed 20 Feb. after 240 hours of test hours in the air.

By 2 March, 1951, F4U-5N's were at a base in Japan ready for action. They were in time to meet some of the Korean winter, as was attested by reports of other non-winterized aircraft lost because of icing conditions in combat.

Included in the winterized version of the *Corsair* night fighter is an improved cockpit heater, de-icing boots along the outer wing panels and tail surfaces, an alcohol slinger ring system for propeller anti-icing, windshield de-icing, and a complete set of frost covers for the airplane.

Started in "fire drill" fashion, the project continued at that pace. As soon as the decision was made, Henry Tereshkow, project engineer of the Corsair, got the B. F. Goodrich Rubber Co. in Akron on the telephone.

Although unable to give details over the telephone because of classification of the project, he was able to state the problem in general terms and ask, "What can you do?"

Next, Hamilton Standard propeller company was contacted on the propeller de-icing problem. "I'll be in Hartford Tuesday," Tereshkow said.

Sunday at 7 a.m. the project engineer left Dallas for Akron and, upon arrival, made contacts for Monday meetings.

Monday morning, requirements were outlined to the Goodrich people.

Locations for the de-icing boots were explored. Goodrich said it would be able to handle the material needs as far as the rubber equipment was concerned, but a snag might develop in obtaining the driving mechanism, manufactured by the Eclipse Pioneer Division of the Bendix Corp., Teterboro, N. J.

Tereshkow called Eclipse Pioneer for a Wednesday meeting.

Tuesday morning he was at Hartford where the propeller anti-icing problems presented little difficulty for the Hamilton Standard engineers.

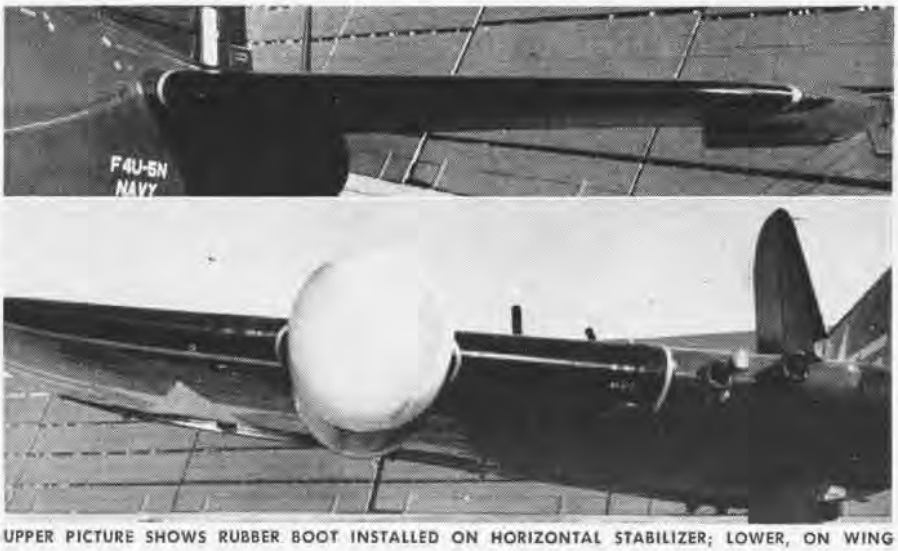
Wednesday he was at Eclipse Pioneer in Teterboro, N. J. Because of previous commitments the company could promise only a four months delivery. Figures on materials were worked out and Tereshkow proceeded to Washington.

THERE, in BUAER, John E. Sullivan of the Airborne Equipment section; J. J. Hospers, assistant general manager at Chance Vought, and Tereshkow, had a conference with Capt. Paul Ramsey.

This resulted in a lot of telephone calls to New Jersey. Orders were reshuffled and equipment required was delivered in time to meet the first scheduled flight November 4. The Bendix and Goodrich companies cooperated fully.

Thus, within a week the basic engineering data had been obtained, reports of components were made to BUAER and Chance Vought engineers, and the F4U-5N had been allocated for prototyping.

To the three main problems—de-icing wing and tail surfaces, de-icing the propeller and de-icing the windshield—was added a fourth—improving cockpit heating and ventilating.



UPPER PICTURE SHOWS RUBBER BOOT INSTALLED ON HORIZONTAL STABILIZER; LOWER, ON WING

By early October material began to flow and an airplane was put together.

Propeller de-icing was checked by ground runs and flights to observe alcohol flow pattern across the blades. The alcohol was pressure fed into a cup at each blade shank and forced centrifugally out along troughs in the boots cemented to the blade's leading edge. A fairly regular pattern along the entire length of the blade would indicate that the fluid was coursing along the leading edge, where ice forms.

With the cockpit heating problem it was known that there was enough heat to keep the pilot warm, but not enough to defog and defrost the windshield and canopy.

A new system incorporating an external scoop was installed. A combustion heater of 50,000 B.T.U. capacity heated the air. The more, the better heating, was the theory. This revised system just about drove the pilot out.

The outside of the windshield had to be taken care of too. Nozzles to spray alcohol were installed to spray the fluid somewhat in the way the "Little Squirts" douse auto windshields with water.

IMMEDIATELY pilots began reporting alcohol fumes in the cockpit. It was discovered that the aerodynamic shape of the windshield was sending the alcohol into the airscoop, then into the ventilating system and producing a mildly toxic effect in the pilots. The mixture also produced a fire hazard.

"Operation Sniffer" came into being. Peppermint was substituted for safety during the tests. This solution replaced the alcohol. The culprit was finally discovered to be the heater scoop. The heating system was modified so as to place the scoop internally. This, plus cockpit sealing, eliminated the peppermint odor.

The next problem was that of the plastic canopy, susceptible to crazing from the alcohol.

This was solved by applying a protective coating along the edges of the canopy where the alcohol was apt to gather. Evaporation kept the main surfaces clean.

Next job was to provide "overcoats" for the planes. Sitting in the open in Korea the planes would be subject to frost, ice and snow. Frost covers, similar to large stockings or muffs which could be pulled over the wing and tail surfaces, canopy, engine cowling, propeller and wheels were made. Hook and eye fastenings made application and removal easy.

This winterization of the F4U-5N meant that the Navy and Marine Corps would have a fighter ready to go on short notice. It could also fly in severe icing conditions so often met in combat.

Deliveries were accompanied by service and data manuals to enable crews and mechanics to cope with adjustment and repair of valves, pumps, wiring and plumbing incorporated in the new system.

External de-icing equipment is removed for summer operation but interior plumbing is permanent.

That is the story of how the Navy got its all-weather nightfighter, the F4U5N *Corsair*. A "fire drill" added an overcoat to its cat's eyes.

Maine Air Station Reopens

Brunswick To Handle Patrol Planes

FAIRWINGS, LANT—A World War II patrol bomber base at Brunswick, Me., is now being reactivated and probably will be in operation by early 1952.

A new fleet aircraft service squadron has been formed at NAS Quonset Point and was to be sent to Brunswick about 1 December. It was from this base on the Maine coast that patrol bombers flew to protect shipping lanes from submarines.

NOLA RESERVES FIX RANGE

BY USING a minimum of funds and a maximum of effort, NAS NEW ORLEANS has put its bombing and rocket firing range into tip-top shape.

The range, which is under lease from the International Paper Company, is located in Hancock County, Mississippi, only 20 air minutes from the station. Eighteen months ago, conditions were so bad that use of ground crews for spotting and radio control had to be discontinued. Even a trace of rain was enough to make a quagmire of the single dirt road leading into the range area.

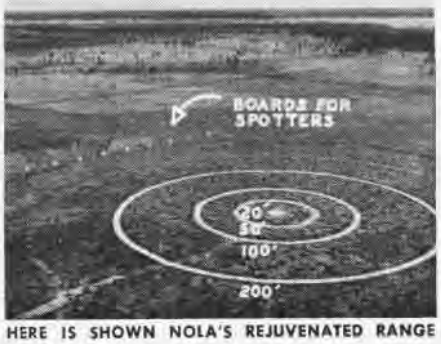
Yet it would cost considerable money to have the road put into first-class shape. About this time, the Reserves found out that the paper company wanted a road for fire fighting.

