

NAVAL AVIATION

# NEWS



El Centro Chutes  
Reserves Return  
NavAer 00-75-R3

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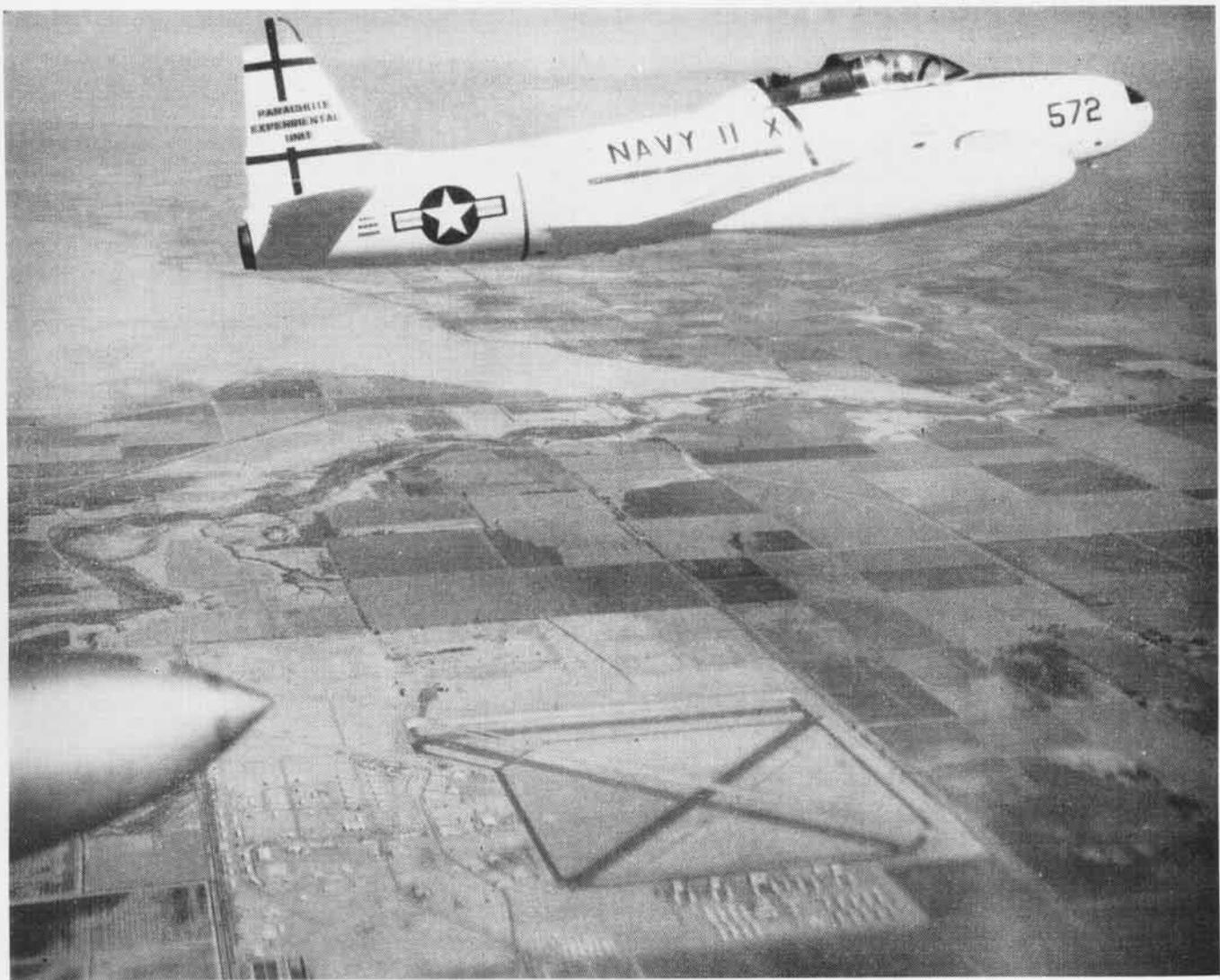




## O'ER LAND AND SEA

Navy fighters from the *Boxer's* all-Reserve air group comb Korean skies for enemy targets, like Yonpo airfield in North Korea, under attack by VF-721's Lt. (jg) Jack T. Davis; *Boxer* launches jets below.





# SPOTLIGHT ON 'CHUTES

**A**N EAR-splitting, teeth-rattling roar swept over the sagebrush desert of New Mexico. Thousands of eyes behind giant concrete bunkers and hundreds of telephoto camera lenses watched as the world's first interplanetary rocket spewed fire and smoke.

Soaring off into the stratosphere, the giant rocket set its course for Erewhon, the bright blue planet. A week later it would arrive, its fuel tanks empty, with its crew of Navy pilots and rocket experts.

Because Erewhon has no gravitation pull, the rocket will come in for a landing with no bump or jar. Out of it will come the pilots, encased in their fish-globe flight suits. No parachutes will be necessary because the rocket men will not have to crash-land. With no more fuel, it will be a one-way trip anyway. Pilots then will be expendable. . . .

But until that day arrives, the Navy

probably will have to have parachutes. Then, as now, it will use them to save its pilots in emergencies, slow down



EL CENTRO 'CHUTISTS BOARD JUMPING PLANE

high speed planes on landings, drop ammunition and supplies to ground troops and bring down target drones to easy landings.

For that reason, the Navy is constantly trying to improve its parachutes. The Parachute Unit, located on the dusty, superheated, dry ocean bed at NAAS EL CENTRO, Calif., is working at the task. It has 12 officers and 200 men.

Men have been flying airplanes since 1903, and pilots have been using parachutes since World War I days. Leonardo da Vinci conceived the first chute and a Frenchman named Garnerin parachuted 7,000 feet from a balloon in 1792 to be the first man to use one.

If the Navy could just keep flying F3B's and N2N's, there would not be any need for a better parachute than was developed in the 30's. But today's pilots fly 600 miles an hour. So parachute experts had to figure out how to save a



**PENSIVE EL** Centro enlisted man parachutists, each with different chute type or harness, await jump signal, some for the first time



**HEADS OF** the Navy and Air Force experimental units, LCdr. J. A. Morrison and Col. Leo C. Moon, check over TO-2 ejection plane

pilot's life when their best personnel parachute split at speeds better than 350 mph.

As restless as the ocean tides, the parachute unit at El Centro is continually trying out new ideas in parachute designs, new cloths and ways of using them. Over the past few years more than 40 different kinds of chutes were tried out and failed to make the grade.

Most inventors will try a new idea half a dozen times and, if it works, will rush out and patent their "new discovery." Not so the parachute people. They aren't satisfied to try a new parachute by having young parachute riggers jump in it even 50 or 100 times. They think in terms of 1,000's. If it stands up under all the rugged tests they can think up, after 1,000 live jumps they may admit it has possibilities.

That many jumps runs through a large number of courageous young men who flow through the Parachute Unit. Some make only a single jump and de-

cline to make a career of it. Others make scores, thrilling as they tumble thousands of feet through space, dreading only the opening shock that comes when they pull the safety ring.

The parachute experimentation going on at the former Marine Corps Air Station, now a Naval Auxiliary Air Station, is one of the best examples, too, of Air Force and Navy unification, because it is a joint operation.

The Air Force has just finished moving its parachute test work from Wright-Patterson field to El Centro. Col. Leo C. Moon, head of its experimental unit, has his office across the hall from LCdr. J. A. Morrison and the two units work harmoniously together, as a ground-level operation can do best. Morrison has headed the Navy unit the past two years and before that flew in the Berlin Airlift.

All down through their organization, the Navy and Air Force are as entwined in their parachute work as a schoolgirl's

braids. The Air Force operates certain things like the new whirl tower, paragon instrumentation lab, 140-foot drying tower for chutes, packing loft and fabric shop. The Navy runs the wind tunnel, textile laboratory, machine shops and metal shops.

The Navy's cameramen photograph every parachute drop test made by either service. It also tests its pilot ejection seats with live "passengers" at El Centro.

Big Fairchild *Packets* and R4D's soar over the desert "bullseye" drop area almost daily. Out of their open doors rush tough young seamen or sun-bronzed chiefs in football helmets, each with two parachutes attached to him—the second one "just in case".

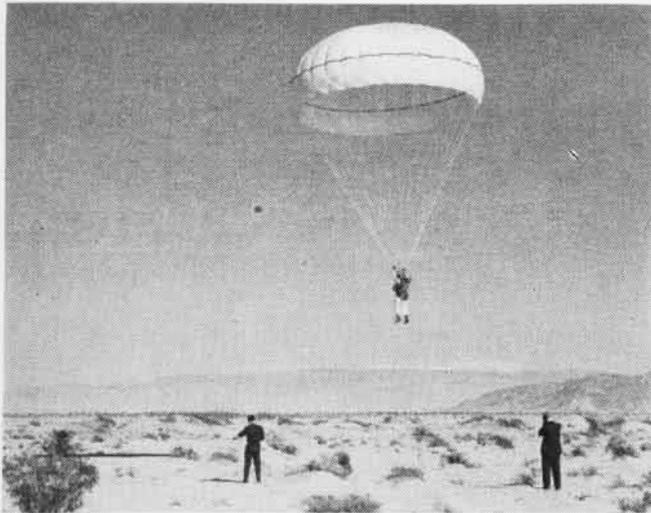
The champion jumper at El Centro today is wiry little Carpenter L. T. Vinson, who never has driven a nail but has 173 parachute leaps to his credit and is jumpmaster at the desert base. Lt. W. H. Freeman, operations officer,



**L. A. DAVIS**, PR3, floating in the salty waters of Salton Sea after dropping in by parachute to test new Mk 3 exposure suit; chutists make much 'softer' landings when they hit the water



**JUMPER TESTS** anti-G suit with chute harness built in and quick disconnect fasteners



**PROMISING** extended-skirt type parachute lets jumper down easier than regular but 1000-jump tests have failed to solve riser twists



**NAVY PHOTOGRAPHERS** record all parachute tests, Air Force or Navy; Photo Officer LCdr. H. L. Tacker supervises the cameramen

leads the commissioned officers with 68 jumps. The Navy's high man for jumps is ChMach C. E. Storm, who recently was transferred back to Lakehurst, the Unit's original home, after making 237 parachute descents. Vinson is the #2 man.

To Vinson went the "honor" of bailing out of an F3D jet escape hatch at 300 mph in the new Mk 3 exposure suit for pilots, to see if it had a "sail" effect at high speeds. The Parachute Unit made 18 water and over-land jumps in the suit to see if it was tough enough to withstand the high speed winds. It was.

Parachute jumpers were not especially crazy about that job. Some of the time the temperature at El Centro, the nation's hottest spot, was 120°, humidity 50% and the suit fairly airtight. The story goes one of them stretched the rubber wrist sleeve a little and out poured a quart of sweat.

Most of the jumps are made over

desert wastelands about 10 miles from the air station, where Fleet fighter and attack squadrons doing gunnery and dive bombing practice will not interfere. Sometimes the jumps are made over Salton Sea, that salty little lake which is 250 feet below sea level. Because of the water's density and an exposure suit's buoyancy, Vinson on one jump plopped into the lake and didn't even get his hair wet.

What manner of things can the Parachute Unit find to try out to keep its men jumping scores of times each week? Let's take a look at a typical day's jump calendar.

Fifteen men went up in the C-119 with its clamshell doors removed for better jumping, headed by Carp. Vinson. The men had on many different kinds of parachutes or rigging, some men merely jumping for the training and others trying out a special new gear.

L. F. Kobes, PR1, had one of the promising extended-skirt chutes. On his

harness he had a new canopy release being tried out, his chute had a deployment bag over it to slow down its opening time and it was equipped with a vane-type pilot chute. M. L. Cardwell, AA, had on a Navy standard back chute with new integrated G suit harness (see photo, pg. 2), while S. E. Robinson, AN, and J. R. Weed, AN, wore quick fit seat chutes with new concealed ripcord housings.

Some jumpers were to delay their openings a few seconds, some waited 12 seconds. Some went out at 3,000 feet, others at 5,000. On the way earthward, several set off orange smoke flares to aid photography. Their professional pride requires that they try to land on their feet in the resilient desert sand and not fall down. Out of the 15 who jumped that typical day, more than half succeeded in making "stand up" landings. They also shoot for a 100-foot white lime bullseye on the desert, but only one man in the group, F. B. Glover,



**NAVY'S STURDY** drogue chute for extreme speeds is held by Lt. William H. Freeman, operations officer, and LCdr. H. L. Tacker



**RIBBON-TYPE** parachute, patterned after German-developed type, falls too fast for men but used to slow planes, drop supplies



**EL CENTRO** jumpers in new exposure suit test: Groendabl, PR; Davis, PR; Cdr. Smith, Carp. Vinson, Lt. Freeman, O'Donnell, PR



**TARGET DRONES** like this KD2G being tested by NATTU El Centro are saved from destruction by chutes developed by the Navy Unit

PRI, hit the spot, from 5,000 feet up, a neat trick even in a calm day.

Jumping conditions never seem to be the same twice. Parachutists report that a man may get little shock when the chute opens and hit the deck light as a feather. An hour later the same man can go up in the same parachute and come down with a thud that knocks the breath out of him. Temperatures, wind and other mysterious factors seem to make the difference. A standard parachute lets a man down about 17 feet a second, but this rate can vary four or five feet a second for no apparent reason.

As was mentioned before, the Navy Parachute Unit believes in giving things a thorough testing. It has had several 1,000-jump projects in recent months. Two of the most interesting were ones testing a new chain-closed pack and trying out the extended-skirt parachute.

The latter idea involves a parachute with a smaller "mouth" to slow down the opening. Most parachutes from the

side look like an orange cut in half. The skirt chute looks as tho the cutter had sliced half an inch lower on the orange.

Between 7 June and 24 July, the jumpers tested the chain-closed pack 500 times in live jumps (using men, not dummies). They followed these up with 510 more tests before August 31. Some men made three and four jumps a day, which calls for excellent nerve and physical condition.

In this new pack, the old snap fasteners which held the canvas cover on a parachute were replaced with a zipper (slide fastener) which could be freed entirely by disengaging a pin at one end. The idea was found more reliable in cold weather because rubber bungee cord gets brittle. Steel springs built into the cover flip it off the parachute faster.

The extended-skirt chute design has been found excellent to cut down the 15 G shock pilots get when their parachute opens. The first test a new parachute has to pass is the low-level drop.

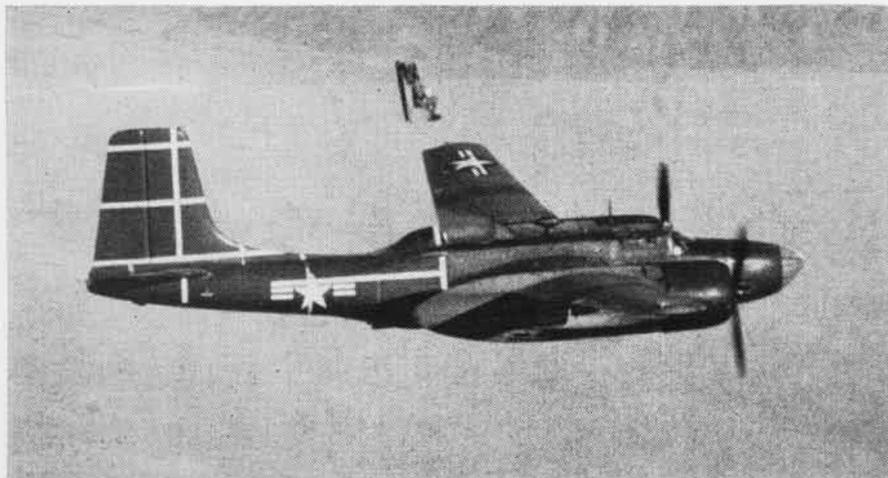
The extended-skirt design opened satisfactorily when dropped from only 200 feet altitude at 100 knots.