The Reserves, therefore, got together with company officials and worked out an agreement whereby both outfits furnished the men and equipment needed to rebuild bridges and roads to the target area.

After the road was completed, a local contractor rebuilt the target using inexpensive oyster shells for better visibility. A 20′ bullseye and 50′, 100′ and 200′ circles were constructed.

The station public works department then got into the act. It erected 22 6-foot signs at each spotting post for marking hits. (In reporting one spotter uses red and the other black. The exact hit is determined on a grid by main control after the numbers are called in.)

The NAS metal shop manufactured the glide angle harp in accordance with specifications furnished by NAS AKRON. An aircraft pilot diving at an angle of 90° to the harp can be given a reading on glide angle and firing range when he is 4000 feet from the target. The harp is designed to give a range estimation up to 2500 yards.



HERE IS SHOWN NOLA'S REJUVENATED RANGE

Members of the Marine Air Detachment at New Orleans and three linesmen from the Southern Bell Southern Telephone, who had recently been recalled to active duty with VMF-143, installed communications for ground personnel.

Approximately 8000 feet of telephone cable was laid between the harp, the two spotters and main control. Marine alert telephones with electric buzzers, powered by 12-volt batteries, are used. Ground-to-air contact is maintained by use of an RT-18-ARC-1 transmitter and receiver, powered by a portable unit.

A range officer, main control man, radioman, glide angle harp man and two spotters are needed to operate the rejuvenated range.

Organized Reservists in the New Orleans squadrons today are making full use of the range to increase their proficiency. Louisiana and Mississippi Air National Guard units also utilize the facility at designated times.

• NAS WILLOW GROVE—VF-935, commanded by Lt. E. G. Sunday, VF-938, commanded by LCdr. T. J. Rennemo, and FASRon-931 under Cdr. Roland F. Harper took part of their two-weeks cruise this summer at NAS CHINCOTEAGUE. Later they went to Norfolk and boarded the *Palau* for five days of carrier operations.

• NARTU MEMPHIS—When Chief Andrew B. Boles shipped over for another hitch, his previous four-year record showed that he had never missed a scheduled weekend drill and had taken all four annual training cruises with his squadron, VA-799.

• NAS DALLAS—The following men are responsible for turning out a model carrier float which took honors in the Armed Forces Day parade: C. W. Robinson, AM1; C. A. Roten, AD-1; L. C. Ferris, AD1; E. C. Pearson, AE-1; B. J. Griffin, DC-2; L. L. Pulver, civilian painter; Lt. G. C. Beckert; Q. G. Kothman, BMC; and E J. Michaels, AMC.

HU-1'S HELICOPTER 'OLD DAD', TAIL ROTOR WARMED UP, WAITS SIGNAL TO START MAIN ROTOR

LST AIRCRAFT CARRIERS

IT WASN'T long after Navy airmen eyed the flat deck of the 327-foot long LST (landship ship-tank) that one of the fleet's most versatile ships and the backbone of the invasion fleet assumed a new role in the Korean war. Pilots laid claim to the ship as an "aircraft carrier for helicopters" and have proved in combat missions the value of their operations from the amphibious craft.

The Navy has converted a few LST's for shipboard operation of the "egg-beaters." According to Lt. (jg) George Hamilton, who pilots one of the planes of Helicopter Unit 17, Squadron One, the conversion amounts to making a lot of "little changes" to make the flat-decked craft a more comfortable resting place.

LST-1084, which has not yet been converted for 'copter duty, is now a floating landing field for Helicopter Unit 17. Commanded by Lt. William A. Whitter, the ship has cleared an area of the main deck to accommodate helicopters.

On LST's which have been converted, the deck, which normally has rough spots, is taken down flush, life rafts are removed from the landing area, refueling facilities are installed, life lines are adjusted, and extra safety measures are put into effect.

Hamilton, who has 10 years of flying experience, says the two he has spent with helicopters are his best. "One experience I won't forget since we have been at Inchon was the rescue of a fighter pilot from the harbor," he recalls. "I was flying in the area when an F-80 pilot bailed out of his crippled plane. We pulled him out of the water 30 seconds later."

Flying mine reconnaissance, logistical support trips to the Kaesong Military Armistice Conference and fueling trips to an air-sea rescue station on the Korean coast are routine to Hamilton. They consume about five hours a day, a long time to be in action considering the replacement and maintenance problems encountered in forward areas.

Repair and maintenance of the helicopters is difficult. The aircraft are not permanently assigned aboard a ship and are shifted from one LST to another as needed. Hamilton believes that, as the number of helicopter-LST teams increases, permanent assignments will be made and the ship can order and stock parts and equipment. In the meantime four mechanics, one electronics technician and one metalsmith keep the machines flying with whatever materials are available.

Primary mission of the LST-based helicopters is mine reconnaissance. Their stop and go and hovering ability makes them an ideal aerial observation post.

An ordinary LST, even without conversion, can carry and operate two helicopters, according to Hamilton. In the future, converted ships with elevators to lower deck spaces could be used as "amphibious aircraft carriers" and operate as many as eight to ten planes, Hamilton believes.

The helicopter pilot says that, to him, one of the most amazing facts connected with the operation of the planes from LST's is the speed with which the men aboard ship can be trained to aid the fliers in landing and take offs. Hamilton has found that it takes only a few hours for men who have had no aerial experience at all to convert their ship into a smooth operating base for helicopters.

Blimp, PBM Find Menace

Floating Explosive Charge Is Located

COMFAIRLANT, NORFOLK — Fast work by a PBM and a blimp from Fleet Air Wings Atlantic command spotted a missing explosive charge floating in the ocean and prevented a possible maritime disaster by quickly tracking it.

Ordnance experts conducting experiments aboard the USS *Shakori* 100 miles offshore lost control of a large explosive charge in heavy weather. The buoyed charge, capable of sinking a major vessel, drifted out of sight in a rain squall.

At daybreak, an air search ordered by RAdm. Richard F. Whitehead saw a PBM from VP-44 at Norfolk and an airship from ZP-1, Weeksville, out.

Lt. John A. Zehner, skipper of the *Shakori*, said the buoy attached to the charge was almost completely submerged. G. M. Buerger, AD1, tail gunner in the *Mariner*, spotted the explosive two hours after the search reached the scene. Gunfire from the tug and blimp sank the explosive in 1500 fathoms of water. Pilot of the *Mariner* was Lt. Clayton L. Krejci and of the blimp Lt. Gene L. Lana.

IT ISN'T *always the officers who get the cake when a 1,000th landing is made aboard a carrier. The pictures above show the flight deck crew aboard the Essex cutting a cake honoring the 36,000th plane to come aboard. With the swarm of men dipping in, it is no surprise Lt. J. S. Golding in the bottom photo got only a few cake crumbs.*

Copter Unit Coming Home

Two Men Recommended for Silver Star

USS HELENA—After eight months of dodging flak while spotting for ship's bombardment, rescuing downed pilots and flying reconnaissance missions, HU-7 is being returned to the United States. The seven men of the unit have served aboard the cruisers *Manchester, St. Paul* and *Helena* and have flown 125 missions over Korea.

While serving with the *Manchester* and *St. Paul*, the unit flew photo and reconnaissance missions along the entire east coast of Korea and acted as gun spotters during bombardments of Songjin, Chongjin and Wonsan. They had close calls twice when hit by AA fire.

Aboard the *Helena* they did a lot more of the same. At Songjin they spotted 16 mines in one day, two near the *Helena*.

Their new assignment is to HU-1 at Ream Field, San Diego. Lt. R. J. Gill and Henry Cordoza, AP1, have been recommended for the Silver Star medal for their actions.

COMING HOME *from the wars to wife and children is one of a naval aviator's supreme thrills. In this set of pictures, we see scenes at NAS San Diego as the escort carrier Bairoko returned from Korea with Anti-Submarine Squadron 23. In the first picture Cdr. Ned L. Broyles gets out of his TBM as his wife reaches up to greet him. The middle photo shows Lt. (jg) Robert A. W. Latimer, flight surgeon, getting his first glimpse of his baby daughter, born while he was overseas. The last shows Mrs. John W. O'Brien in bare feet, greeting her returning husband seven months over seas. You can run faster with no shoes.*

P5M-1's Replacing PBM's

New Patrol Bombers Built for ASW

FAIRWINGSLANT, NORFOLK — Seaplane squadrons of FAIRWINGSLANT will be among the first to fly the huge new Martin *Marlin* patrol bombers. The P5M-1's are beginning to replace the older PBM *Mariners* in the Atlantic Fleet. This is the first aircraft of any type designed and built expressly for anti-submarine warfare.

Glenn L. Martin Company engineers have been working on the hull design since 1946. It is expected to make the aircraft more study and maneuverable in rough waters. A pair of "flaps" in the plane's hull can be extended to a 65° angle on either side, resulting in a 50% reduction in the turning circle.

The *Marlin* is equipped with the highest-powered tactical radar in any U. S. aircraft and can carry the latest type of ASW weapons as well as searchlights and cameras to record target damage.

Winning Squadrons Selected

VP-5, VP-45 Selected as Outstanding

FAIRWING 11, JACKSONVILLE—Competing against all other Fleet Air Wings Atlantic squadrons, VP-5 was selected as the best landplane patrol squadron and VP-45 as the best seaplane outfit. Both are units of Fleet Air Wing 11.

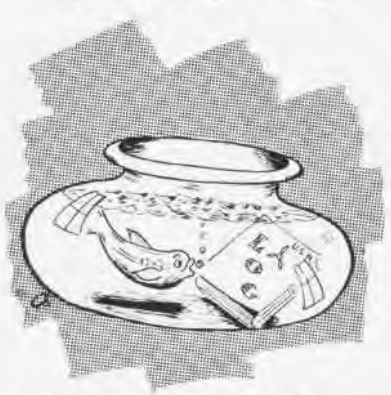
VP-5 has flown its P2V's into many Atlantic and Mediterranean borders and during May flew 1,200 hours, a new record. Cdr. Rex W. Warner is head of the squadron. VP-45 flies *Mariners* out of NAS COCO SOLO, with Cdr. Wendell W. Bemis in command of the outfit.

Sending a Prop to Overhaul?

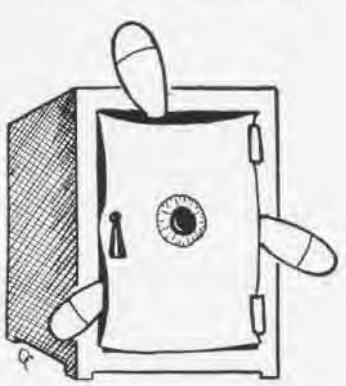
Propellers are operated on a time basis. Changes and configurations are made on a time basis. Without the log book, overhaul and repair shops have no idea where to start. Be sure to—

Send Along the Log

Send the Correct Log



Wrap In Waterproof Paper



Secure Log to Box or Prop

AT COURSE IN RADOME REPAIR AT NADC JOHNSVILLE, INSTRUCTORS SHOW STUDENTS F3D DOME

Plastic Radome Fixes Save Money

UP TO NOW, damaged radomes have been considered unrepairable. But new techniques for the fabrication of reinforced plastics developed and utilized at Naval Air Development Center, Johnsville, Pa., now make repair possible.

These techniques in the field of reinforced plastics are the result of the work done in the Aviation Electronics and Electrical Laboratory. They are based on a relatively new class of materials known as "low pressure" or "contact" resins. When these resins are properly mixed with certain catalytic agents, their physical form changes from liquid to an infusible solid.

This makes resins highly useful in preparing laminates and other constructions for which complex shapes would otherwise involve the use of elaborate and expensive molds. With contact resins, molds may be made of plaster metal, wood, or even glass fabric laminates. Since contact pressure is all that is required, large presses are not needed, and unit cost can be held to a minimum.

WEIGHING RESIN IS ONE STEP IN REPAIR WORK

The amount of saving by using the new plastic repair technique will be substantial. For example, NAS NORFOLK repairs three TBM's each week. Each week 1.5 radomes a week valued at from $3,000 to $5,000 each, have been discarded because it has been impossible to make proper repairs. Plastic repair changes this picture.

Recently a group of technical personnel from NAS QUONSET POINT, NAS NORFOLK, NAS JACKSONVILLE, and MCAS CHERRY POINT was given training in radome repair at NADC Johnsville. The course covered basic chemistry of polyester resins, methods of impregnation, molding techniques, effects of patching on electronics and on mechanical strength. NADC representatives conducted similar programs at NAS ALAMEDA and NAS SAN DIEGO.

BUAER estimates that a major portion of damaged radomes can be placed in Class 265 (repairable material). Plastic radome repair should only be done by trained personnel.

Standard radome repair materials will be stocked by aviation supply offices. Definite radome repair quotas will be established at the air stations designated for this work. It is anticipated that this program eventually will save the Navy several hundreds of thousands of dollars annually.

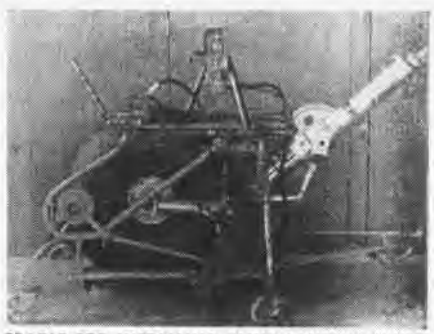
● VP-8, QUONSET—Thirty men from this squadron fly small private planes as a pastime after working hours, many belonging to themselves, some as cooperative ventures.

Airship Wheel Installing Gear

At NAS LAKEHURST, David D. Clayton has designed gear for rolling a landing wheel under an airship and jacking it in place to install. He has been granted an award under the Navy's Beneficial Suggestion Program.

Heretofore two or three men have rolled the landing wheel under the ship and pushed it into place, and put "C" clamps on to raise it into position. This was dangerous as clamps could slip when the wheel was shifted to the proper position, and it was also hard to hold the wheel steady by hand.

With the use of the cradle designed by Clayton, the wheel can be placed under the ship, the strut raised to a vertical position, and the wheel jacked up so that Bearing supports are lined up ready to bolt. This saves time and is also a much safer method than the old one.



CRADLE FOR INSTALLING BLIMP LANDING WHEEL

Carrier's New Jet Tie-Down

The *Coral Sea* (CVB-43) reports that the existing tie-down reels for jet aircraft are strong enough in heavy seas when a carrier is pitching and rolling or when a hard, sudden turn is made. This is particularly true when jet aircraft are being spotted for the next launch and are tailed outboard.

In an attempt to find a satisfactory solution, the *Coral Sea* has designed an experimental tie-down.