Parachutes are given all manner of tests before finally being accepted, including being pushed to complete destruction. The extended-skirt type represents the biggest step ahead in Navy chutes in recent years. Five years ago, the fastest a pilot could bail out with his chute was around 250 knots. When ripstop material was invented, this ceiling was boosted to around 325 knots. Technicians hope the 26-foot extended skirt with ripstop cloth will open slowly enough so a pilot can use it at better than 400 knots. Dummies have been dropped in a 28-footer at 500 knots without splitting the chute.

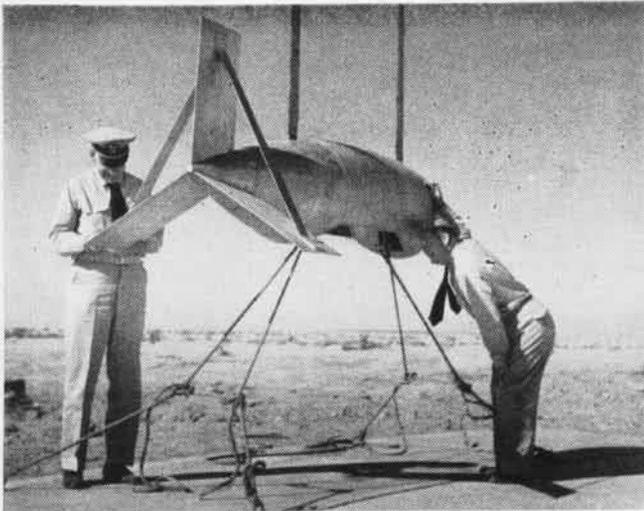
Not all of the parachute tests are made with live men in the harness. All kinds of large and small parachutes are tried out. Some have weights attached; others have 200-pound rubber-covered, torso-like dummies. Little five-foot chutes were wanted to carry down canteens of water to pilots forced down in desertland around El Centro. The Navy had to find out whether that size, or a six or seven-foot chute would let the canteens down easy without rupturing them.

An eight-foot chute was attached to an ejectable film cassette and tried out for size. Another orange-and-white striped parachute for Arctic drops (*see cover picture*) is being tried out with extended skirts, plus a reefing cutter so it will not open fully for three seconds after dropping.

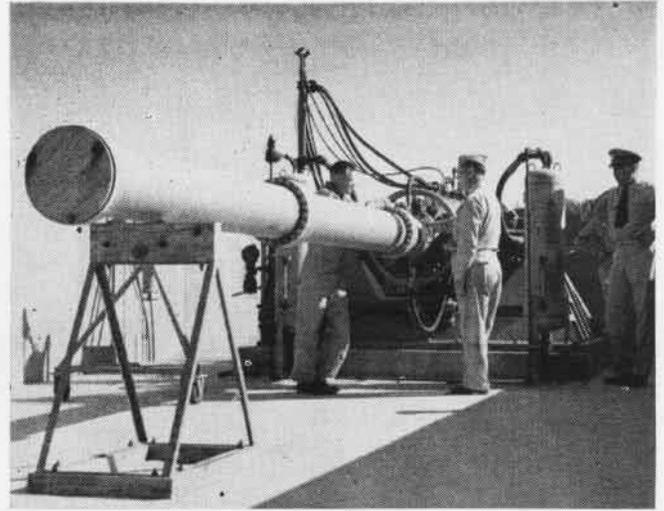
All manner of parachutes to drop supplies in Korea have been or are being developed. Another model chute is being dropped with a dummy, with its risers purposely twisted three times to see if it can untangle itself. That has been the toughest problem for the



**ONE OF** toughest jobs at El Centro is live testing of jet fighter ejection seats; here CMach C. E. Storm is blasted out of Unit's JD-1, higher speed tests employ the TO-2 jet plane



**LCDR. J. A. Morrison**, head of Navy parachute unit; **LCdr. Ward D. McCabe**, chaplain, examine Air Force whirl tower chute 'bomb'



**COMPRESSED** air projects missile with a parachute attached from this Air Force paragon, being inspected by Navy chutists

skirt-type to surmount in all these months and hundreds of live jump tests. If it won't untwist with a man in the harness, the Navy doesn't want it. The extended-skirt chute has been so good in every other kind of test, the Parachute Unit is trying every angle to get over that one lone hump.

Incidentally, a jumper after he gets back on the ground, if he wore a chute the Navy was testing, is interviewed by project engineers immediately upon landing to see how it worked. When a dummy is used in a chute, a telemetering system enclosed in a can-like container, is inserted in the neck of the dummy.

This sends back messages to ground radio station listeners on seven channels, telling them what is happening as the chute floats groundward. It measures tensions in the risers and gives a complete time-record of the drop. Dummies have been given up to 30 G's of shock in parachutes, indicating how strong the Navy is building its chutes.

The Navy is working on the idea of a tiny telemetering system which it can attach to a parachute jumper's person to send back scientific data on his rate of descent, duration of G shock and the like. Human beings have withstood sudden stoppage forces higher than 100 G's for a fraction of a second and lived. A man can take three or four G's for a second or two without blacking out, but in higher G levels the duration has to be drastically lower. That is why the Experimental Unit is working with the extended-skirt chute, the deployment bag and other ideas to keep a chute from opening so quickly and causing a heavy G shock.

When the armed forces in Korea demanded survival kits be dropped to pilots downed behind enemy lines, the

Unit designed, developed and tested a nine-foot chute for the kit and had it ready for use in 29 days.

Another project involves improving the ripcord housing on seat pack chutes, while a third is working to incorporate the pilot's safety belt and shoulder harness into one release point. If the harness can be incorporated in the G suit, there will be that much less to hang on the already-overburdened jet pilot. Having one place to unhook would be simpler than unplugging the oxygen line, microphone, G suit and seat and shoulder harnesses. The Navy is working toward that goal.

Not all parachute tests are for pilot chutes or for dropping parcels to ground troops. El Centro is working on chutes for ejection seats, ejection capsules and "eggs" and for guided missiles and drones. Man has yet to find a substitute for the parachute when it comes to let-

ting something or somebody down easy from altitude, so the Unit's job is never ended.

Besides finding the right size and shape for a parachute, it also has to decide the kind of fabric it should be made of. Some parachutes are of mesh cloth that lets air leak through faster than standard nylon cord. Germans developed a ribbon chute which was too bulky and fell too fast for pilot use but has been adapted by English and U. S. activities to slow down planes during landings. Little target drones, which are tested at the NATTU at El Centro have no landing gear and are saved from destruction by popping a recovery chute at the end of their flight. Since drones are different sizes and weights, the right parachute for each one had to be determined.

Another sidelight of the Parachute Unit's many-sided work is its experi-



**UNUSUAL PHOTO** shows five El Centro parachute jumpers in air at one time over desert; some projects call for 1,000 jumps before new chute design or harness is given final approval

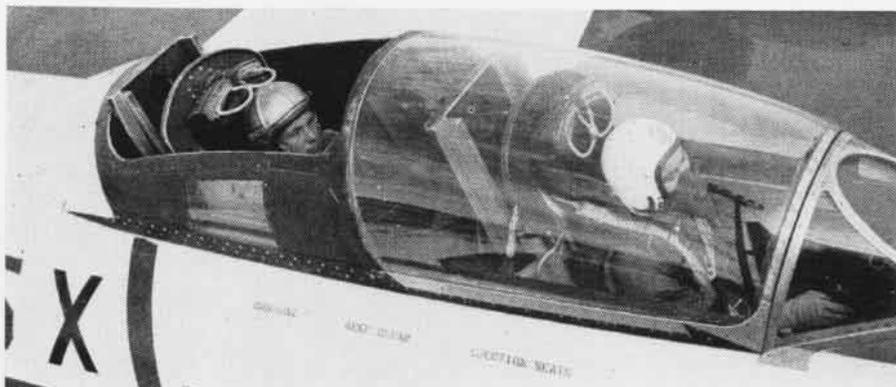
mentation with pilot ejection seats. Each of the manufacturer's seats—Grumman, Chance Vought, McDonnell and Douglas—was tried out with three live ejections at El Centro to see how the seat and its parachute system worked.

The Unit supplies "cowboys" to ride the seats out and report on their functioning. The contractors' seats have been tossed out of the JD-1 plane at speeds up to 250 mph. and a fifth seat developed at the Naval Air Material Center was fired with a dummy from a TO-2 jet at 450 mph.

As with all parachute tests, the Unit photo section has a jet photo plane flying alongside to record on film the sequence of the seat's emergence. By studying its action in the high speed slipstream, the Unit can determine the type and size of drogue parachute necessary to slow the seat down and how big a main chute is needed to bring the costly seat down without wrecking it, so further tests can be made with it.

The Navy is in the process of developing one standard ejection seat which will be placed in all jet fighters, to eliminate any confusion from slight differences in maintenance and operation of the four seats now in use. This NAMC seat has been given 16 dummy tests in the air by the Unit and a total of 40 is scheduled. The seat is tested with and without drogue stabilizing chutes and long and short delays in parachute release after ejection.

Since so many Fleet and Reserve squadrons use El Centro as an operating base for gunnery and dive bombing, emergencies arise where planes are down in the empty desert spaces. To meet this need, the Experimental Unit has organized an airborne parachute rescue team. Two pharmacist's mates were checked out in parachuting, to-



**LOOKS SORT** of breezy; F. B. Glover, PR1, in open-air rear cockpit of TO-2 jet about to take off and test ejection seat built by NAMC; Pilot of plane is C. A. Wightman, ADC (AP)

gether with four regular jumpers, led by Carp. Vinson. The men carry medical supplies and other necessary items with them when they jump.

When the Air Force moved its parachute experimentation to El Centro, it brought along two interesting new devices to test parachutes at high speeds. One is the whirl tower, a 100-foot tower with rotating arm, suspended from which is a bomb-like container. At supersonic speeds, this container is released, to fly out over the desert and free its parachute.

The other device is a paragon which uses compressed air to shoot out at high speed test missiles equipped with parachutes. Both pieces of equipment will be used to help the Navy also solve its high speed problems.

In addition to its other jobs, the Unit recently made bailout tests for the AF-1 attack plane. The aircraft was jacked up and slipstream from another plane's prop in front of it was used to test whether pilots could bail out of the AF without too much difficulty. Because of the two extra vertical tail fins, it was

feared bailouts might be dangerous.

The tests showed that if a pilot had to abandon his plane, the console on the right hand side was too high for safe exit. He should go over the side on the left, diving for the leading edge of the wing. The test indicated bailout would be successful if done in straight and level flight and under 160 knots. Some trouble with hitting the stub antenna and gas tank filler cap on the wing might be met when leaving the plane.

As was mentioned, the Unit over the past few years has tried out 40 different types of parachute designs and materials, trying to find the best for the Navy pilot. Some had highly porous material in the peak to let air escape; others had peaks that would stretch under pressure or had elastic gores.

Some shroud lines or riders were made of elastic material or undrawn nylon. Chutes came in the shape of cones, baseballs, triangles, lobes, squids, with multiple or collapsing canopies. Some had hesitator canopies which deployed first, slowing the jumper before the main chute unfurled to let him down.



**PARACHUTE** rescue team, Anderson, Chenault, Glover, Vinson drop survival pack from air



**AIR FORCE**, Navy men work side by side in machine shop; Sgt. Winquest, Cordes, AMS2



**INSERTING** telemeter gear in 200-lb. dummy neck is AT1 Haig while Morrison looks on

## Carriers Have Big Hearts Homecomings See Special Ceremonies

Crews of aircraft carriers undertake numerous charitable projects which help morale and show the humane touch often missing in wartimes.

When the *Princeton* came back to San Diego last fall from Korea, it was a special homecoming, complete with a "queen"—17-year-old Jane Taylor. Paralyzed from the waist down since she was born, Miss Taylor was selected through the San Diego Chamber of Commerce. A court of four little girls was selected for her "court"—Negro, Filipino, Mexican and white—representing a cross section of the *Princeton's* enlisted men.

The girls were completely fitted out with clothing and a \$5,000 gift fund from the men was given Janie, administered by three San Diego businessmen. Following her coronation, a week of interviews, television shows and honors were showered on Queen Jane.

When the *CVE Sicily* came home from Korea, a typical mother, Mrs. Arnold Little of Greenburg, Ind., was on the dock to greet it. Selected from a list of mothers of single men on the carrier, Mrs. Little's expenses to the coast were paid by the ship. Her son, Edgar, was flown off the ship by helicopter as it neared port and helped greet it on docking. She, too, received the full treatment of civic honors.

The carrier *Bon Homme Richard* held a dance and raised 47,000 yen for the Syunko-Gakuen orphanage at Yokosuka, Japan, and gave them an ice cream party before presenting the check. Another carrier, the *Philippine Sea*, financed the law education in the U. S. of a Japanese youth, Shigeru Ebihara, 27, who had become friendly with the crew while in Japanese waters. He will go to the University of Michigan.



LT. FEES SHOWS WHERE BULLET ENTERED HEAD

## Bullet Bores The Lieutenant Sniper Performs Second Tonsillectomy

A present the Commies had for Marine First Lt. Fred J. Fees practically went in one ear and out the other. It was a hole in the head.

In the middle of an air strike where the fighter-bomber pilot was acting as air controller, Fees got a sniper's bullet which smashed his right earphone and entered his cheek under and in front of his ear. It passed through his throat, bored through his left jawbone and came out a half inch from his left ear.

Unable to talk because of the blood in his throat, Fees handed the microphone to the Corporal who carried the radio and whispered directions to be relayed to the pilots.

Fees was relieved by another pilot and evacuated by helicopter. The pinwheel pilot was in worse shape than Fees because the wounded man insisted on sitting with the pilot and talking with blood streaming from both sides of his head.

Four days later, after a short stay aboard a hospital ship, he returned to

pay a visit to his friends. He exhibited no shock symptoms and wore no bandages over the neat round holes. His only discomfort was a shattered right jaw bone that was wired together.

"I never did feel any pain," Fees said, "except when the doctor wired me up. I did have a sore throat. The doc said my tonsil operation years ago was a waste of money. This would have removed them."

## VR-24 Helps Set Up School Flies Desks, Books, Teachers to Naples

Supplying mail and other services to the Sixth Fleet is not the only task of Air Transport Squadron 24. Recently the squadron undertook an operation, aptly named "Schooldays".

Before school could meet, children of dependents at the newly-opened CINELM headquarters in Naples had to have equipment and supplies—to say nothing of teachers. So children's desks, teachers' desks, book cases and file cabinets were manufactured in Germany. Books and other supplies were gathered together. Then everything was carted in huge vans to Rhein-Main for airlift to Naples.

VR-24 then got into the act. Two R5D's took off for Rhein-Main. One, piloted by Lt. V. G. Short was routed via London. The other piloted by VR-24 skipper, Cdr. J. A. Smith, flew non-stop.

At Rhein-Main, the heavy cargo was stored aboard the R5D's in one afternoon, and the crew was able to take time out that evening to do a little Christmas shopping in Frankfurt.

The next morning, after the teachers were escorted aboard, the R5D's took off for Naples. Four hours later they arrived at Naples. Schoolteachers, desks and supplies were delivered. And "Operation Schooldays" was completed.



PAN MUN JOM AGREEMENT reached as UN and Communist officers sign agreement after 11 days of attempts to reach mutual agreement on detailed security provisions for the UN Base Camp at Munsan, the military armistice conference site at Pan Mun Jom, and the Communist field headquarters at Kaesong.



ADM. ARTHUR W. RADFORD (left) Commander in Chief, Pacific and U. S. Pacific Fleet, receives farewell handclasp of Gen. Matthew B. Ridgway (right) Commander in Chief Far East, upon completion of Adm. Radford's tour of Far East military units. He said, "We are stronger today in Korea than ever before."