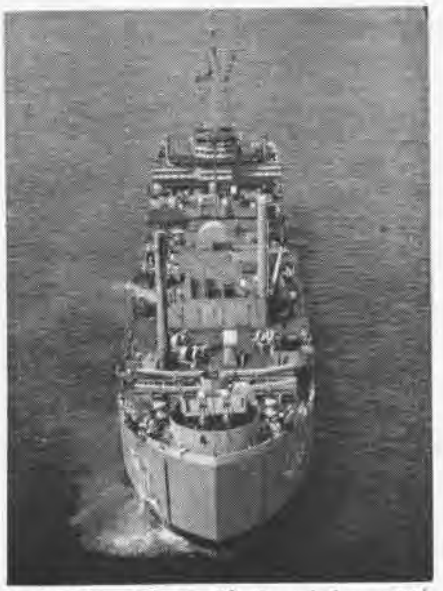
The tie-down consists of a 5/16" chain, seven feet long, with a 5/8" turnbuckle fastened on one end with a 5/16" schackle. A padeye is attached to the turnbuckle with a 5/16" schackle. The other end of the chain is free to reeve through the padeye of the aircraft and is then bolted to the appropriate link of chain to take the slack out. One washer is brazed on the head of the bolt; one, on the nut. The turnbuckle is used to take the required strain on the chain.

While it is realized that this is not the ultimate in jet tie-downs, *Coral Sea* men believe it a step in the right direction.

HERE AN F2H IS HELD WITH THE NEW TIE-DOWN

SUPPLIES FOR CARRIER PLANES

PLANE TIRES *are checked in Menelaus hold by H. E. Teachy,* AK1; *C. A. Philpott,* AKC



MENELAUS, *Atlantic Fleet's aviation supply ship, washes anchor and heads for action*

CHECKING PLANE *parts in storeroom below the decks are Teachy and R. C. Early, airman*

NEED A SPARE engine or gasoline tank for your airplane? Or how about a bolt to fit your kitchen stove?

If you are the commanding officer of an aircraft carrier in the Atlantic Fleet, the USS *Menelaus* (ARL-13) will deliver it COD to your doorstep, whether you're tied up in Norfolk, Va., or in Algiers, North Africa.

Literally a floating department store, the *Menelaus* can provide carriers with any one of almost 20,000 parts to repair their aircraft. From the latest jet engines to the lowly washer weighing a fraction of an ounce, the *Menelaus* maintains a list of supplies and equipment which takes months to inventory.

ELECTRONICS *storeroom of Menelaus is listed by Fedora,* AK1; *small parts in drawers*

Unlike her sister ships, the USS *Megara* and the USS *Chloris,* which are aircraft repair ships, full of machinery and tools to fix planes, the *Menelaus* performs no repair functions. Her job, according to LCdr. C. J. Bannowsky, her commanding officer, is to provide mobile logistic support to our carriers, wherever they are.

The *Menelaus* has but one forebear, the USS *Jupiter,* now aiding U. S. fliers in keeping their planes in the air over Korea. The *Jupiter* has been a member of the Pacific Fleet for some time and first was constructed on the hull of a cargo vessel, the ex-*Flying Cloud.*

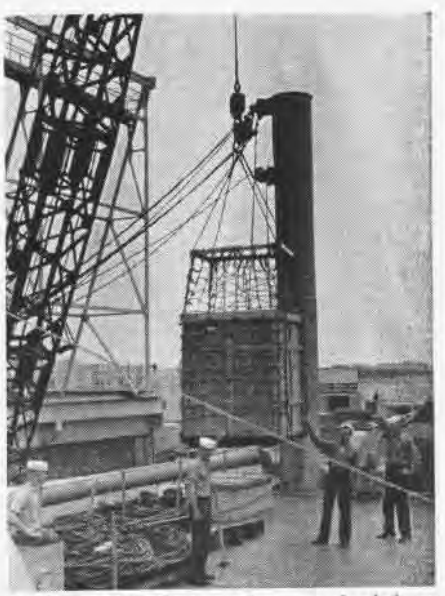
When the need became imminent for a counterpart of the *Jupiter* (AVS-8) in the Atlantic Fleet, no cargo ship hull was available, so the *Menelaus* was constructed on the hull of an LST. It was designated a repair ship for landing craft, her old designation before being converted as an aviation supply ship.

For carriers of the fleet, the holds of the *Menelaus* contain a great variety of items for repair of all types of naval aircraft. Wing tanks for fighters, bomb racks for attack aircraft, wing sections for dive bombers, and floats for patrol planes are stored throughout the ship. Even rotors for helicopters are furnished by the *Menelaus.*

On her weather decks, in compartments formerly housing machine shops, are neatly stacked sections of aircraft wings. Near the hinged bow doors, where heavy tanks once rolled onto beachheads, are row after row of aircraft tires. Lining her 328-feet length are hundreds of shelves holding all types of equipment—electronics, aircraft repair, general stores used by ships during a cruise, and various other materials used by the Atlantic Fleet's air arm.

Her crew of about 190 officers and men are largely aviation specialists. Her executive officer, Lt. Paul DuPont, a Reserve officer, formerly was a Westinghouse Electric engineer. Many parts made by his company are now aboard the ship, destined for use by Atlantic carriers.

Named for the husband of Helen of Troy, the *Menelaus* may well be called the "Trojan Horse" of aviation supply ships. Its "innards" are well filled.



SUPPLIES FOR *fleet carriers are loaded on Menelaus, ready to be transported anywhere*

SUPERSONIC TURNS TOUGH IN 'SKYROCKET'

WHEN the Navy decided to talk about the supersonic exploits of the D-558-II *Skyrocket* the press and periodicals gave the slim swept-wing plane and its pilot, William B. Bridgeman, a big play. The whole project stimulated imaginations because it stepped into a realm which had been theory only for many years.

After satisfying demands for personal appearances for publicity purposes, writing articles for magazines and appearing on TV shows, Bridgeman, a former Navy patrol plane pilot, put down his experiences for the edification of pilots and engineers. His story, delivered at a meeting of the Washington Section of The Institute of the Aeronautical Sciences, reveals fascinating details of his flights and preparations for them not previously released.

Bridgeman stated that the *Skyrocket* is an obsolete plane. It was built as a sister ship of the D-558-I *Skystreak*, which was started before the possibilities of swept-wings in the transonic speed range were realized. Thus the original contract was modified.

The *Skyrocket* has airfoil sections of the conventional subsonic type, with rounded leading edges and contours, not of the supersonic pointed type. Thus, by employing rocket power, the plane could explore the upper limits of the subsonic type of airfoil.

Controls of the plane are the simple, radius nose flap type without aerodynamic balancing, with mass balancing only. No hydraulic boost is used.

The wings are swept 35° at 10% thickness with a 3.57 aspect ratio.

Only incidental were the world's record high speeds and altitudes attained. The research program has furnished valuable aerodynamic information, drag characteristics, maximum lift and stall characteristics, buffet boundaries and control trends. NACA, which has been and will continue to fly the planes, is obtaining data on the above plus airloads, pressure distributions and flight boundaries in the available mach range.

Greatest value of full scale tests is in the comparison shown between them and wind tunnel tests with scale models. Wind tunnels tests are limited to low values of reynolds numbers; the full scale tests cover the reynolds number range from five to 50 million. Data in the range from mach .95 to 1.1 is difficult to obtain in tunnels, but the *Skyrocket* tests filled in this region adequately.

Instrumentation to determine rise in temperature with rise in mach number was installed on the skin of the ship, the glass windshields and the fuselage. A rise of 270° F. was experienced due to compression, but 50% of this was absorbed by the structure. Bridgeman was never conscious of this heat transfer.

EX-PATROL PLANE PILOT BILL BRIDGEMAN NURSED SKYROCKET THROUGH RUGGED TEST PROGRAM

DATA WAS recorded by a motion picture camera which photographed all the instruments installed in the ship. Pressure was measured at 400 points on the wing and tail surfaces, and control and stress forces were measured by means of 904 electric strain gages, automatically recorded by an oscillograph.

This instrumentation took a lot of space, but the purpose of the tests would have been lost if it had been eliminated to provide more fuel space. Douglas Chief Pilot John Martin flew the plane first in 1948, while Gene May flew it first with the jet-rocket combination. Later the jet engine was removed from one of the two *Skyrockets* which were converted for air launch. This provided a double load of propellants for the rocket engine.

Lateral oscillations were the most serious difficulty encountered in the plane. On the initial test a climbing mach number of .92 was reached and a pushover exerting .7 of a "G" was used at 41,000 feet. The wing dipped and the rudder oscillated at 3 degrees per second. Force on the rudder pedal stopped that oscillation and rudder deflection against the wing dip stopped the roll. Rudder was much more effective than aileron control.

ON SUBSEQUENT flights this roll became so bad that the engine had to be cut. Rudder force was too great to overcome. For later flights the rudder was locked, with a release for landing incorporated. With the rudder locked there was lateral oscillation but the ailerons were effective.

On the fifth flight the pushover was changed to .25 "G". With such a low load factor, the ship rolled as much as 75° on a side at a rate of 86° per second. It took 65 pounds of aileron force to control it.

These oscillations continued to close to the peak mach number attained by the aircraft. The alternate rolling made it impossible to enter a steady bank in order to make a 180° turn to return to Muroc Dry Lake. By applying a longitudinal load in the opposite direction which finally reached about 4 "G" the oscillations were damped and a successful turn completed.

To escape the high drag associated with speed above mach 1, the angle of attack was increased in the climb as rapidly as the buffet at stall warning would allow. (High speed stall.) Once the right wing dipped when the boundary warning was entered too deeply in a partial stall. The nose was lowered momentarily to regain control. It is impossible to hold the ship to the ideal climbing speed of mach .8 because of buffet limitations.

Air launching the *Skyrocket* from the B-29 was carefully planned. Mechanics of this air launch had much to do with the high performance. Two variables, the wind gradient and the type of flight plan controlled the direction of launch and the distance and bearing from the dry lake at the time of drop. Launching was done about 25 miles out from base

and the plane was 25 miles beyond when propellants were exhausted. Thus if the engine refused to function a dead stick landing could be made on the ten mile long runway. A 180° turn had to be made at the end of the run.

THE AIR FORCE furnished two chase pilots; one at the launch site, the other at the point where the fuel was exhausted to help if the windshield was frosted or some structural failure was experienced.

The B-29 pilot controlled the release, as Bridgeman couldn't see out. Bridgeman had his most difficult time just after launch. The ship was in a flat attitude and flying at the speed of the B-29, 230 mph. It was necessary to force the plane into a steep climbing angle so that after the rockets lit off after ten seconds the speed could be kept under mach .85 because drag rises abruptly in the transonic region. With a wing loading of 90 pounds it was nip and tuck to do the pullup without going into an accelerated stall. The most he could pull before speed was gained was 1.6 "G's" or there would be buffet from stall.

He could never keep the speed down enough to satisfy the aerodynamists, reaching sonic speed 8000' too low in the climb. At high altitudes the phenomenon of rapidly rising mach number and falling indicated air speed was very apparent.

Burning a ton of fuel a minute, the wing loading changed rapidly. Also the IAS became so low that supersonic speed was mandatory. Here the elevator lost its value so horizontal trim had to be maintained through the trim device which changes the angle of the leading edge of the horizontal stabilizer.

At the end of the run after fuel exhaustion, it was necessary to turn 180° immediately to return to base. These turns thus had to be made at the highest mach number. Entering a vertical bank and applying full up elevator would not alter the course one degree. But by applying three or four degrees, and in some cases all that was available of the stabilizer trim, it was possible to bring the load factor up to 4G, making it possible to enter a diving turn. Because the electrical trim activation was slow, it was necessary to return it to neutral almost as soon as applied, or additional "G" would aggravate the near stalled condition.

Bridgeman says there is much potential left in the plane. Testing must be step by step, with each one being analyzed before another is tried.

Bridgeman likes air launch and rocket power for this research flying. Many conventional takeoffs were made with rocket power but he considers this dangerous. In one instance all the rubber was thrown from the tires because he was a little slow in breaking loose the plane from the bed of Muroc Dry Lake. "This could be a little rough in that you are carrying an airplane full of alcohol and liquid oxygen and a nice slug of hydrogen peroxide," he says in a masterpiece of understatement.

What he wants for the future is a genuinely supersonic airplane with engines that will give, not the altitude perhaps, but the endurance to stay at peak mach numbers for a few minutes instead of seconds. He wants to have an airplane with supersonic wings and irreversible controls to test air conditioning and what aerodynamic heating will do to fuel systems, windshields and metals to be used.

"It could be there is a secret as big as that 'A' bomb. It's possible, and what would be nicer than another big stick to hold over our friend 'Uncle Joe'," he concluded.

Release Drops Rescue Gear

USS PRINCETON—Metalsmiths have built a surefire release bulb for sea/air rescue kits. A slightly shortened tip tank from the F9F, hung from a standard bomb rack, houses the Mk II, type D, SAR kit and an improvised mechanism which works the release hatch on the lower side.

The metalsmith crew, directed by Lt. C. L. Jones, constructed the apparatus largely from the motor and gear train from the tail hook assembly of a TBM. The hatch works on a swivel and is activated by a solenoid controlled from the cockpit of whatever plane the release bulb is mounted upon.

The new SAR bulb thus permits the pilot to make bullseye drops to men in distress. Naturally, it can be used to drop any bundle about the size of the SAR kit. Pilots made successful test drops on the first pass flying from the *Princeton* off Korea.

WINIGAR, FOREMAN DISPLAY WORKINGS OF TANK

Lands With Full Wing Tank

VF-12, CORAL SEA—Landing an F2H-2 aboard the *Coral Sea* with only one wingtip tank—and that one full of gasoline—was the experience of Ens. Robert A. Rulis on 17 September.

When he was catapulted, the tank cover on the port tank flew off and the pressure normally carried in the tank for transfer was lost. Having transferred all fuel from the starboard tank, Rulis tried to jettison both tanks before attempting a landing.

When the tip tank release handle was pulled only the starboard empty tank jettisoned properly and Rulis was forced to attempt a landing with one full port tank still attached to his plane.

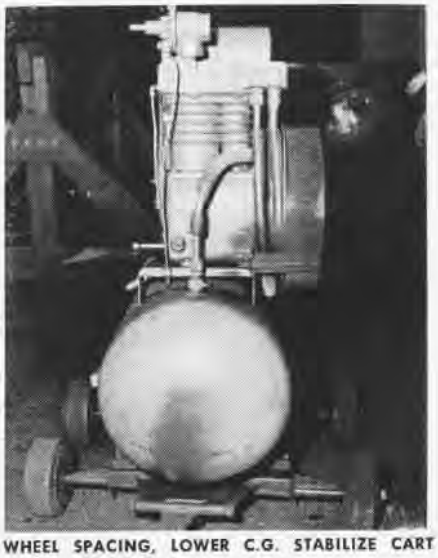
Using an excess of power and slightly higher landing speed than normal, Rulis made a normal landing. The only mishap was when the tank was thrown from the wing when the plane caught the arresting wire. The tank slid up the deck taking out two jet barriers before coming to rest just forward of the #2 elevator.

Compressor Cart Redesigned

NAS, ALAMEDA—A small stone on the taxi ramp outside Hangar 40 at this west coast station brought about the redesigning of the undercarriage of the Kellogg-American air compressor.

As a FASRon-885 mechanic was pulling a compressor across the ramp, one of the narrow guage iron wheels struck the stone and the top-heavy piece of equipment tipped over, causing considerable damage.

At the suggestion of Lt. W. L. Rebman, assistant maintenance officer, P. S. Linch, chief metalsmith, designed a new undercarriage to minimize the danger.

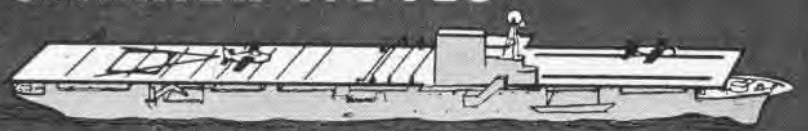


WHEEL SPACING, LOWER C.G. STABILIZE CART

The compressor is now transported on solid rubber wheels 41⅜" apart as compared to the previous 26⅝ inches. The center of gravity of the machine was also lowered approximately four inches.