# GRAMPAW PETTIBONE

## 20 Knots Over Mach

The spine-chilling paragraphs below are taken from the statement of the surviving member of a two-plane F9F flight which left NAS DALLAS for Maxwell AFB on a VFR clearance.

"Just west of Tyler, Texas, it became evident that we could no longer remain VFR because of the huge buildups and thundershowers ahead of us. We made a very large climbing 360 and refiled IFR. Before entering the clouds at 26,000 feet, I turned on pitot heat and cabin temperature to full hot. We continued climbing and at last check of altimeter read 38,500 feet. My ADF needle was making complete revolutions and MDF was nothing but static, no null or signal. Both ADF and MDF worked well before in clear weather.

"From then on it was all I could do to keep Captain ..... in sight and stay on his wing. We never hit a clear or thin spot. After about 20 minutes at this altitude, I noticed the lead plane's canopy frosting up on top. A check of my own revealed the same thing, so I rechecked the temperature controls and went back to concentrating on flying wing.

"In a few minutes I could hardly see through the ice. I have reason to believe there was some ice on the outside. I lost sight of Captain ..... and immediately began to wipe the canopy with the rough side of my glove but did not do any good. It took a few seconds to go from contact to instruments and I found I was in a right bank, maybe almost inverted. I leveled the wings and found my airspeed about 20 knots over the limiting Mach. I pulled the power off and tried to pull out but couldn't, so put the dive brake control in down position. This didn't seem to slow me like it usually does and I still couldn't pull out.

"At 19-20,000 until 13-14,000, I was in between two cloud layers and from what I could see, in a wings level steep dive. I re-entered the clouds and jettisoned the canopy. Decided I would bail out if I had not recovered by 4000 feet. By 8500 feet I was fairly level with 505 knots and no power. Went through a hole and did a steep turn to get back to it, where I orbited until I was down to 250 knots. Then I let down until I was VFR which was about 1800-2000 feet.



Sighted a small town to my left and made several low passes over it to identify it as Waskom, Texas. Barksdale AFB tower told me to fly 087 degrees but my magnetic compass was not settled and the G-2 compass was spinning—so I followed the highway to Shreveport.

"All the time I was going down, I had continuous lightning flashes on my canopy and very severe buffeting. My accelerometer read six positive and two point seven negative when I had recovered. Captain ..... gave me instructions all the way down, and when I told him that I was going from a clear area back into the clouds and still could not get out of the dive, he told me to bail out. When I recovered, I told him so and he acknowledged it, but when I found I was over Waskom, I could not contact him."

This pilot subsequently landed at Barksdale AFB in a heavy rain storm. The flight leader who followed him part way down, also became disoriented. He finally reported that he was in the vicinity of Lake Providence, Louisiana, and was taking a heading for Jackson, Mississippi. Later he radioed that he was very low on fuel and was preparing to ditch. An extensive search has not discovered either the F9F-2 or the pilot.



**Grampaw Pettibone Says:**

When I finished reading the wingman's statement, I felt like I had just been talking to a dead man who came back to tell us just "how it happened."

One fact that stands out in this accident is that each of these pilots could probably have gone through the storm had they not been in formation. Both were evidently well qualified instrument pilots. The wingman got into his initial difficulty by trying to stay in formation after his windshield and canopy had iced up. The flight leader's efforts to help him resulted in his getting lost and later losing his life.

In an emergency of this sort, it seems to me that little can be gained by a flight leader reversing course and remaining in the thunderhead, even though he is motivated by a desire to help his wingman.

When the weather conditions deteriorate to the point where ability to stay in formation first becomes doubtful, that's the time to take up a planned separation. Then continue on the original course "on the gauges" until breaking out in the clear. Any other course of action risks the possibility of a mid-air collision or a sudden, unexpected shift to instrument flying for the wingman. This is particularly dangerous if the wingman loses sight of the lead plane in a turn, because then he must fight against vertigo as he shifts to his instruments.

## Dear Grampaw Pettibone,

The USS *Wright* (CVL-49) now has a total of 1,373 consecutive arrested landings aboard without an accident of any kind. We are quite proud of this and believe that it may have set some sort of a record. . . . Would appreciate your checking to see what the all time record number of consecutive accident free arrested landings is.

These landings were made while the ship was engaged in intensive refresher training and while taking part in the big Atlantic Fleet Lantflex 52 Operation. During the Lantflex operations the *Wright* took all emergency landings for her task group, took all the night landings, and still came through without a scar.

You might be interested to know that the *Wright* last week had its 40,000th arrested landing aboard, all without a single fatality. We think that, too, is something to be proud of.

Ensign, USN.



**Grampaw Pettibone Says:**

Your question is a tough one to answer. If you haven't set a record, you are well on the way. If any other carrier has a better record, we'll no doubt hear about it as soon as this gets in print.

Congratulations to the *Wright* on this

fine safety record. You might be interested to know that, according to the statisticians, the "average carrier" would have had approximately five accidents in that number of arrested landings.

## Make Sure That It Fits

Last month the first of the new Mk-3 continuous wear exposure suits were shipped by air to squadrons in the Korean Theater. By the time you see this in print, distribution should be starting for stateside carrier type squadrons.

There's an excellent training film available to show how the suit should be individually fitted. This movie was produced by the Naval Photographic Center in the record time of a little over a week in order that it might accompany the first shipment of suits.

The movie number is MN7458, and the Technical Note dealing with the new exposure suit is No. 21-51.



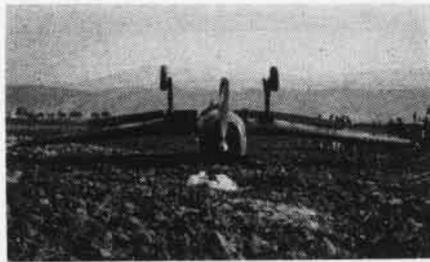
*Grampaw Pettibone Says:*

There are few items of equipment that have caused more gripes than exposure suits. I think you'll find the new model far more comfortable than you may expect. The outer suit is constructed of a "moisture vapor permeable, water impermeable coated fabric," which is a polite way of saying that your sweat won't have to collect around your ankles just because the suit is really water tight.

## Vets Talk Combat

Eight Marine airmen, all veterans of more than 80 missions over Korea, recently passed along information to pilots of MAG-15, slated for future duty with squadrons overseas.

Profiting by someone else's experience is by no means an outstanding trait of humanity, but pilots of MAG-15 may save themselves many hardships through the experience of these veterans of a hard-bitten campaign. The battle-tested pilots stressed the importance of coordinated thought and action when disaster is imminent. They all pointed out the terrific job the helicopters are doing as a rescue team and felt that casualties would be far greater without their help.



## No Smoking, Please

The pilot of the inverted F6F pictured here spent a very uncomfortable hour waiting for the arrival of a crane, so they could get him out.

Following a couple of barrel rolls which he began at an altitude of 8,000 feet, his engine began to misfire. It soon began to backfire so much that he was unable to maintain altitude. Despite changes of manifold pressure, RPM, and the use of emergency fuel pump, he was unable to get the engine to run smoothly.

Realizing that he wouldn't be able to return to his home field, he headed for a nearby airport. While some distance away, he saw that he was losing altitude too fast to make this field and that he would be forced to select a spot for an emergency landing. About this time he spotted a short dirt strip close by and decided to make a landing on this field. His engine quit completely at 900 feet and his position was such that he had to make a downwind approach.

He decided to try it with wheels extended. Although he touched down fairly close to the end of the strip, he was unable to stop and the F6F turned over on its back when it hit a ditch about 20 yards beyond the end of the runway.



*Grampaw Pettibone Says:*

I don't envy this chap hanging upside down for an hour while they brought the crane, but perhaps that was safer than attempting to dig him out. He wasn't injured except for minor bruises on his right arm. It was about ten minutes before some people arrived, and he had the presence of mind to warn them at once not to smoke.

The cause of the engine failure is not known. When a new prop was installed, the engine ran all right after considerable

priming. The accident board was of the opinion that the most probable cause of the misfiring and eventual failure was an air lock or vapor lock in the carburetor.

The pilot states that he was operating on the right main gas tank which had 55 gallons of gas. He did not shift tanks or make use of the primer in an effort to restart the engine.

His decision to land with his wheels down, although the strip was short and he was forced to approach from downwind, was motivated by a desire to avoid damaging the plane. Experience shows that this doesn't work very often in emergency landings.

A good general rule to follow is: In an emergency landing, if you have any doubt about the terrain, leave the wheels up. The ground is always rougher than it looks.

## Don't Shoot Your Friends

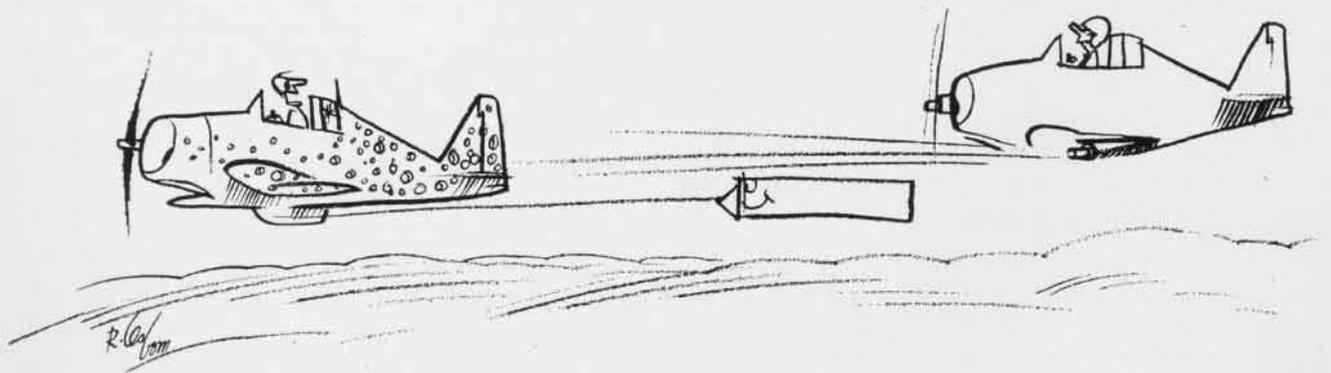
There are societies for the prevention of just about everything, including one known as The Society for the Prevention of Disparaging Remarks About Brooklyn.

After an incident, which occurred not too far from Flatbush Avenue, I wouldn't be at all surprised to find that a S.F.T.P. O.C.T.T.P.\* has been formed.

On returning from an authorized gunnery flight, the pilot of an F6F which had been used as tow plane noticed a couple of holes in the trailing edge of his starboard wing just above the flaps. Investigation revealed that these holes were made by .50 caliber bullets.

The pilot had been towing a 25A aerial target banner which was trailing approximately 900 feet behind the plane. During the gunnery flight, several course changes were necessary in order to remain clear of the gunnery flights. All of the pilots in this particular flight were sure that they were not in a position to hit the tow plane during their firing runs, and it is possible that the bullets came from a plane in one of the other gunnery flights. In any event, the path of the bullets through the wing indicates that they were fired from a position about 10 degrees off the stern and in a rather flat attitude.

\*Society For The Prevention Of Cruelty To Tow Pilots.





THE NAVY'S two newest transport aircraft, both products of Douglas, are shown flying over Terminal Island, Calif. They are the R4D-8, the Douglas naval version of the Super DC-3, and below it the military configuration of the DC-6-A, known as the R6D. Both aircraft have been ordered by the Navy in substantial numbers and some have been received.

### R6D Makes Maiden Flight Test Trip Is Pleasure for Copilot

NAS BARBER'S POINT—The Navy's newest air transport model, the R6D, landed at this station recently on its maiden flight. The trip from Moffett Field was completed in nine hours and 25 minutes.

Capt. C. E. Colestock, CO of VR-5, and four civilian specialists and technicians made the test trip.

The sleek new air cruiser resembles the R5D in body structure. It is the result of meticulous planning by top aeronautical wizards in cooperation with other engineers, pilots and mechanics in the field.

One of the main features of the R6D is its pressurizing mechanism which begins operating immediately upon take-off and maintains normal atmospheric conditions within the plane. Another innovation is the reversible-pitch propellers.

It is capable of carrying 79 troops and can be converted to accommodate 60 litter patients. Primarily, it will be used in Navy air transport work in the Pacific area.

Lt. C. E. Morrison, copilot on its maiden flight, claims that while it was a job to fly the R5D, it's a pleasure to fly the R6D.

### Pilot Chooses Big Carrier Makes First Landing in Six Years

During recent *Lantflex '52* operations, Lt. Ralph W. Ashbridge of VF-13 lost his auxiliary fuel tank after diving at

an intercepting jet. He informed his section leader of his predicament and was told to pick the biggest carrier for a landing.

With only 100 gallons of gas left, he had to find a roost quickly, even though it meant being captured by enemy forces. He sighted the *Kula Gulf* and explained his situation. He and his section leader were ordered to land.

The flight deck was cleared on the double, and Lt. Ashbridge attempted his first carrier operation since his recall to active duty. He brought his F4U down on the deck of the escort carrier with little or no trouble, showing how well he had originally learned his vocation. It was the first time in six years he had attempted such an operation.

### P2V's Purchased by RAAF Crews Trained at Naval Air Stations

NAS BARBER'S POINT—The first two of 12 P2V *Neptune* patrol planes purchased by the Royal Australian Air Force paused here briefly for refueling on their flight to Australia from Moffett Field, California.

Headed by Wing Commander David Vernon of Sydney, the P2V's will start the recommissioning of No. 11 Squadron to be located at Perth, Australia.

The thirteen crew members have been under instruction in the United States since early in June at NAS SAN DIEGO, NAS WHIDBEY ISLAND and NAS ALAMEDA.

The Royal Air Force also is purchasing P2V-5's for patrol use, crews picking the planes up at Lockheed plant.

### Attention, Navy Pilots!

It has been discovered that some activities are not aware that a *Revision to the Navy Pilots' Information File* (NAVAER 00-80-T-33) is now available.

As indicated in the *Naval Aeronautic Publications Index*, copies of this *Revision* may be obtained from the nearest major supply point for aeronautic publications. Officers in the Washington area may also obtain copies of the *Revision* from OP-542D, Navy Department, which has a small quantity on hand for local distribution.



TWO historians of Naval Aviation recently were honored by CNO Adm. Fechteler; above; Dr. Henry Dater receives the Distinguished Civilian Service Award; below, Adrian O. Van Wyen receives Meritorious Service Award

### Capt. Diehl Wins Award Honored for Aviation Research in 1951

Capt. Walter S. Diehl (Ret.), now vice chairman of the NACA Committee on Aerodynamics, was recently presented with the National Air Council award for his contributions to the field of flight in the transonic speed range during fiscal 1951.

Each year the awards are given to that member of the Navy and of the Air Force who contributed most in the previous fiscal year in the field of aviation experiment and research.

Capt. Diehl is credited with laying much of the groundwork leading to the establishment of the David Taylor Model Basin, the Aircraft Research Station at Chincoteague and the Navy's flight test unit at NAS ANACOSTIA.

HOW it got back, the pilot and crew don't know, but rotor lasted for trip to Munsan

### Rescue At Dusk

A record long distance helicopter rescue with all the suspense of a movie melodrama was enacted over Korea when an Australian pilot, Sub-Lt. M. D. MacMillan, flying his *Firefly* from the Australian carrier *Sydney*, was shot down after a successful tunnel bombing.

MacMillan and his crewman, Observer 1/c C. J. Hancox, landed in the midst of an enemy group. Using the *Firefly's* machine gun, and with the help of *Sea Furies* overhead, they held the enemy at bay.