In addition to the undercarriage improvement, a shield has been designed and installed on the motor mounted over the tank. The drive wheel and belt previously were in the open, requiring caution by the operators.

CARRIER NOTES



BUREAU OF AERONAUTICS—SHIPS INSTALLATIONS DIVISION

Plane Hook Points

The Naval Aircraft Factory has received many Colmonoy coated hook points, NAF603410-1, rejected after service aboard carriers. A large percentage of these hook points have proved to be suitable for further use. The following information should aid operating personnel to determine acceptable and unacceptable wear.

On numerous hooks the Colmonoy spalls

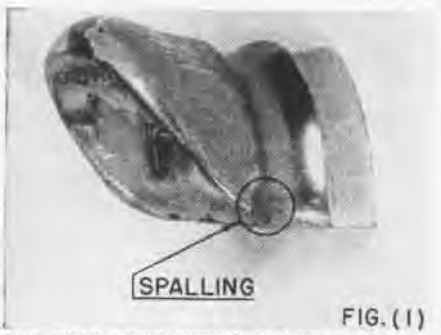


FIG. (1)

THIS HOOK POINT SHOULD BE KEPT IN SERVICE

off on the corners at each end of the throat and under the shank slot. The spalling of the corners is not due to inferior or defective coating but it is the result of the impact blow the hook receives in striking the deck. It is not considered of serious consequence since the deck pendant normally does not contact the hook point in those areas.

Steps are being taken to prevent the spalling of the Colmonoy at the edge of the forging by absorbing the impact with a back plate instead of permitting the hook to strike the deck on the forging edge. Many hooks that show this condition can be improved by grinding off the jagged corners of hard Colmonoy. Figure 1 shows a hook point of this type that should not be removed from service but should be reconditioned by grinding the corners.

Test engagements at the Naval Aircraft Factory, under severe off-center conditions using chipped hook points, did not result in abnormal wear or abrasion of the deck

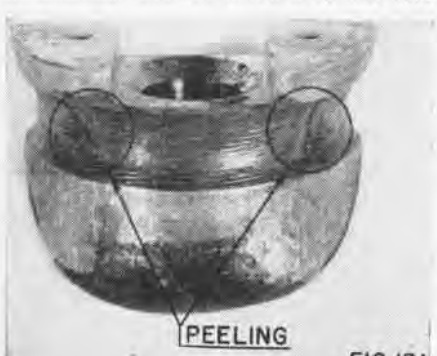


FIG. (2)

PEELING FROM THROAT HAS RUINED THIS POINT

pendant except in those cases wherein so much Colmonoy had been removed from the hook that the cable came in direct bearing against the base metal. The sharp edges of the Colmonoy at the chipped areas are therefore believed not dangerous in themselves, since the Colmonoy tends to yield and be smoothed out during engagements. For this reason, chipping of the Colmonoy at the edge of the shank slot should not be considered cause for rejection unless it permits the deck pendant to bear directly against the base metal.

Figure 2 shows a hook in which the coating has peeled away from the throat. The hook is no longer serviceable and should be replaced. This defect is indicative of an imperfect bond. Improved methods of bonding the Colmonoy to the forging are being studied.

Arresting hooks with a cracked condition as shown in Figure 3 should be replaced. However, incipient cracks of this type can only be found by removing the hook point and examining the lower corners of the shank slot. Any hook points evidencing these cracks should be removed, reported by an RUDM, and returned to the Naval Aircraft Factory for inspection. The normal life of

FIG. (3)

CRACKED HOOKS LIKE THIS NEED REPLACEMENT

a Colmonoy coated hook point is considered sufficient to permit about 35 engagements, after this the hook points should be discarded.

To facilitate the study of defective hook points reported in RUDM's, it is desired that the serial number of the hook point be included in the report. The serial number permits the Naval Aircraft Factory to identify the hook point and thereby determine the technique used in its manufacture.

Technical Order No. 9-50 is presently being revised to include this information.

• NAS WHIDBEY ISLAND—Thirteen officers and enlisted men from the Royal Australian Air Force reported aboard to train in P2V's, bringing the total population from "down under" to 17 men with FASRon-112.

Engaging Velocity Recorder

The Bureau of Aeronautics has procured a prototype instrument which will be used to record the actual landing speed of airplanes on the decks of carriers. This device measures and records the velocity of the airplane as it engages the arresting wire.

Functioning from photo-cell and light beam equipment, the velocity recorder measures the time required for the airplane to travel a fixed, known distance and converts this time-distance relationship to velocity (knots). The velocity is printed, with a serial number, on paper tape for permanent record. Minor modifications are to be made in the prototype to reduce errors due to airplane vertical velocity, which were found to be present during trials on the USS *Wright* (CVL-49), 4-8 September 1951.

The velocity recorder is expected to be valuable either by itself or when used in conjunction with airplane approach speed indicators, by providing quick and reliable airplane velocity data during operations with new aircraft or during qualifications of new pilots. These data will also be used as an accurate means of checking arresting gear performance against published performance data.

By providing pilots with an accurate measure of their actual engaging speeds, it is hoped that they will tend to make fewer landings that are unnecessarily fast. This will amount to an effective reduction in the energy which the arresting gear is required to absorb. It will, therefore, perform more satisfactorily. Runouts on deck will be less, and the frequency of barrier engagements will be reduced.

It is planned to provide training carriers and carriers conducting trials of new aircraft with the new instrument.

Trunion Pin Bushing Cutter

Edward L. Wine, MM2, at NAS OLATHE, has designed and manufactured a cutter tool to undercut the landing gear trunion fitting attached to wing station No. 60 forward on the F8F-1, in order to replace trunion bushing, Part No. R-82-GR-59881-1.

This tool employs four cutting blades manufactured from a 3/16" lathe cutting tool. Three of the blades were ground to an angle of 45° to cut a chamfer after the undercut was made.

The tool can be used with a 12" ratchet, and the pressure put against it by hand is sufficient. It is important that the groove be cut, so that the cutting edges are at the center line of the tool. Also, forward of the cutting tool, a relief should be milled for chip clearance.

The time for the cutting operation on the bushing is from 10 to 15 minutes.

► *BuAer Comment*—**This item is another example of a pilot and cutter designed for a particular job. The designer is congratulated on his resourcefulness and initiative.**

Cutting tools frequently require adjusting and sharpening, and the designer could improve the tool by using set screws instead of soft soldering the cutting teeth in the grooves.

AVIATION ORDNANCE

Ordnance Handling Trucks

Prototype models of two new pieces of ordnance-handling equipment—Bomb Truck Mk 22 Mod O and High Lift Truck Mk 21 Mod O—are scheduled to undergo shipboard evaluation tests in the near future. They were designed in the Aircraft Armament Section of the Naval Gun Factory in connection with the guided missile program.

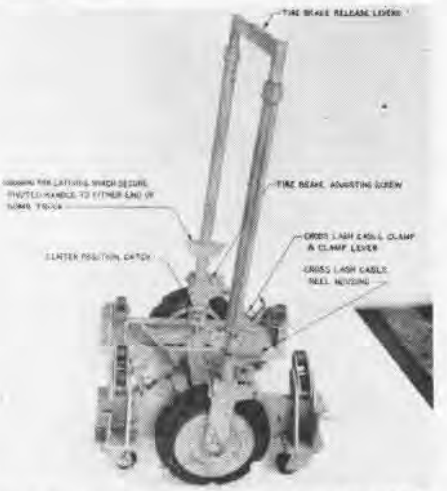
Both trucks incorporate a number of new features. Although the prototype model of each truck was developed specifically for handling certain guided missiles aboard aircraft carriers, the new trucks are readily adaptable for handling and loading standard ordnance stores.