The *Sydney* called for assistance from a land-based helicopter unit, but there were grave doubts whether the trip could be made before dark. At 4:20 p.m., the *Sydney* sent off the U. S. Navy helicopter based aboard, with two *Sea Furies*



# KOREAN AIR WAR

as escort. Air Group Commander Fell swooped low over the airmen and was hit by gunfire and had to make a landing at an airstrip. Some *Meteor* jets joined the party over the downed airmen.

By 5 p.m. the shore-based helicopter was ordered home because of approaching darkness. *Sydney's* helicopter, manned by Aviation Pilot A. K. Babbitt and crewman G. C. Gooding, passed the other 'copter on his way back.

The *Sea Furies* were ordered to leave because of fuel shortage, and the *Meteors* had to give up for the same reason. The *Fury* pilots decided to remain a while longer, regardless, to maintain the patrol.

Aboard the *Sydney*, a commentary on the rescue was broadcast through the ship. As the clocks ticked on and dusk

approached, their anxiety increased.

At 5:25 the helicopter spotted the men on the ground by their machinegun flashes. As the pinwheel landed Gooding jumped out and shot two of the enemy who had approached within 50 yards. The three men jumped into the helicopter.

Triumphantly escorted by the *Sea Fury* pilots who stayed on 15 minutes extra, the 107 miles stretch back to the carrier was flown in darkness. All landed safely.

### Pinwheel Wire Layers

The longest and fastest bit of telephone line-laying ever done in a combat zone was the feat accomplished by Marines on the Korean eastern front during a recent airborne infantry operation.

After their HRS-1 helicopters discharged "waves" of infantry troops on a new hill position, wire teams of the First Signal Battalion laid 24 miles of telephone line.

Two wire teams alternated in laying two lines from the helicopter, double assurance of communication between the hill position and a command post more than 10 miles away. Sgt. Duane S. Wimmer and Cpl. Gerald F. Skorupski laid out the first line and Wimmer teamed with Cpl. Arthur J. Ryan to lay the second.

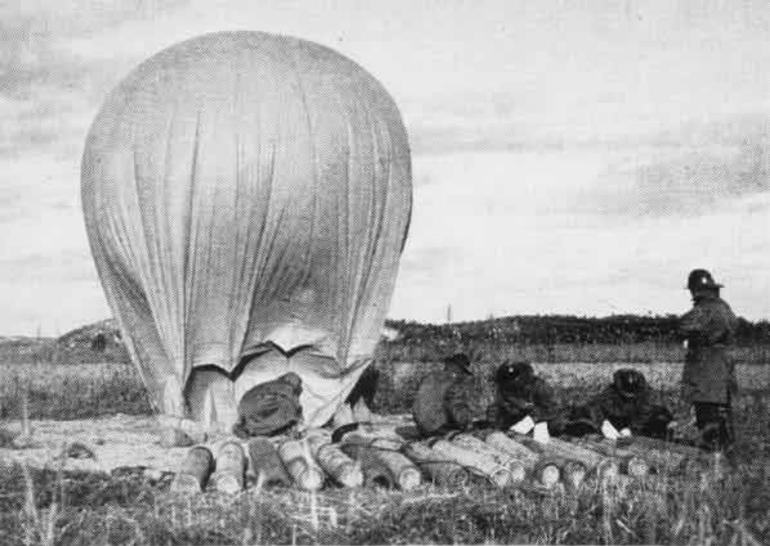
In a few hours, the Marines had done a job of wire-stringing that would have taken three or four days for ground teams to handle. If the latter had handled the job, some probably would have been killed by enemy fire.

PICTURES of combat planes in act of shooting cannon are rare; here is Panther, piloted by Lt. Peck, firing 20mm at Hungnam



NEW STYLE transportation for staff of Commander Carrier Division Three is shown in transfer from Paracutin to Bon Homme Richard





THOSE balloons which warn straying aircraft from truce talk site of Pan Mun Jom look like this; workers protected from hydrogen



ROYAL CANADIAN NAVY skippers Cdr. Taylor, Cdr. King plan future operations on USS Rendova with Cdr. J. J. Maechlen, Op. officer

### Corsair Versus Cable

As Maj. George Herlihy pulled up from a valley to avoid smoke in his Marine *Corsair* "Nightmare" night fighter a tower loomed at him atop a hill.

As he whizzed by, Herlihy heard a collision and pulled up sharply to gain altitude. He had clipped a  $\frac{5}{8}$ " guy wire on the tower.

Back at his field inspection revealed that a large section of the right wing was ripped out and a piece of the five-strand wire dangled on it as a trophy.

### Jets Wreck Airstrips

Landing strips in Korea pose new problems in construction. Unlike the World War II counterpart, today's strip handles jet aircraft.

Jet exhausts have the unhappy faculty of blasting away dirt and stone foundations under pierced steel planking. The runways were wrecked even after a layer of asphalt was put under the matting. Jet fuel softened it for the kill.

Present method of solving the problem is to put a two-inch layer of asphalt under the planking with the hope that added thickness will hold the raveled asphalt until the jet fuel dries.

Another solution tried with good results is to apply a layer of coal tar over the asphalt. It is not soluble in jet fuel.

**DON YOUNG, SA**, flew from own ship to *Boxer* for reunion with brother, Lt. John Young



Runways must be constructed with table-top smoothness. Napalm tanks under the wings of planes have only three or four inches clearance. A slight irregularity will cause a tank to scrape and explode.

### Corsairs Do a Job

"Good work, Navy. Best strike we've had in weeks," was the thank-you message two *Corsair* pilots aboard the *Boxer* received after they had clobbered an enemy ground position during a close air support strike in Korea.

The fliers, LCdr. Altus E. Bradley and Lt. John Adams, from Olathe Reserve air station, destroyed three Red machine gun nests, two mortar positions, a fortified bunker and 70 enemy troops on two ridges close to advancing United Nations troops.

The airborne controller led the *Corsairs* to the enemy-held slopes, then a ground observer took over and spotted targets for them. On the first run, they napalmed the Communists, causing many to scramble out of their positions. They ran back to their trenches after seeing the napalm bombs drop.

Lt. Adams' napalm did not explode so Bradley turned and strafed it, exploding the jelled gasoline. Enemy troops, caught by surprise, were engulfed in the flame, eliminating one enemy position.

**FIRST** Marine pilot to shoot down a MIG-15 was exchange pilot Capt. Guss flying F-86



### Tender Dodges 'Ruth'

Ever hear of a Navy ship that ran away from a woman? Here's one that did.

Usual routine of an aircraft tender is to remain anchored in some harbor, nursing a group of seaplanes. Not so the *Gardiners Bay*. That doughty ship spent part of October dodging a typhoon in the western Pacific.

Shortly after arriving at Iwakuni, Japan, from the U. S. for her second tour in Korean waters, she upped anchor for Buckner Bay, Okinawa.

No sooner had she assumed her duties there than typhoon *Ruth* threatened. To sea again she went. Nearly 2,000 miles and six days later she returned to Buckner Bay, after dodging *Ruth* during that time.

Travels were not over, however. She was relieved by the *Salisbury Sound*, then proceeded to Manila. Eventual destination was off Kowloon peninsula near Hong Kong.

### High Priced Labor

While helping repair an airstrip, 1st Lt. Charles Edmundson needed aid in replacing one of the pierced steel planks.

Without looking up, he told the nearest man to hold it while he swung a sledge hammer. The man complied.

**FROM** rescuing British destroyer to *Rendova* comes LCol. Brilliant, shot down by AA





**A SQUIRT** of gas from flame thrower and a phosphorus grenade chase hidden guerrillas

"Now move it around here," he ordered. The order was carried out silently and quickly. Edmundson removed a piece of bent steel with a few deft strokes then looked up.

His "helper" was MGen. Christian F. Schilt, commanding general of the First Marine Aircraft Wing, striding away wiping his hands on a handkerchief. Lt. Edmundson's men stood grinning.

"He's a good man," one of them ventured. "We could use him permanently." Edmundson wasn't able to speak.

### Commuting Carpetbaggers

Air Group Two, which saw duty on three carriers in ten months, has a member who once was the Naval Air Reserve's champion long distance commuter.

LCdr. L. A. Patterson, now the group's maintenance officer, used to make 770 mile round trips semimonthly between Buffalo and Willow Grove (Philadelphia) to drill with his organized reserve outfit.

As maintenance officer he points to a six months availability or aircraft of 87.2%. His "commuting" is aboard ships now, really long distance.

The "Carpetbaggers," as the group members call themselves, served on the *Boxer*, the *Valley Forge* and the *Philippine Sea*.

**PERHAPS** the most unusual menu served to a whole crew appeared aboard *Bon Homme Richard*—frog legs! Exec., Supply officer sample



**GROUND-BOUND** infantrymen did double take when HRS came over hill carrying another

### Strange Bird

"Great Snakes?" cried an amazed Marine infantryman. "What's that coming over the hill?"

A closer look revealed that the strange bird wending its way back to home base was a Sikorsky HRS-1 helicopter carrying the fuselage of another one beneath it on a cargo hook.

Several days earlier one of the aircraft had crashed into a steep mountainside in eastern North Korea. Marine Helicopter Transport Squadron 161 had been carrying on daily salvage operations.

The downed plane was stripped of everything except the fuselage. A cable was put around it and fastened to the hook of a hovering copter. Down a deep canyon the strange bird went, followed by craning necks from infantrymen below.

Back at base the burden was unfastened, thus ending a unique salvage operation.

### Kiss, But Not Of Death

From the arms of death to the arms of beautiful vocalist Monica Lewis—that's the recent feat of Lt. Charles J. Badewitz, AD pilot of the carrier *USS Bon Homme Richard*.

It all began as Badewitz led a flight of *Skyriders* and *Corsairs* in a dawn at-



**FOUR** pilots of Marine Devilcats squadron go into buddle with coach Devilcat himself

tack on locomotives and rolling stock near the town of Hungnam. On the first run, his plane was hit by small arms fire. One bullet entered the cockpit and went completely through his right forearm.

With blood spurting from the wound, Badewitz turned south toward friendly territory accompanied by his wingman, Ens. Elwood Nielsen. Frantically he ripped off his white scarf and fashioned a crude tourniquet, using his large knife as a lever.

He came close to fainting in the air several times before managing to reach a small emergency strip to the south.

With his right arm hanging useless, Badewitz made a perfect landing. Nielsen landed beside him and rushed to help the South Korean personnel at the field lift Badewitz from the plane.

A Marine helicopter was dispatched immediately from a nearby field and flew the wounded pilot to a forward area hospital.

His wound treated, Badewitz was given two transfusions for shock and loss of blood. But his best treatment was a resounding kiss from Miss Lewis. The blond singer was visiting the hospital at the time with the Danny Kaye troupe.

Badewitz, discussing the situation afterward, stated, "That kiss contributed greatly to my recovery."

**AN ATTACKING Corsair** swooped in to give the one-two to an important bridge over which supplies, ammo poured; plane from Essex





**ALWAYS THE gentlemen**, two Marines from MCAS El Toro give up their seats in a one-man liferaft to Miss Totti Ames, Los Angeles cutie, in a survival drill in the station's swimming pool. With radar reflector erected in the raft and holding an orange smoke flare, the two pilots, who don't look too unhappy with the duty, only want a bigger raft; the water is cold

### Movies Give Xmas Greeting Dependents in San Diego Turn 'Actor'

NAS SAN DIEGO—Parents, wives and children of men serving aboard aircraft carriers and seaplane tenders in the Far East sent personal greetings to their loved ones on motion pictures with sound.

Women and children living in the San Diego area were notified to appear at the air station to have their pictures taken. The films then were sent overseas to the carriers and shown on Christmas day. Some of the Pacific fleet's carrier and tender men have missed Christmas at home since the outbreak of the Korean war.

Those filmed were dependents of men aboard the *Essex*, *Valley Forge* and *Antietam* along with their air groups, the escort carrier *Badoeng Strait*, the seaplane tenders *Salisbury Sound*, *Suisun*,

*Gardiners Bay*, *Floyds Bay*, and the aviation supply ship *Jupiter*.

All scenes were shot at the Fleet Air photo lab on North Island. It is hoped that next year the movies can be taken in color. Commercial movie companies from Hollywood helped with the filming. The idea of the Christmas movies was conceived by Cdr. Wm. Bryson, ComAirPac PIO, and sponsored by VAdm. T. L. Sprague.

### PBY Jaunt Lasts 21 Days Long Weekend for a Weekend Warrior

NAS NEW YORK—LCdr. T. V. McEnery recently brought his PBY home to Floyd Bennett Field and received a unique medal for his 21-day trip.

Escorted by Wave Betty Frank, amid solemn pomp and ceremony to "ruffles and flourishes", he was piped aboard by a sideboard of Chiefs and awarded the "Distinguished Travelers Medal." It's

the only one of its kind ever struck and weighs about five pounds.

Capt. Ben Scott Custer, CO of NAS NEW YORK, read the citation. It reads in full: "During the period 5-26 October, LCdr. McEnery skillfully piloted Naval Aircraft over a distance of 6000 miles. Through the constant exercise of superb judgment and vigilance, he traveled 528 hours over treacherous terrain at an average speed of 11.3 miles per hour. Due to the effort above and beyond call of duty, the PBY aircraft has become a familiar sight to thousands of Americans residing in our inland areas. LCdr. T. V. McEnery's conduct of this memorable flight brings credit to the science of aviation and is in keeping



**ERRANT McENERY GETS FLIGHT PAY AND MEDAL**

with the highest tradition of Naval Service."

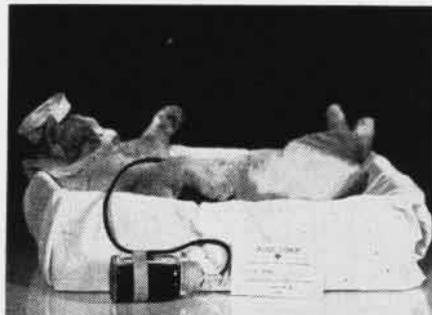
LCdr. McEnery modestly pointed out that he was ably aided and abetted by a crew consisting of Lt. Patrick Henry Smith, VP-832 weekend warrior, who, as the commander puts it, spent a long weekend, and ADI W. B. Jones.

● **NARTU SEATTLE**—A mobile exhibit unit is visiting science and industrial arts classes of Seattle schools. One of the main purposes of the exhibit is to develop an interest in naval aviation among students.

● **NAS MOFFETT FIELD**—Ground has been broken at Ames Aeronautical Laboratory for a new 8-foot supersonic wind tunnel for testing airplane and missile models at velocities in excess of the speed of sound.



**THE RECORD-breaking** 2,377 pints of blood donated by crewmen of the *Boxer* in a three-day period was advertised by the men spelling out the number, complete with the storage flask, on the flight deck of the carrier. The *Boxer* has been operating off Korea coast.



**NOT A SCAREDY-CAT**—When Far East Command staff members were asked to donate blood, mascot 'Hypo' pussfooted over to the Center with the rest of the volunteers; if some Korean cat needed a transfusion, he hoped his blood would help to save nine lives.



**NEWEST addition** to the Carrier Navy is the escort carrier *Salerno Bay*, CVE-110, just returned to duty at Boston from mothballs. Capt. John P. Rembert, Jr., is skipper. First man to take off was Lt. Frebert H Klitz of VS-913; first landing was made by LCdr. Robert J. Macklin, squadron leader.

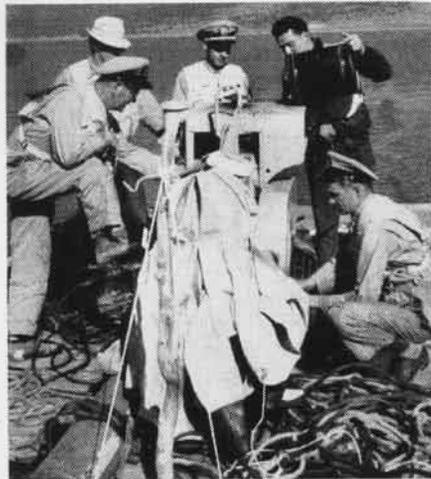


PERSONNEL from NAS Denver get Twin Lakes operation underway by lashing rafts together and covering their decks with canvas



CHIEF BOS'N Sherwood, clad in divers' woolen underwear, gives final instructions to divers Goldsmith, Guice, Ward and Easter

## 30 FATHOMS DOWN AT 10,000 FEET UP



EACH MORNING, Denver's Brennan, Schear, Conger, Tokle and Lakner check equipment

YOU WOULDN'T expect the Navy to conduct diving operations amidst the snow-capped peaks in the high Colorado Rockies. But that's what happened this fall when local authorities requested NAS DENVER to aid in recovering the body of a Denverite fisherman who had drowned in Twin Lakes reservoir.

The air station arranged to have six qualified Navy divers with necessary equipment flown from San Diego in aircraft furnished by NAS LOS ALAMITOS.

Upon their arrival, the divers were rushed to Twin Lakes. One officer and eight stationkeepers from NAS DENVER went along to support the operation.

Then followed four days of intensive activity. Witnesses were contacted to approximate the location of the accident. Diving equipment was rigged. Two rafts, constructed on the spot by civilian volunteers, were loaded with the diving gear and towed to the search area.

Diving got underway on the second day. Each diver went below five times. They worked a circle 33' in diameter in progressively smaller circles.

On the fourth day, H. C. Easter, MMC, signalled that he had the body in his possession. He was quickly surfaced. The corpse was fastened to the raft and towed ashore. And the grim task was finished.

During the operation, the divers were hampered by the coldness of the water and the tall, thick weeds that grew in the soft mud of the reservoir bottom. They also noticed the effect of the rarefied mountain air when they were at the surface, although they experienced little difficulty in breathing during the dive since the pressure of the air fed to them corresponded to that they were normally subjected to at the 60' depth.



GUICE IS pulled up after 30-minute dive, bucket contains hot coffee sent by spectators



CHIEF BRENNAN administers oxygen to Ward, hampered more by altitude than pressure



END OF THE grim task, Tokle helps coroner's crew carry the body to waiting ambulance

# Plan Those Easy Flights



Gramp and his staff were talking of crash reports recently read. When one of the lads made this remark as he thoughtfully scratched his head: "If only every flight were PLANNED before the guys get in the air, I honestly think that one of these days our INCOMING box might be bare."

THERE may have been an element of wishful thinking involved in the above statement. Not all accidents are caused by inadequate flight planning, but certainly there are days when an accident analyst begins to wonder whether or not flight planning is still in vogue.

There are many reasons why pilots take off without properly preparing themselves for a flight, but the two most prevalent are *haste* and *overconfidence*. If you're in a big rush to get somewhere and you believe you could fly there in your sleep, then you've reached the point where it will pay you to slow down and think of some of the trouble you can get into if you take off half-cocked.

**Case #1** "The Rover Boys and Their Uncle's Airplanes, or Who Has the Chart".

Two ensigns departed from NAS LAKEHURST on a ferry flight in a couple of F6F's. Their destination was Norfolk, Va. The flight was VFR and each plane carried approximately 235 gallons of fuel. The pilots were not provided with flight packets or charts but they were familiar with the route so they set off without asking for them. They filed individual flight plans, but flew to Norfolk in formation.

On arrival in Norfolk, they were informed that the planes should be delivered to MCAS CHERRY POINT, N. C. One of the ensigns picked up a chart of the Cherry Point area, but the other pilot had landed there a week before, so he

did not think it necessary to get one. Both pilots departed for Cherry Point without refueling.

On take-off from Norfolk, the lone chart of the Cherry Point area blew out of the cockpit . . . but this did not deter these intrepid airmen. The pilot who was supposed to have the chart, then discovered that his VHF transmitter was inoperative. The other pilot was signaling for him to take the lead, but he refused it.

His chartless cohort continued in the lead until they were within a few minutes of Cherry Point. He then tuned in the Cherry Point Range, getting a definite NKT and an "A" signal. He thought that this put him on the right hand side of the NE leg of the range and took up a heading of 210 degrees. This would have been just fine except for the fact that the "A" sector is on the other side.

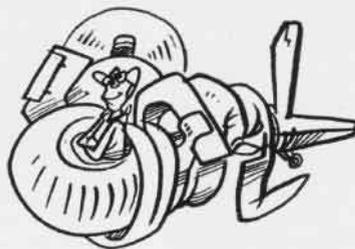
Exactly what courses were followed from here on cannot be determined. The wingman had a chart of the northern portion of Albermarle Sound and finally decided to reduce power settings and head back to Weeksville on his own.

The flight leader called Weeksville tower for a VHF steer, stating that he had 30 gallons of fuel left. Elizabeth City Coast Guard heard this call and asked him to shift to channel 1 on VHF. He did this, but received nothing. About this time he had the good fortune to spot the abandoned seaplane ramp at Harvey Point, N. C. The best landing area that Harvey Point had to offer was a weed covered taxi-way. After dragging this the pilot made a landing and rolled about 1,000 feet before his wheels struck a surface steam pipe sending the F6F up on its nose. The ensign's first question was, "Where am I?"

**Case #2** "I'll go on top because it will be good at the other end."

The pilot of an SNJ took off from NAS ANACOSTIA for NAS NIAGARA FALLS in the late afternoon. Enroute the visibility began to lower, and he climbed to 10,000 feet where the weather was clear. As he proceeded, he noticed that a solid undercast formed below him; but since Buffalo had been reporting high scattered clouds at the time of his departure, he thought that he would be able to let down VFR.

Evidently he did not listen to the weather broadcasts which would have given him a clue to turn back. He tried a couple of let downs through an overcast which ranged from 8,000 feet down to below 1,000 feet. Unable to contact Buffalo due to static, he climbed back on top. Two and a half hours after take-off, he was preparing to abandon the plane after flying on a southeasterly heading to get away from the lakes. With very little gas left, he spotted a break in the overcast. He was able to effect a letdown and make a good wheels-up landing in an open field despite the fact that his engine quit for lack of fuel just as he was "coming round the bend."



THE CHARTLESS ROVER BOY HAS MANAGED TO TURN AN EASY FLIGHT INTO A REAL SNARL

# AIR RESERVES GET HEROES' WELCOME



LCDR. EDMONSON, Capt. Young and Mayor Morrison lead parade for VF-821 as enlisted men return to NAS New Orleans from Korea



RETURNING VETS of VP-892 ride through "Welcome Lane" in the heart of downtown Seattle as citizens jam the route to cheer

EVERY NAVY man, away from home and his loved ones on a tour of duty, dreams of the day when he'll come home. That dream is coming true for ex-"Weekend Warriors" who were called to duty when Korean hostilities broke out.

It's been a long training cruise for many returning warriors. Some squadrons went directly into active military service from their two weeks' training cruise. Homecoming for them not only means seeing their loved ones again, but also that they can finally check out of their cruise.

The "Weekend Warriors" have demonstrated their capacity for rapid mobilization in times of national emergency, earning the name of "Minute Men of Naval Aviation." Daily battle reports from Korea cite the round-the-clock activities of Naval and Marine Reservists as part of the United Nations forces—proof that the taxpayers' investment in the Naval Air Reserve Training program is paying big dividends.

Reserve Air Stations feel that their homecoming squadrons merit a "Well Done" for the illustrious records they have racked up in the Korean fighting as well as on the other fronts where they have served. As a token of their admiration, every station in the Reserve circuit plans a heroes' welcome for their returning squadrons. Receptions ranging from the first precious moment with their families to official ceremonies with all the trimmings have already been held. This is the story of some of these celebrations, typical of the parties which will be given as long as Reserve squadrons continue to come home.

One of the first squadrons to return to the United States was VP-931. The "Philadelphia Flying Eagles" gained the

distinction of being one of the first Reserve squadrons to complete a tour of operational duty at an advanced overseas base.

After being recalled to active duty in September 1950, VP-931 converted from civilian status to a first-line Navy patrol squadron in record time. At NAS WHIDBEY ISLAND the unit was given basic training in the *Neptune* patrol bomber and then ordered to the Pacific area for duty. Last April, under the leadership of LCdr. John Hess, VP-931 flew 1306.9 hours, establishing a new all-time monthly high in flight time.

Homecoming for the "Flying Eagles" early last June meant only return to NAS WHIDBEY ISLAND and joyful family reunions. There would still be the heroes' welcome waiting for them at NAS WILLOW GROVE.

Another fine Reserve squadron which came home early last June was Seattle's own Patrol Squadron, VP-892. They were lucky enough to get back to their home base.



LOOKING AT his daughter for the first time, VF-821's Lucian Abba is glad to be home

Recalled to active duty in July 1950, the squadron, commanded by LCdr. Edward R. Swanson, left the West Coast on Thanksgiving Day and winged its way across the Pacific to Japan. Immediately, they commenced their missions of anti-submarine patrolling, conducting armed reconnaissance flights, convoying, and flying weather information patrols. When the planes were not actually engaged in operations, they were kept busy in training flights. The squadron was commended by RAdm. George R. Henderson, COMFAIR Japan, for the manner in which they conducted their work.

VP-892 WILL never forget the welcome mat Seattle laid out for their gala homecoming. The city, which has had lots of experience in welcoming home thousands of Korean veterans, went all out for its Reserve squadron.

The men were flown from San Diego in three R4D's. At Portland, Oregon, a fighter escort from NARTU SEATTLE met them and escorted them to Boeing Field where the real welcome got underway. A welcome committee, composed of Mayor Wm. Devin of Seattle, three Navy bands from the carrier USS *Valley Forge*, the Thirteenth Naval District and the Seattle Port of Embarkation and hundreds of friends and relatives, awaited them.

Twenty new convertibles were provided especially for the returning heroes. Starting from Boeing Field, the motorcade with police escort made its way through "Welcome Lane" in the downtown section of Seattle. Thousands of spectators turned out to view the returning squadron. Serpentine and ticker tape came streaming out of hotels and office buildings, reminiscent of the heroes' welcomes on Broadway.



VADM. JOHN Dale Price, Chief of Naval Air Training, addresses over four hundred guests under VF-884's "Bitter Bird" insignia



THE STATESIDE FOOD tasted mighty good to members of Memphis' Rebel Squadron. Over 300 Memphians attended the luncheon

WHEN THE procession finally arrived at Sand Point naval air station, the men at long last were able to get together with their families and friends, pick up their baggage and start on well-earned leaves.

Down in New Orleans another enthusiastic welcome by fellow citizens was extended to the men of VF-821 when they returned this past fall.

The squadron's strength was bolstered by men from other squadrons of the Naval Air Reserve Training Command after it received its call to duty in July 1950. Early this year VF-821 was ordered overseas and served with other Reserve units aboard the USS *Princeton*. On the morning of 1 June, the squadron launched its first combat mission against the enemy. From then until 9 August, it flew night and day close air support and heckling missions in support of United Nations ground forces. The squadron flew a total of 480 combat sorties over Korea.

The weather was favorable on the squadron's homecoming day. Eager eyes

of anxious relatives scanned the skies around Moisant International Airport for the first sign of the RSD which was bringing 37 enlisted men to their home base at NAS NEW ORLEANS. As the plane landed, the waiting crowd began waving and pushing forward to get a first glimpse of the returning heroes. A huge banner, bearing the words "WELCOME HOME VF-821", was lifted on high by four sailors from the air station.

AFTER THE initial exchange of greetings, Cdr. Barry Holton, PIO at NAS NEW ORLEANS, announced the remaining schedule of events. Capt. H. L. Young, CO of NAS NEW ORLEANS, welcomed the men home and introduced Mayor deLesseps S. Morrison. Highlight of the homecoming ceremonies was the presentation of a citation to LCdr. Robert F. Edmonson, CO of VF-821. It read in part, "for heroic action while flying in Korea." He was awarded a gold star in lieu of a fourth Air Medal.

The men were escorted to nine convertibles and, proceeded by a color guard of Marines and the Navy band

from the naval station at Algiers, they paraded around the commercial district of Canal street and then to the Army-Navy club for a reception.

Memphis' weather was far from favorable for its Rebel squadron's homecoming, but relatives and friends braved a sodden day to greet them.

The Rebel squadron, VF-791, was recalled to active duty in July 1950 and exactly 72 hours later the entire squadron was ready to move. The squadron was ordered overseas last spring and served with other Reserve squadrons aboard the USS *Boxer*.

While flying from the *Busy Bee*, VF-791 piled up some enviable records. The pilots averaged 60 flights and the planes had twice that number of missions painted on their fuselages. In seven months of combat aviation, the pilots dropped over 750,000 pounds of bombs and rockets from their *Corsairs*.

THE STEADY downpour failed to dampen the enthusiasm of the people who converged on the Memphis naval air station to shower VF-791 with



NO GRIPING from this turn-to gang. Sailors from VP-892 stow gear before Seattle parade



WEARING GAY sombreros, "Pancho" Bradbury and "Sam" Baldwin of VP-931 return to U.S.



LOOKING MORE like Scotsmen, VP-892's Adams and Beauchamp come home

a tumultuous welcome. The R4D's which were bringing the squadron home were dubbed the "Rebel Airline." No sooner had the first R4D taxied to the operations apron than the squadron skipper, LCdr. James B. Kisner, opened the hatch and sped through the rain in search of his wife and children.

As the band played "Dixie," five other planes landed in quick succession. On hand to welcome the squadron were RAdm. W. D. Johnson, Chief of Naval Air Technical Training; Capt. J. M. Carson, CO of NAS MEMPHIS; Capt. E. R. Peck, CO of the Naval Air Technical Training Center; and Capt. K. M. Krieger, CO of NARTU MEMPHIS.

After a brief reunion with families and friends, the men were whisked away to Memphis in convertibles. At the Hotel Claridge, a testimonial luncheon was staged for the squadron. More than 300 people filled the Balinese Room and heard Mayor Overton of Memphis express the city's sentiments of welcome.

**K**ANSAS City's VF-884 "Bitter Birds", another of the *Boxer's* Reserve squadrons, came home at the same time, but the official celebration was held up until 10 November.

VF-884 pilots averaged over 60 combat missions each during their tour aboard the *Busy Bee*, including close support hops on the front lines, strikes against bridges, rail lines, rolling stock and communications and spotting for naval gunfire. During one of these missions, LCdr. Glenn F. Carmichael, CO of the squadron, parachuted from his crippled plane and was killed.

The officers and men of VF-884, together with their families, were literally the guests of the city on 10 November. The entire Armistice Day celebra-



**DRIPPING WET** but happy! Bette Davis greets fiance, Edgar Buffalo, of Memphis in rain

tion was observed in honor of the "Bitter Birds."

The welcome began with the largest Armistice Day parade that Kansas City has seen since 1920. VAdm. John Dale Price, Chief of Naval Air Training, was the honorary marshal at the parade, which included almost three miles of marching units and civic and veterans' organizations.

Following the parade, VF-884 members and their wives were guests of the Military Order of World Wars at a luncheon at the Kansas City club. Each man and his wife received a pin and bracelet containing the "Bitter Bird" insignia.

Next on their busy schedule were cocktails and a banquet at the Town House, sponsored by the Kansas City, Kansas Chamber of Commerce. VAdm. Price and Capt. Cameron Briggs, for-

mer CO of the USS *Boxer*, spoke briefly before more than 400 civilian guests at the banquet.

**T**HE ENTIRE group was then introduced individually to Kansas City at the annual Armistice Day ball held at the Kansas City municipal auditorium and sponsored by the Veterans of Foreign Wars. The squadron marched into the arena under their insignia, depicting the "Bitter Bird" as a Kansas Jayhawker



**"IT'S BEEN a long time!"** George Garner gets kiss from wife, Joyce, as VF-791 comes home

whose feathers have been badly ruffled. The ruffled feathers symbolize the high casualty rate suffered by pilots of VF-884 in combat over Korea.