The bomb truck is to be used to move a store up to and across the flight deck of an aircraft carrier to a point where the high lift truck is ready for a hoisting operation. The high lift truck loads it on to the aircraft, leaving the bomb truck free to return for another store.

Moves Sensitive Missiles: The special tread used on the standard, commercial, deluxe cushion tires of both types of truck was designed to facilitate the movement of the trucks across the arresting and barrier cable areas of the flight deck. Angularly arranged grooves eliminate the objectionable sliding-away movement of these cables which normally occurs when hard, smooth tread tires come in contact with them.

In addition to a tire body large enough for the practical application of the groove type tread, the 13" outside diameter tire also provides a radial depth of rubber which minimizes shocks and reduces the effort required to move sensitive missiles across arresting and barrier cables. The four caster wheels of the bomb truck are set at such a height that when the pair at one end of the truck body are on the deck, the opposite pair will clear a one-and-a-half-inch diameter cable.

The adjustable, load-supporting roller brackets of the bomb truck body carry a store at a height above the I-beam cross member sufficient to permit the free entry of the high lift truck's saddle to a position directly below the store and above the I-beam cross member. The transfer of a store from the bomb truck to the high lift truck is accomplished by merely elevating the saddle of the latter. A store can be transferred also from the high lift truck back to the bomb truck with the same ease.



SIDE ANGLE VIEW OF BOMB TRUCK MK 22 MOD O

The cross lash arrangement on the bomb truck consists of a pair of steel cables, reels, and power springs housed in diagonal corners of the truck. Quickly and easily unreeled and applied to a store, the cross lash cables provide firm, positive means for securing a store to the bomb truck. When the store is transferred to the high lift truck, the cross lash cables are released and automatically reeled in.

Truck Handle: The telescope handle of the prototype model bomb truck saves space and meets the limitations of aircraft carrier elevators. Full telescoping of the upper section of handle automatically releases the catches which secure the pivoted handle assembly to either end of the truck body. The levers on the upper handle assembly are coupled together for simultaneous operation of the tire brakes, which are automatically applied upon release of the levers. The brake release levers are operable only when the telescopic handle assembly is fully extended.

Brakes: Dual-purpose brakes used on the rear wheels of the high lift truck are of the internal, expanding type. They represent an improved compromise between the dead-man control requirements for a strong braking force and a moderate releasing effort. The automatically applied service brakes are released by applying pressure on the drawbar lever.

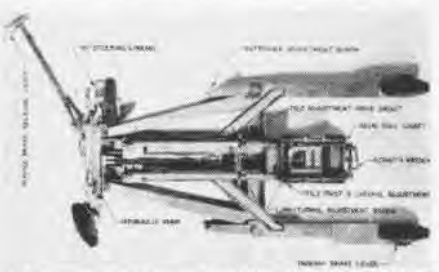
The service brake shoes are used also for parking. When they are used for this purpose, they are applied by means of a short hand lever at each rear wheel. An alternate design for operating the parking brakes provides means for releasing and applying them simply by moving the drawbar handle within, or outside, the relatively small angular range of positions suitable for moving the truck.

Structure: The structural arrangement of the high lift truck frame provides relatively free access for the movement of the bomb truck into the transfer position. The lifting structure is so arranged that the sliding movement of the forward ends of the two long lift beam channels during lifting cancels the horizontal component of the arc movement developed by a conventional, end-pivoted type of lifting structure. This cancellation results in a veritcal lifting movement, the tilt pivot of the saddle moving in a straight line perpendicular to the truck frame during lifting. When the outriggers are extended, the basic lateral stability of the high lift truck, with a 1000-lb. bomb fully elevated, is increased from 20° to 30°.

The saddle of the high lift truck should be approximately parallel with the deck to effect the transfer of a store from the bomb truck. Since conventional carrier aircraft park with their racks at an angle longitudinally with the deck, an objectionable amount of time would be required, if parallel lifting were maintained, to introduce tilt for loading these racks, and to eliminate tilt for transferring the next store from the bomb truck. The prototype model high lift truck is equipped to provide either parallel lifting, or ten degrees of automatic tilt at maximum elevation during lifting.

The spotting indicator is an accessory device designed to spot the high lift truck under the bomb rack of an aircraft with a degree of accuracy which will minimize the use of, or eliminate completely the need for, special adjustments of a store with the exception of the tilt adjustment. Another spotting indicator of the same type will spot the high lift truck prior to the transfer operation.

Other Uses: Adaptation of the bomb rack for use over unpaved areas ashore could readily include the substitution of a suitably shaped frame for the present H-frame, the use of four pneumatic-tired wheels instead of the present solid-tired ones, and provisions for train towing, without interfering with the basic new features of the Bomb Truck design. Similar adaptation of the High Lift Truck Mk 21 Mod O could, in addition to the substitution of pneumatic-tired wheels, include increase load capacity, higher lifting heights, and power operation.



PLAN VIEW OF HIGH LIFT TRUCK MK 21 MOD O

Mk 12 Gun Training Course

Preparations have been made to train instructors in ordnance schools under the command of Chief of Naval Air Technical Training in the maintenance, firing practices, and prototype installations utilizing the 20 mm automatic gun Mk 12.

The instructors will be trained at the Naval Gun Factory, the Naval Proving Ground, Dahlgren, and Armament Test, NAS PATUXENT RIVER. These instructors will, in turn, incorporate this gun in the curricula at the AO School, NATTC JACKSONVILLE; at the MCATS, MCAS QUANTICO; and in Naval Air Mobile Trainers, MOR's 1 and 2, NAS NORFOLK and SAN DIEGO.

• NAS JACKSONVILLE—CAG-1 returned to this station recently after six months duty in the Mediterranean. During their tour of duty, they operated with four different carriers, while in the Mediterranean zone.

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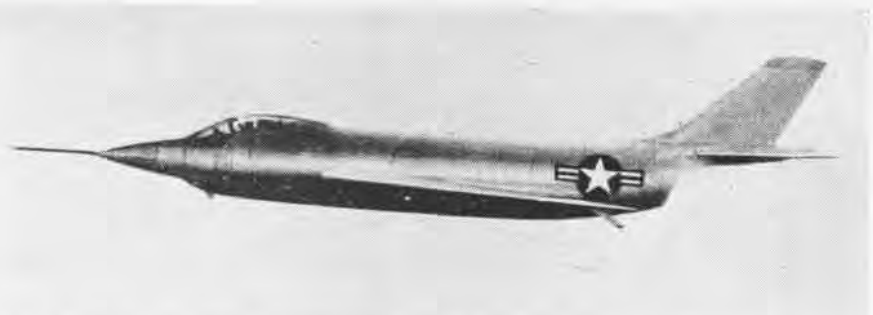


SHOWN UNDERGOING *its initial aerial test at Lambert St. Louis Municipal Airport, St. Louis, Mo., is one of the Navy's newest jet fighters, the McDonnell XF3H-1 (Demon). Production models of the airplane will be manufactured both by McDonnell and Goodyear Aircraft Corporations under terms of a Navy contract announced recently.*

LETTERS

SIRS:

Personnelman McBee of the USS *Bairoko* is to be congratulated on the fine job he performed in his investigation of service records of his carrier's personnel and the resultant awards.

However, Yeoman Second Floyd of NAS, Naval Air Development Center, Johnsville, Pa., with 407 enlisted personnel abroad, has, by means of a similar investigation of records the past three months, kept BUPERS medals and awards incoming basket busy.

The command not only distributed Distinguished Flying Crosses, Air Medals, Bronze Stars and Purple Hearts to Korean veterans, but also distributed the following Good Conduct awards, representing awards to 48% of the enlisted personnel aboard: 1 fifth award, 10 fourth awards, 26 third awards, 68 second awards and 61 first awards.

All of the above, combined with many World War II campaign and service awards, brought Floyd's overall "findings" to a total of 215.