**B**EFORE the *Boxer* left Korean waters, the battle-hardened crew, while within sight of North Korea, donated 2,377 pints of blood for men fighting in the Korean war. This is believed to be the largest single donation ever made by any one activity, civilian or military. Giving their blood that their comrades-in-arms might live, the record set by the *Boxer's* officers and men is characteristic of the spirit of true fighting men.

Pilots of the returning Reserve squadrons are receiving assignments throughout the Naval Air Reserve Training Command and the enlisted personnel are either being discharged or re-assigned to stateside billets.

**A**S THE recently returned squadrons came home to receive the plaudits of their fellow citizens, the USS *Antietam* joined United Nations forces in Korean waters. Another all-Reserve Air Group was aboard. Already CVG-15 has chalked up some remarkable combat records. When their tour of duty is up, heroes' welcomes will be waiting for them in their home station areas.



**THE FIRST** eleven members of VP-931 to return home are smiling happily at San Diego after a tour of operational duty at an advanced overseas base in the Pacific area



YUGOSLAV AIR FORCE DEVELOPED S-49 FIGHTER WHICH RESEMBLES RUSSIAN YAK, GERMAN ME-109; HAS 330 KNOT SPEED, CARRIES GUNS IN ITS NOSE

# THE YUGOSLAV AIR FORCE

YUGOSLAVIA stands ready to battle for her freedom and independence, "alone if necessary." This proud boast by Marshal Tito is backed up by a military force which he constantly is striving to improve. Of considerable importance to Tito's well being is the capability of his small air force to defend Yugoslavia's borders against attack and to provide air-ground support for the army. In carrying out this mission, the Yugoslav Air Force is hampered by the lack of up-to-date equipment. Missing are the jet aircraft so necessary in a modern air force of today.

The history of military aviation in Yugoslavia dates back to 1920 when an air force department was first formed. During the '30s, the Royal Yugoslav Air Force was classed as a moderately effi-

## RECOGNITION

ent Balkan Air Force composed of rather well-trained pilots. But later events proved that this small force was no match against a powerful foe.

In the spring of 1941 the Air Force Commander led a coup against the Regent, Prince Paul, and his government in objection to their pact with Hitler. This resulted in the government being overthrown and a challenge to the Luftwaffe. Superior German air power made short work of the destruction of Yugoslavia's valiant air force. With most of their aircraft destroyed on the ground and their country over-run, many of the

air force officers and personnel fled the country to serve their exiled King Peter with the British in the Middle East.

The present day Yugoslav Air Force came into being on the 21st of May 1942, when partisans raided a German-held airfield and made off with two fighters. This exploit marked the date for the annual Air Force Day celebration.

By 1944 Marshal Josip Broz, popularly known as Marshal Tito, then in command of the Army of Liberation, was in a position to conclude agreements with the major allies for the expansion and training of his air force. The Middle East units were formed into fighter squadrons equipped with British *Spitfires* while other units were formed from young partisans who had been trained in



AERO-2 TRAINER IS BUILT IN YUGOSLAVIA, HAS FIXED LANDING GEAR



YUGOSLAV 213 TRAINING PLANE HAS PARTIALLY RETRACTING WHEELS



RUSSIAN IL-2 FIGHTER, HOLDOVER FROM WORLD WAR II, IS BACKBONE OF CLOSE AIR SUPPORT

Russia and provided with Soviet aircraft.

When hostilities ended in Europe, Yugoslavia was left with a rather formidable air force which was more than capable of defending its borders. Its equipment consisted chiefly of World War II Soviet aircraft augmented by some British and German planes. Organization and training was patterned after the Soviet model, as the country at that time was included in the USSR sphere of influence. It was during this golden era of plenty that Tito's air force demonstrated its aggressiveness when two unarmed U.S. R4D-type transports were deliberately shot down after inadvertently straying over Yugoslav territory.

CLOUDS of dissension formed over the Yugoslav paradise in 1948 at which time Tito broke relations with the Soviet Union and accused them of abandoning true communism. Marshal Stalin retaliated by changing Tito's status in his new ever-changing encyclopedia from hero to villain and stopped all military aid. With the supply of aircraft, equipment and oil no longer flowing from Russia and her satellites, the capability of the YAF experienced a sharp decline.

More cordial trade relations with Western nations, however, have somewhat alleviated the YAF's critical supply problem. With the importation of aircraft and gasoline along with considerable cannibalization, the air force has managed to maintain a semblance of air strength.

Still, much remains to be done to obtain the comparatively formidable position occupied by Tito's air force four years ago. A new development in an attempt to improve the dwindling supply of aircraft is the production of a number of new-type aircraft. Quantity delivery of these aircraft, however, will be hampered by an industry with rather restricted resources.

The present day Yugoslav Air Force still adheres to the Soviet pattern of organization. It consists of a number of air divisions which are further broken down into air regiments. Under the Soviet system, each air division is composed of

three air regiments. These air regiments are made up of approximately 30 to 50 aircraft depending on the regiment's role.

Fighter regiments in the YAF are equipped with Soviet YAK-3's and 9's with some German ME-109's still around. In an effort to bolster their diminishing fighter force, the Yugoslavs have produced a single-engine fighter called the S-49. This aircraft appears to be a combination of the Soviet YAK-3 and German ME-109. Recognition-wise the S-49 favors the *Yak*. A redesigned tail which is more triangular in shape differentiates the S-49 from the YAK-3's and 9's. This fighter, Yugoslavia's first post-war military aircraft, was unveiled at the May 1950 Aviation Day Show and officially presented to the YAF by Tito. It is now in service with YAF fighter regiments. Top speed of the S-49 is said to be around 330 knots, about the same as later *Yak* piston fighters. Armament consists of four machine guns installed in the engine cowling. The engine is an in-line.

Recent deliveries of British-made twin-engined *Mosquito* aircraft are slated for night fighter and fighter bomber duties. The famous but obsolete single-engine IL-2 *Stormovik* forms the backbone of their ground attack regiments.

For armament the IL-2 is equipped with two 23mm, one 12.7mm and two 7.62-mm guns. Pe-2's which flew so well against the Germans in World War II are still in service with the YAF as light bombers. British-built *Spitfires* and *Hurricanes* make up the reconnaissance outfits while transport aircraft in service units consist of LI-2's (DC-3) and trimotored German JU-52's.

Military markings in the YAF consist of a blue ring surrounding a Russian red star on a white background. These are on the wings and fuselage, with three small bands of blue, white and red with a small red star in the middle of the fin.

In addition to the S-49 post-war model, already mentioned, there are other new Yugoslav-built aircraft. Of interest is the AERO-2 trainer which is replacing the Soviet PO-2 in this field. The AERO-2 is powered by an inverted air-cooled in-line engine. It is a low-wing aircraft with a fixed tail-wheel type landing gear. The rounded fin and rudder has a tapering dorsal-fin fairing which ends just aft of the two-seat tandem cockpit.

A variant of the same type is the AERO-2H which is equipped with floats as a seaplane. The floats are attached by N struts, and are of the single-step type.

Another new post-war type is the 212, a low-wing trainer with a retractable landing gear and a fixed tail wheel. This aircraft has two seats in tandem under a cockpit canopy that does not project above the fuselage lines at the rear. The horizontal stabilizer fitted to the top of the fuselage is braced by two underneath struts. A *Yak*-type fin and rudder completes the tail assembly.

Finally, the 213, called the *Vihor*, is also of recent vintage, a low-wing, two-seat trainer. One of the newest developments is the acquisition of F-47 *Thunderbolt* fighter planes from United States for fighter regiments' support.



AERO-2H TRAINER IS HYDROPLANE WITH SINGLE STEP FLOATS, BRACED WITH N-TYPE STRUT PLAN

# DIVE BOMBER AMBULANCE

CAG-1, CORAL SEA—Conversion of an AD-4W plane of VC-12 detachment to carry a badly-injured officer from the carrier to a hospital ashore was done by the air group.

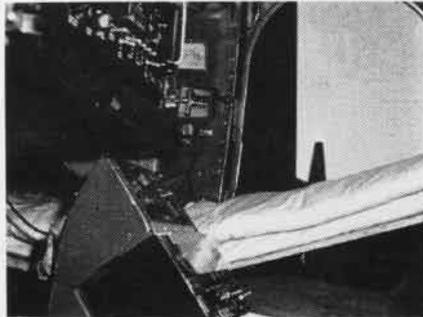
While landing an F2H, the *Coral Sea's* cross deck pendant broke. The catapult and arresting gear officer sustained serious facial injuries, equivalent to being hit full in the face with a well-swung baseball bat.

The man needed orthodontic and orthopedic treatment only available in a hospital, the nearest being the U. S. Seventh Service hospital in Trieste, Italy.

The ADW plane had sufficient room for a litter patient but a Stokes stretcher could not be placed in the plane. The ship's carpenters built a plywood platform with an inclined back rest in the rear compartment along the starboard side. This platform was secured to the deck by manila line, with fore and aft movement possible.

The aft end was snug against the backrest of the starboard seat and the forward end snug against a solid bulkhead up in the aisle. The back rest was to help make the patient comfortable by keeping his head raised and a safety belt was fastened to the underside of the platform for safety in take-off and landing.

Brought to the hangar deck, the patient was helped into a parachute harness and life jacket and assisted into the rear compartment of the plane, piloted by Lt. F. L. Brady. Cdr. C. P. Phoebus, senior medical officer, went



PICTURE SHOWS STRETCHER IN THE SKYRAIDER

along to minister to the patient on the flight.

The actual flight was 380 miles. The intended route was to cross the Italian mountains at 9,000 feet, but the patient complained of being unable to stand the effects of altitude so an alternate route was selected via Genoa and the Po Valley.

## Skipper's Big Idea Backfires

### Tail Wheel Destroyer Wins Just Dues

ZP-1, WEEKSVILLE—To embarrass pilots who through faulty airmanship or ill luck wiped off tail wheels on their blimps, Cdr. C. A. Bolam initiated a scheme which promised to get results.

The scheme was to retrieve the mangled wheel and take the pilot's picture with the wheel in his arms. The pictures were posted in the wardroom for all to scoff at.

Unfortunately the plan has backfired—the skipper wiped off a wheel!

The accompanying photo shows the commanding officer himself giving him-



MONTAGE SHOWS CDR. BOLAM HOLDING WHEEL

self the old Rah! Rah! that he who wipes off a tail wheel so richly deserves. ZP-1's photo officer worked up the montage.

## UN Naval Aircraft Record 603 Enemy Vessels Sunk in Korea

United Nations naval aircraft have destroyed 603 enemy vessels and damaged 1,428 from the beginning of the Korean conflict to the first of November, 1951.

A majority of the 2,031 vessels were junks or sampans.

United Nations Navy planes also have killed an estimated 48,762 North Korean and Communist troops since the beginning of hostilities.

The summary of enemy ships destroyed or damaged was:

Type	Destroyed	Damaged	Total
Barges	46	17	63
Corvettes	5	4	9
Freighters	3	2	5
Junks & Sampans	530	1369	1899
LST.	1	0	1
LCM	5	0	5
MTB	3	3	6
Tankers	1	0	1
PC & MS	7	32	39
Tugs	2	1	3
	603	1428	2031

● NAS BARBER'S POINT—When Mrs. A. J. Finkbeiner wrote two letters to Barber's Point recently, requesting that her son, Arnie, be provided with a birthday cake, the men of VR-21 were anxious to please. On his 21st birthday, Arnie received two cakes at an impromptu surprise party held in the air terminal.

● Boy Scouts, members of Troop 162, Corpus Christi, Tex., recently were guests of the All Weather Flight School. They made an inspection of a PB4Y-2 and tried "ground flying" one of the school's Beechcraft trainers.



A NEW VIEW of the Navy's newest patrol bomber, the Martin Marlin P5M-1, is this shot of the seaplane on a ramp at NAS Norfolk during three days of static displays, lectures and flights for the benefit of Atlantic Fleet Air Wings personnel. Note the thinner fuselage compared to its predecessor, the PBM. The Marlin is an antisubmarine plane, hence the big radome on the nose. It gradually will replace the Mariner with patrol squadrons of the fleet.

# SEABEES BUILD MARINE KOREA AIRSTRIP



FIRST NAVY LST, loaded with vital supplies for Marines ashore, warps up to CB-built floating pier, just as in World War II days



SEABEE Rodgers developed gravity flow avgas supply ramp at the airstrip, using empty gas drums, to fill gas truck in 8 minutes

THE SEABEES are back at their old tricks of building airstrips along the beaches—only this time in Korea instead of the South Pacific.

As usual, their buddies were the Marines, for whom Amphibious *Seabee* Battalion One's "Charlie" detachment expanded a forward airstrip in short order. They rammed a causeway pier onto a beach within hearing distance of front line artillery to supply the strip.

Aided by tugs, LST's made fast to the pier and units of the South Korean Army rolled ashore the gasoline, napalm and other supplies. Previous operation of the airfield depended on supplies flown in or trucked over 18 miles of rugged mountain roads. The road became a bottleneck and the fighter group fell behind schedule. Front line ROK forces needed fighter support, so the Marines switched to the plan of supply by sea. That's where the *Seabees* came in.



MARINE CORSAIR fighter takes off from the old airstrip as *Seabees* and Korean laborers work to build up new strip. MGen. Schilt praised construction men for the excellent job



RODGERS' gravity fuel system in operation; ramp permitted filling fuel trucks far faster than by hand pumping plan once used



ACRES OF 100/130 octane gas are piled on beach after unloading from LST which replaced slow supply system on mountain roads



RAAF GROUP WORKS ON ANTI-SUBMARINE PROBLEM IN THE VP OPERATIONS ROOM AT FAIRBETUPAC

## "Down Under" Fliers Get Word

**A**NXIOUS TO "get cracking", that is, to get things going, 21 members of the Royal Australian Air Force recently took off after two months instruction with the Fleet Airborne Electronics Training Unit, Pacific.

The group, headed by Wing Commander K. R. Parsons of Melbourne, consisted of two complete flying crews plus electronicsmen and engine and air frame experts. At FAIRBETUPac, the 11 officers and 10 senior non-commissioned officers undertook extensive training in the operational and tactical employment of current ASW aviation equipment (including aerial mine laying). They also concentrated on operation and field maintenance of aviation electronic and electrical equipment to be used in the P2V-5 aircraft.

Prior to their arrival at NAS SAN

DIEGO, the group attended a two-weeks course at the Lockheed Aircraft Company in Burbank where they got the word on the mechanical aspects of the P2V-5. Later the pilots and navigators went to NAS WHIDBEY ISLAND for operational check-out in the aircraft, while the electronicsmen stayed on at FAIRBETUPac for further schooling in their specialty. Other members of the group returned to Lockheed for additional P2V-5 information.

Upon their return to Australia, the two crews will check out the rest of the members of a new squadron, which upon its formation will be skippered by Wing Commander David Vernon, another member of the group.

The Australians expressed great satisfaction with the training they had received and hope some day they'll be back again. So it's au revoir, not goodbye.



LT. TROUPE BRIEFS RAAF'S CULLEN, PARSONS, COONEY, VERNON, BOYLE ON ANTISUB WORK

## Gassed Pilot Lands Safely

Two Other Aviators Guide Him In

Although almost overcome by carbon monoxide during a training flight, Lt. J. E. Pritchett of NAS COLUMBUS managed to fly 100 miles back to his home field to make a perfect landing. Then he blacked out.

Credit for helping him get in safely goes to two other pilots on the flight, Lt. W. C. Shroyer and Lt. R. R. Merritt, who pulled out of formation to aid him in his predicament.

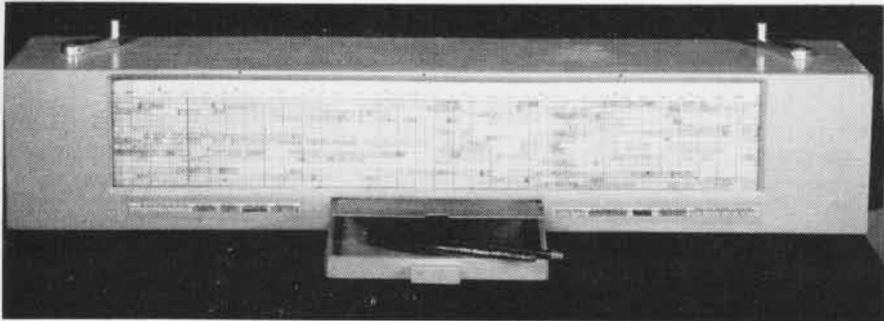
Pritchett became ill while flying over Charleston, W. Va. Deciding to bring him back to Columbus where he would be familiar with the landing conditions, Shroyer and Merritt radioed him to rock his wings if he was awake enough to hear them. Instead of replying, Pritchett started to climb. He got up to 9,000 feet before they could get him to level off. Then Shroyer led Pritchett, while Merritt flew alongside giving hand signals. They managed to get him back to 4,000 feet and then guide him to Columbus. This took some 90 minutes since Pritchett was flying so erratically.

Meanwhile Port Columbus emergency and rescue crews were alerted to stand by. They nearly passed out when Pritchett started in. His plane flaps were down, but his wheels were up. Just in the nick of time though, the wheels came down and the flaps went up. (Later Pritchett said he must have been acting by pure instinct since he really didn't know what he was doing at that point.)

The plane rolled safely to a stop at the end of the runway and doctors rushed out to give the now unconscious pilot oxygen before they pulled him from the cockpit of his plane. Pritchett's only injury was a banged-up hand, received when he held his arm out the opened canopy in an effort to funnel some air into the cockpit.



CANADIAN visitor at NAS New York, "Fuzzy" Maher of the Royal Canadian Air Force, compares notes with Air Reservist Bologna as he examines the cockpit of Navy Phantom



THIS RUNNING STATUS BOARD DEvised BY VR-3 PROVIDES A CLEAR RECORD OF AIRCRAFT USE

## VR-3 USES RUNNING STATUS BOARD

DR. GARTH D. Gilmore, aircraft maintenance officer of VR-3, realized that a running record of aircraft status would be desirable for purposes of analysis. A color chart showing the actual time expended for different phases of transport operation was visualized. Then LCdr. V. F. Davies, Cdr. Gilmore's assistant, took the problem in hand and created the Running Status Board.

The board is a rectangular box 36 inches long, 6¾ inches wide and 6¾ inches high. The chart vision area is 27¾ inches long and 4¾ inches high.

On top of the box, at each end, there is a crank which has a shaft through the top of the box. The right crank is connected to a spool of new rolled chart paper. By turning the left crank, the chart paper winds itself across the vision area. Ink notations are then made on the chart paper which is divided into hours of the day. One roll of chart paper will last six months.

The notations on the chart paper tell the time of operation for all VR-3 transport aircraft. They tell the time of upkeep and repair; which aircraft are used in training and test hops, and when operational checks are performed and many other activities required for efficient transportation.

On the front of the status board, below the chart vision, there is a small drawer for pencils and other equipment.

The board also serves as a reference as one may turn the right crank backwards and find what happened prior to the present time of operations. The board is in operation 24 hours a day in VR-3's maintenance office.



DO WE WANT POPCORN?

## Faster Refueling is Sought

The Navy is seeking ways to speed up and make safer the refueling of those gasoline-eating jet engines in its fighter planes.

Bureau of Yards and Docks has contracted with Fish Engineering Co., of Houston, Tex., to make a study of construction problems at master jet field gas stations that will be protected against ignition of fuel from extreme heat from numerous jet engines in one area. The study also will consider methods of shielding personnel at work on planes.

Because jet engines consume larger quantities of fuel than propelled planes, the problem of speedier refueling is being attacked from several angles. Results of the investigation are to be reported upon later.



STAND IS GREAT IMPROVEMENT OVER LADDER

## Rigged Stand for Fueling Job

Refueling the RSD has often resulted in damage to wing de-icing boots. To meet this problem and reduce the fire hazard, Jack Ruttschow, AD-1, NAS Corpus Christi, has specially rigged an hydraulic Aero stand. His modification has been approved under the Navy Beneficial Suggestion Program.

Special mounting brackets have been installed on the platform of the stand to hold one or two CO<sub>2</sub> bottles which would be readily accessible for fighting fire. (This conforms with O&R order No. 51.)

By mounting two U shape brackets on the right guard rail of the stand to support the hose, the hose reaches the tank directly from the stand. This eliminates contact with the de-icer boot and eliminates the possibility of damage that would normally result with the hose rubbing on the boot.

Where this rigged stand has been used, much time has been saved on gassing jobs.

## Exhaust Plug Puller Made

At NAS QUONSET POINT, Daniel Jaswell has designed a tool to remove wooden plugs from the exhaust stacks of radial aircraft engines prior to the preservation treatment given engines before shipment. Jaswell has received an award for his device under the Navy Awards and Incentives Program.

The tool can be quickly and inexpensively manufactured from miscellaneous material. It consists of a lag screw, a length of rod stock fitted with a nut on one end and a cast iron weight drilled to make a sliding fit on the rod stock. The lag screw is welded to the bar stock and the rest of the tool assembled in such a manner as to allow the weight to be confined to the bar by the lag screw and the nut.

In use, the lag screw is started into the wooden plug by hand and screwed in a couple of turns with a wrench. The wooden plug is then easily removed by sliding the weight up against the nut on the bar stock using a light pressure.

It is estimated that the device will save over \$1900 annually on the basis of the saving in time and material made possible by its use.

## Class 265 Parts Valuable

Class 265 material is not junk but valuable material that is needed to maintain aircraft. This class of material consists of all overhaulable aircraft components. It includes every item from an aircraft or engine—except the aircraft or the engine itself—which can be overhauled.

Did you know, BUAER Maintenance asks:

- That 80% of the fleet's support in aircraft spares are obtained by overhauling the items taken off the airplane?

- That if you treat an accessory roughly and damage it by dropping or tossing it on the counter you might be causing an AOG of your own aircraft later?

- That more aircraft instruments are damaged by rough handling than by service in the aircraft?

- That damage to spares by rough handling during the off loading of carriers cost millions of dollars and sometime causes items to become critical?

- That if you treat each "old" part as you would the "new" one, you help fleet support and yourselves in that better and more spare parts will be returned to the supply system from the O&R departments?

This is BUAER'S advice: Give yourselves a break and treat those parts going to Class 265 with care. Treat them like fresh eggs.



WHY NOT, HE'S GOIN' SOUTH, AIN'T HE?



CHIEF HOLT SHOWS HIS MODIFIED MAE-WEST

### Simple Snap Saves Airmen No Delay in Donning Survival Suits

COMFAIR SEATTLE—Sailor-airmen in stricken Navy patrol planes may soon be thanking Chief Parachute Rigger Ralph J. Holt for saving their lives. Chief Holt is an instructor in the survival training program of FAIRWING 4 based at NAS WHIDBEY ISLAND.

Holt noticed that his airmen students were losing previous seconds in donning their Mark I survival suits by becoming entangled with the flopping bib back of their vest-type mae-west life jackets. A simple snap vulcanized underneath the rubber back that fits into its mate in the crossed web straps attached to the jacket has made the jacket form fitting. Fastened on the hard edge of the bib, this modification in no way interferes with the normal inflation of the jacket, un-snapping itself when the CO<sub>2</sub> vials pop.

Chief Holt is hoping that his idea will be adopted. The time bonus the snap gives naval aviators can easily mean the

difference between life and death. Time required to don the survival suit has been cut at least in half.

### How Portable Can You Get? Electronicsman Designs Hattie-Talkie

World War II produced walkie-talkies and handie-talkies. Now an ingenious sailor of Fleet Air Service Squadron 102 at NAS NORFOLK has come up with the "hattie-talkie".

John A. Maykut, AT1, concocted the weird contraption. During spare time



MAYKUT MODELS SELF-DESIGNED HATTIE-TALKIE

over a period of two months, he built a five-tube superheterodyne receiver in a tropical helmet. Power comes from AC or DC sources and can be run on miniature batteries carried in the pocket.

Tubes and parts came from three old radios. They are on the top of the helmet, while the speaker is on the front. A lop antenna is on the side. Tuning and volume controls are on the back.

### EPS Research Project Set Jax O & R Pioneers New Program

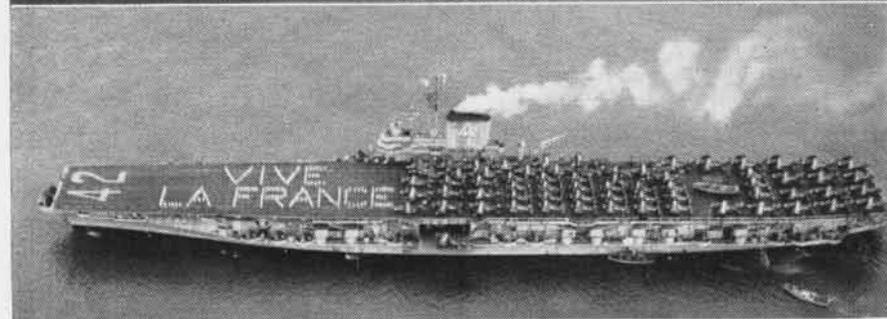
BUAER has designated NAS JACKSONVILLE as "the pilot station for the development, installation and evaluation of the Engineered Performance Standards Project."

"EPS" is a long-range research project designed to explore ways and means of improving workplace layouts and design of equipment; reducing fatigue, and identifying opportunities to improve performance. It is expected to become an important element of effective achievement throughout the Navy. By June 30, 1952, BUAER hopes to have sufficient data assembled to develop programs of a similar type at all other major Naval Air Stations.

The programs will be based on guide lines established at NAS JACKSONVILLE to determine use of EPS in Public Works and Supply Departments, statistical methods and reports necessary to compare actual performance with EPS, and training programs for personnel.



SUBBING FOR SUBS—These three mammals thought their U-boat formation was a whale of a way to test the schnorkel spotters in Airship Squadron One which was making an ASW training flight over the Gulf Stream



WHEN NAVAL Aviation News ran an article on flight deck "card stunts" in its October issue it stirred up a hornet's nest of other new greetings. Above photo shows the crew of the CVB Franklin D. Roosevelt doing a little good will advertising during slack periods of fleet exercises in the Mediterranean. Needless to say, such photos are well received in Italy, France

### VR-2 Serves Hawaii Music Atmospheric Songs on Records Feature

VR-2, HAWAII—Taking a cue from commercial airlines, the Mars Honolulu detachment now toasts arriving and departing passengers on trans-Pacific hops with melodic strains of Hawaiian music.

Old nostalgic favorites such as "Aloha Oe" and "A Song of Old Hawaii" have been put on records, together with instructions to passengers, the latter with a background of soft music. Relatives and friends usually give out flower leis to visitors, which help create the Hawaiian atmosphere so eagerly anticipated by most new arrivals to the isle.

# AND THERE I WAS ....



## Turning the Midnight Oil

EVERYTHING that besets a pilot need not be 30,000 feet straight up into the blue. Plenty of things can go wrong on the ground. There was a young ensign, for example, who was made VT engineering officer of a composite squadron back in the days when a JG was a big man. This downy-cheeked lad, a Bachelor of Arts graduate and therefore well qualified for the job, was made to specialize in hydraulics since the squadron lacked a rated man.

Applying Keats and Shelley to the TBF hydraulic blueprints, he soon worked out an admirable system of stemming leaks by stuffing old sonnets into the cylinders. One night, though, he nearly toppled.

A *Turkey* had been grudgingly dropping its gear in dive pullouts and our hero decided to fix this. He had the plane jacked up; he applied the external test unit to the quick disconnects; he fiddled with the gear and in a trice changed the settings of the J-hooks and corrected the problem. The plane was unjacked and trundled away to the snow-swept line. It was then that our gimlet-eyed one-striper noticed that a can of castor-oil base hydraulic fluid was sitting near the test unit.

As any good hydraulics man can tell you, putting castor oil into a mineral oil system is tantamount to using Wrigley's best for the seals. Our hero knew it too. With every nerve taut, he sprung into action.

Three barrels of kerosene were dragged to the line. The jacks were pressed back into use. For one hour—or until the kerosene ran out—he worked every hydraulic lever in the cockpit, with the test unit pumping straight kerosene into the gummy *Turkey* and spewing the return all over the mat.

By dawn's early light, their work accomplished, the boys filled the TBF with mineral oil again and stole away to their sacks.

Nobody ever knew a thing. There was some question about the lake of kerosene, but it was passed off as one of those rare phenomena bred by war.

BOB REILLY, LT. USNR

VA-772  
NAS LOS ALAMITOS

## No Strain, No Pain

ON A recent exercise of Antisubmarine Squadron Twenty-Two, one of the pilots was launched at night in a TBM on a routine search flight.

He flew the complete flight and returned to the carrier. He made one pass, took a waveoff, and then came around and made a normal carrier landing on the second attempt.

There is nothing in this account to get "shook up" about, except for the fact that as this pilot taxied forward, the flight deck crew noticed that his rudder batten was locked securely in place.

LT. (JG) LEE KLEIN

## One Way to Grow

NAVAL AIR stations in the Reserve chain are always anxious to increase their quotas of planes in order to give their Organized Reservists every chance to fly. At one point it looked as if NAS NEW ORLEANS was using the direct approach to add one more *Corsair* to its pool.

The story, as told by Ed Willis ADC at the station, concerns an F4U that was flown in to NAS NEW ORLEANS by a transient pilot for a routine overnight layover. The next morning the *Corsair* was not to be found, even though the line chief searched the station.

Finally, hearing the tower controlman announce that this particular plane was being taxied back to the hangar, the pilot and line chief rushed over—in the nick of time. A check crew was already pulling an acceptance test. A paint crew was eagerly standing by to paint the NAS NEW ORLEANS insignia on the plane. And another line chief was marking up the *Corsair* for flight that "week-end". Questioning revealed that orders directing that the work be done had been issued by the planning division.

With visions of finishing his flight on foot, the visiting pilot demanded that his plane be returned to the transient line. Then followed a brief investigation which showed that three newly-overhauled *Corsairs* had landed at the station the day before—two as replacements and the third as a replacement for another station. Somehow the visiting pilot's airplane was mistaken for one of the replacements.

With his *Corsair* once more under his con-



trol, the pilot couldn't resist one question before taking off:

"Do you collect many airplanes this way?" he asked.

"No, sir," was the red-faced chief's reply. "But," he added wistfully, "We sure could use an R4D."

## In Person

A PILOT was flying an SNJ from Phoenix to Los Angeles on a dark and gloomy night. ATC had forwarded his clearance ahead of him to Blythe, and as he steamed westward at a brisk 130 knots, he soon picked up Blythe radio calling.

He answered, but Blythe failed to reply. The pilot, a quick study, figured this was because his rickety 4495 was inoperative, so he waited until he drew nearer. Still Blythe couldn't hear him. Finally he was circling the tower at 500 feet and shouting into the mike, but Blythe only continued to call him—now with a note of slight anxiety.

Since he needed to acknowledge his ATC clearance, not to mention a minor item called the ADIZ, our hero decided to land. He did so at the field, taxied up to the dark line and clambered out, heading for a small lighted shack, the CAA hut.

Inside the operator was getting frantic. "Navy 280," he said with a catch in his voice, "come in please. I have your clearance." Our hero stepped through the door and walked slowly over to the operator.