Floyd's real discovery of the entire record search was the uncovering of authorization for a 1931 Yangtze Service medal for service by an "Old Salt."

H. W. BOWMAN, COMMANDER
NADC, JOHNSVILLE.

SIRS:

I am enclosing a photograph of Lt. (jg) "Moon" Mullen who was "Paddles" for VF-42 while on Mediterranean cruise.

I thought it might be of interest to the readers of NAVAL AVIATION NEWS to note the resemblance of Lt. (jg) Mullen to "Bugs Bunny".

It might also be of interest to know that VF-42 flew 18 F4U-4's aboard the *USS Saipan* for the cruise and flew 18 F4U-4's ashore upon completion of the cruise.

VF-42 was commanded by Cdr. R. B. Spencer.

R. K. MCDANNOLD, LT. (JG)
VF-42

SIRS:

I believe the F6F crash shown on pg. 12 of the September 1951 issue of NAVAER NEWS occurred on the USS *Hornet* in early 1944. The tail section later blew backwards off the after end of the flight deck.

L. T. MORSE, CAPT.

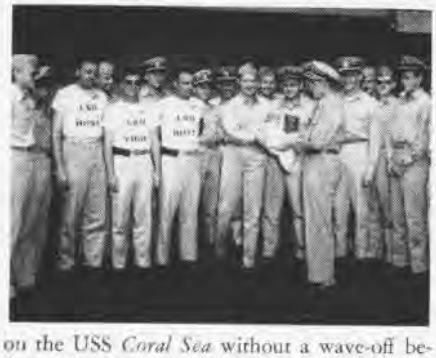
JOINT OPERATIONS CENTER, KOREA.

¶ A check of flight accident records in the Navy department, involving an F6F which pulled in half after catching an arresting wire, turned up one such crash also on board the old *Princeton* back in 1943. Capt. Morse's letter sheds new light on the mystery photo in the *News*.

SIRS:

The enclosed picture shows Commander Carrier Division Six, RAdm. D. V. Gallery, complying with a time-honored custom by presenting a can of ice cream to the landing signal officers and all pilots of VA-15 after the admiral attempted to land on board with his wheels up.

During the past six months in the Mediterranean, Adm. Gallery has put in his flight time in AD's, and had made 12 good landings



on the USS *Coral Sea* without a wave-off before they finally enticed him into making a pass with his wheels up.

PUBLIC INFORMATION OFFICER
CARRIER DIVISION SIX

SIRS:

On 15 September VF-12, the *Flying Ubangis*, flying F2H-2's made their squadron's thousandth landing for this cruise aboard the *Coral Sea*. We feel this may be a record number of carrier landings for jet squadrons for single cruise.

The thousandth landing was made by LCdr. Joseph M. Campbell. This squadron has spent six months in the Mediterranean area and is looking forward to its anticipated return to Jacksonville.

EUGENE R. MURRAY, LT. (JG)
PUBLIC INFORMATION OFFICER

● NAS OLATHE—The Navy's second annual "Boot" Training School at Olathe was time well spent for 125 Recruits who completed the eight-weeks' course.

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● THE COVER

NAS San Diego took this month's cover especially for **Naval Aviation News.** Posed on the 40' flight deck of the model Essex-class carrier is Cdr. H. C. Shaid, CEC, public works officer for the station, who was Santa Claus at Xmas parties. The USS **North Island** has appeared in many public functions and parades on the West Coast.

● BACK COVER

Lt. (jg) Ivan Campbell of VA-702 rolls his Skyraider over to join up with the rest of his flight. He and the Panther jet were returning from a mission against Communist supply lines in Korea.

● SUBSCRIPTIONS

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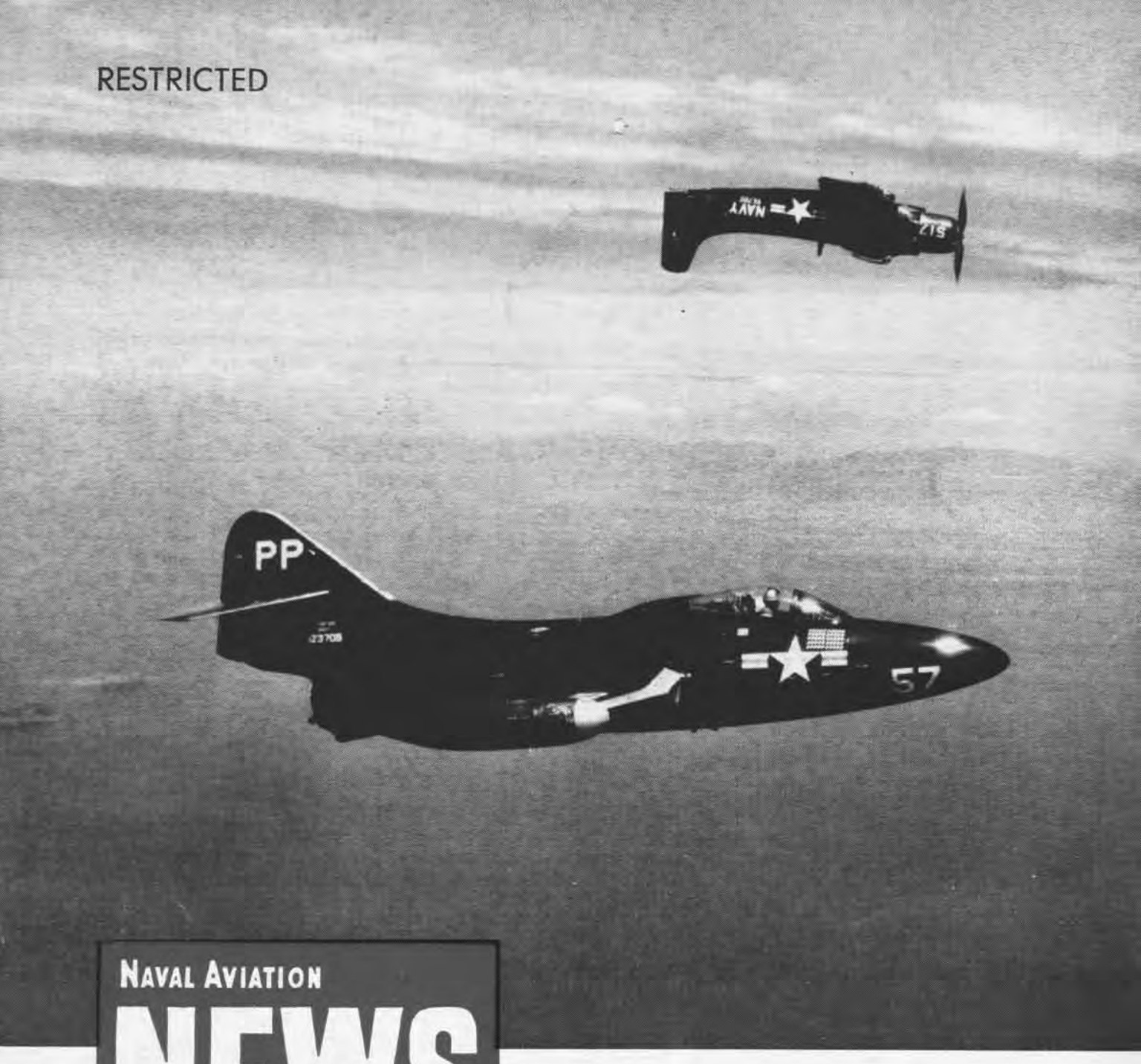
SQUADRON INSIGNIA IN KOREAN WAR

TWO RESERVE squadrons from the Middle West are carrying the fight to Communists in Korea, operating off the Boxer. VF-884 from Olathe features the Kansas Jayhawk on their squadron insignia, while VA-702, a Dallas attack outfit, has D-branded steer. Rocket, bomb, torpedo and mine point up its ordnance



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