"280," he said. "Shall we dance?"

BOB REILLY, LT. USNR

VA-772  
NAS LOS ALAMITOS



## Have You Heard This?

EVERY DAY some new way to wreck an airplane is discovered. LCdr. Stan R. Holm, staff operations officer of CAG-102 aboard the *Bon Homme Richard* in Korean waters, reported a peculiar one.

A plane director, routed out during the wee hours of the morning, left his false teeth in his locker.

When it came time for him to blow his whistle to signal the plane captain to apply the brakes, he had no teeth to grip the whistle.

The whistle went flying through the air, resulting in an ineffectual "whoosh" unheard by the plane captain. Chalk up another ship-board aircraft accident to a novel cause.

# LAST OF THE MOHICANS



PICTURE ON UNCAS BEFORE LAST NOLO FLIGHT

**U**NCAS, the last TD2C target drone in the Navy, is now a permanent resident of Davy Jones' Locker.

On 26 July, *Uncas* crashed at sea after suffering gunfire damages while operating with the USS *Kraus*. *Uncas*, named for the brave who was the last of the Mohicans, was "beeped" (or flown) into the air where F8F *Bearcat* control planes took over and flew him out to the Virginia Capes operating area for the fatal gunnery exercises. The gunners of the *Kraus* took no pity on *Uncas* and shot him down as if hundreds more were to follow.

According to the records of VX-2 at Chincoteague, Va., some 422 TD2C *Nolo's* have been flown since 27 July 1945 by that activity.

The name *Nolo* is derived from the words *no live operator*, and the average life of a TD2C was two and one half *Nolo's*. VX-2 believes it had two of the Navy's most experienced TD2C ground control operators in Lt. R. E. Orcutt and Lt. E. R. Britt. Orcutt had credit for 74 *Nolo's*, while Britt had 49 in VX-2, and both men had *Nolo* credits before reporting to VX-2.

VX-2 is now operating with F6F-5K drones and has flown over 400 *Nolo's* with the famous World War II Grumman *Hellcat*.

*Nolo* is an operation which requires exceptional skills and teamwork. After a drone is rigged with the proper radio and electronics gear, it is checked and rechecked before it is taxied out to the runway in preparation for a takeoff.

The ground operator takes over after the plane is spotted and "beeps" it into the air. The F8F control planes which have been orbiting, turn on their radio control gear after the *Nolo* is airborne and fly it to the target area. Then the control pilot in the *Bearcat* executes the maneuvers requested by the ship or shore installation doing the firing.

If the *Nolo* is not shot down, it is flown back to Chincoteague. The wheels and flaps are lowered by the airborne control planes and the *Nolo* is flown into the final approach a few knots above stalling speed. The ground operator, sta-

tioned near the end of the runway, takes over control in the final approach and "beeps" it in for a landing.

Don't say it can't be done, for the records of VX-2 show that almost 1000 *Nolo's* have been flown by that squadron. There are rumors that Grampaw Pettibone believes ground operators would make good LSO's for some of the consistent "wave-off" boys.

## VR-3 Designs 'Escape Slide'

### Guarantees Safe Unloading of Litters

Combining their ideas, know-how, and following the old adage that "it's better to be safe than sorry," VR-3's Lt. J. E. Langille and L. T. Raleigh, PR1, recently designed and constructed an air evacuation "escape slide."

The escape slide is similar to hotel chutes or slides. It enables the swift, gentle, unloading of litter patients from transport aircraft in the event of a crash landing.

In the event of such a landing, the slide—a 26 x 31½' strip of heavy duck canvas—is secured by three parachute snap hooks to deck rings near the main cargo door of the transport. Then, slipping to the ground, crew members hold the canvas strip tautly out from the aircraft until it forms a sliding-board type chute.

The crew members aboard carry the litters to the cargo door and gently slide them down the chute to the ground and safety.

Without the escape slide, the nine-foot height from the ground to the cargo

door of the R5D aircraft would prevent the safe unloading of patients during an emergency.

The slide which weighs 30 pounds is now carried aboard all VR-3 evacuation flights in a convenient container.



**MARINES** of the Second Marine Air Wing at Atlantic Fleet exercises find Spanish in Puerto Rican newspapers confusing. Sgt. Fred Richard uses Spanish dictionary as Sgt. T. Oliver translates and Corp. R. L. Swiatkowski just looks baffled by headline which says something about a woman offering matrimony to another woman.



**PYROTECHNIC** locker, demonstrated by R. J. LeBrun, AN, was designed by VR-3 maintenance personnel. Consolidated stowage of combustibles eliminates potential fire hazard of a more haphazard arrangement of stock



SLIDE OFFERS SAFE EXIT FOR LITTER PATIENTS IN CASE OF TRANSPORT EMERGENCY LANDING

# SELF-POWERED BEACHING CRADLE DESIGNED



*THIS one-tenth scale model of the Convair XP5Y-1 was constructed to test the big flying boat before building the full-sized one; here it tests new beaching cradle*

**L**IKE A fish, the limiting factor of a seaplane is its inability to come ashore on its own power.

Oldest tableau in naval aviation is the sight of half submerged beach crewmen dressed in rubber suits jockeying a seaplane onto a cradle or fastening beaching gear prior to heavy tractors hauling the behemoth up a ramp from the water.

Amphibians solve this problem, but at the cost of too much weight.

With newer and larger seaplanes already in being, ready to take their rightful place in the future of global aviation, development of handling equipment such as beaching cradles and floating U-docks becomes mandatory.

Biggest U. S. sea plane now in existence is the Consolidated XP5Y-1 turbo-prop-powered long range patrol plane and transport.

Ray Farnsworth, Consolidated-Vultee

Aircraft Corporation project engineer, recently demonstrated his company's solution to the problem of beaching a large seaplane which cannot be handled by former obsolete methods.

Convair has designed an ingenious self-powered beaching cradle to accomplish the task at a reasonable cost with the least effort and within the shortest possible time.

Early in 1946, on the drafting boards at Convair's San Diego division, there appeared the beginning of a self-propelled cradle. From this beginning, a staff of draftsmen, engineers and model builders have produced a hydrodynamic one-tenth scale model beaching cradle. When built full size, it will meet the requirements for any large seaplanes.

Reason for the scale model was that previously a radio-controlled one-tenth scale model of the XP5Y-1 had been constructed. The pictures appearing here

show both the plane and cradle models operating together.

The ultimate beaching operation, estimated to take only five minutes, will proceed like this. The 20,000-pound proposed cradle, powered by four outboard motors totaling 100 horsepower, in smooth or choppy waters, to the seaplane scheduled for beaching. It travels at about six knots. An operator, seated at controls "under glass" in one of the two aluminum alloy pontoons, guides the craft so that it slides on each side of the aircraft's hull.

Pilot-to-cradle intercom is connected. Steel cables from the cradle are attached to the plane by a crewman. At this point the cradle sub-structure is elevated so that the pads make firm contact with the bottom of the seaplane hull. This is done by pneumatic pistons.

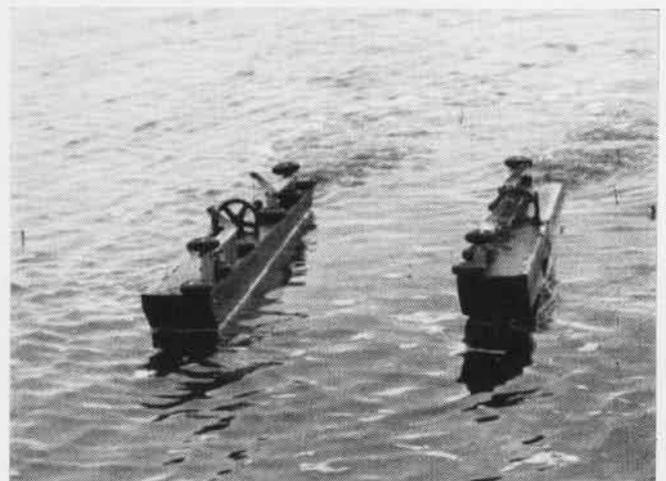
After the plane is made fast to the cradle, the pilot revs up and taxis to the ramp, up the ramp under his own power, then to a parking space. Steering on land is done by the cradle operator under guidance of a signalman. It's that simple.

A glass bottom window at the operator's station gives direct view of the cradle pads, step positioning block, and hull bottom for the mating operation. A diver's lamp supplies improved vision for murky water beaching. The plexiglas canopy protects the operator from airplane propeller blast.

A study of existing seaplane ramps revealed that many are in shallow water. The proposed cradle can operate in shallow water. It is designed to retrieve the large seaplanes in only nine and one-half feet of water. This eliminates a long run to the waiting plane from a beach which has a long gradual slope.



*IN PRACTICE the cradle will run out to seaplane, fit on each side of hull, then plane will taxi up ramp to parking space*



*THIS large seaplane beaching cradle is self-propelled by four outboard motors and has an operator placed inside one pontoon*

# LST'S ASSUME NEW ROLE



MODIFIED LST AVENTINUS STANDS BY AT WHARF WHILE F9F PANTHER IS EFFICIENTLY REPAIRED

IN THE FAR Eastern theater are scores of small ships which are playing a major supporting role in the Navy's dramatic air war over Korea. The stellar performance they turn in keeps 'em flying.

The ships are converted LST hulls accommodating machine shops and storage spaces for the overhaul of aircraft and storage for the endless assortment of spare parts. Such a vessel is USS *Aventinus* (ARVE-3). She and her sister ship, USS *Fabius* (ARVA-5), constitute Aircraft Division One.

Working in whatever port their services are most urgently required, they tailor their prime mission to fit the particular needs of the moment. The job may call for overhaul of an engine as a unit, or it may involve only a few of the more abused components. Certain classes of accessory items, such as tail hooks, starters and generators, are in perpetual short supply in a carrier task force.

At times, the USS *Aventinus* has devoted a substantial part of her total effort to seemingly minor things which assume strategic importance in the heat of battle. Perhaps the item is not to be found in the stock bins and has to be fabricated from scratch. Maybe it can be salvaged from a war-weary hulk.

The *Aventinus* was named for the Aventine Hill, one of the seven upon which ancient Rome was built. Built by the American Bridge Ship Building Company in Ambridge, Pa., the ship was commissioned on 30 May 1945. The *Aventinus* served in the Pacific until

August 1946 and then was mothballed at San Diego.

On 25 July 1950, the commission pennant was again hoisted and the *Aventinus* sailed for the forward areas to help stave off Communist assault in Korea.

In reviewing the events since July 1950, LCdr. Commander Kenneth T. Sanders, USN, skipper of the ship, describes his job as a pioneering experiment that challenges Yankee versatility.

"Aviation types had undergone considerable change, and these ships had been in hibernation for five years. After the dust and rust was cleared away, it was time to think about our mission, what tools would be required, how much we could accomplish and how soon.

"Since that time, many questions have

answered themselves, and we have a store of knowledge accumulated on a 'learn while you earn' basis. The variety of the work has paid dividends in developing new methods and techniques. It has been a long and hard road, but we now have a real mobile aircraft repair and maintenance facility."

## Dual Role for Tankers New Deck Permits Navy to Ship Planes

Take a second look at that Navy tanker plowing through the seas with a load of planes on her deck. At first she might look like a small aircraft carrier.

The deck on which her planes are riding is merely an ingenious addition to the tanker which permits MSTs vessels to double as cargo ships. Constructed of aluminum, the 12,000-square foot deck space can be quickly assembled by only two men, if necessary. There is no piece in the 1,000-unit deck which weighs more than 175 pounds.

The versatile structure, tagged by tanker sailors as "mechano decking," is assembled along the lines of an erector set. These cargo decks enable the Navy to ship fighting aircraft to areas where needed without tying up a carrier.

## Navy Lends a Helping Hand NAS Doctors Fly to Assist in Disaster

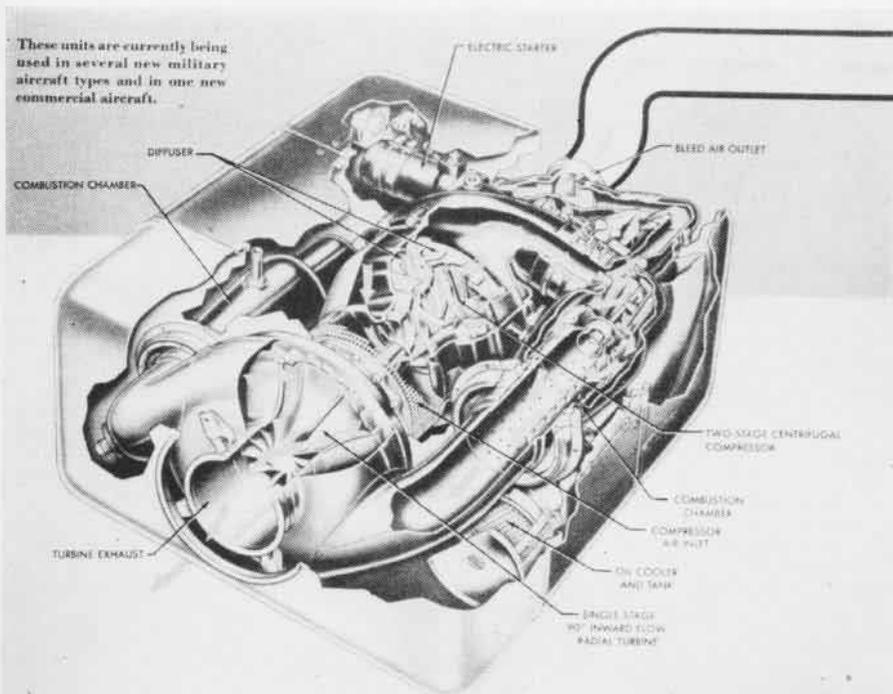
NAS CORPUS CHRISTI—When the roof of a 70-foot ore storage silo under construction collapsed recently near Gregory, personnel were dispatched from this station to lend a helping hand with the extrication of men trapped under tons of concrete.

Cdr. J. D. Boland and Lt. C. H. Lake from the dispensary flew to the scene in a helicopter and remained at the plant administering first aid to the stricken men until the silo was cleared. A group of doctors and corpsmen from the Naval Hospital also arrived at the scene and helped in rescue work.



PREPARATORY TO RECEIVING a number of PV-2's from this country under the Mutual Defense Assistance Program, the Royal Netherlands Navy sent three flight crews to NARTU NORFOLK and three more to NAS WILLOW GROVE for training and check-outs in that type of plane. The first picture shows Norfolk's Cdr. Reister (r) briefing RNN Lts. Van de Meulen, te Velde, Outshoon and Walters; the second one shows RADm. Heijje Schaper, Deputy Chief of the Royal Netherlands Naval Staff for Air, presenting a miniature Dutch flag with the Royal Netherlands Air Force insignia on it to Capt. Howell, Commanding Officer of NAS WILLOW GROVE as RNN Lts. Bijkerk and Kosten look on with interest.

# NEW JET STARTING SYSTEM



CUTAWAY SHOWS INTERIOR OF GAS TURBINE COMPRESSOR WHICH WILL START FUTURE NAVY JETS

WHEN THE Navy built jet and turboprop engines, the need arose for new, lighter starters to replace heavy electrical systems. Bureau of Aeronautics, under contract with AiResearch Manufacturing Co., of Los Angeles, has developed a pneumatic system which appears to be one of the most promising systems.

This system consists of a gas turbine compressor, an air turbine starter mounted on the engine to be started, and a control valve operated by the pilot when starting the engine. The first-named unit has compressed air bled from a two-stage centrifugal compressor within the unit. This air is ducted to the air turbine starter.

The remainder of the air that passes through the compressor is divided between the two combustion chambers where it is mixed with fuel and burned as in conventional gas turbines. The air

then passes through a single-stage radial inflow turbine wheel and out the exhaust.

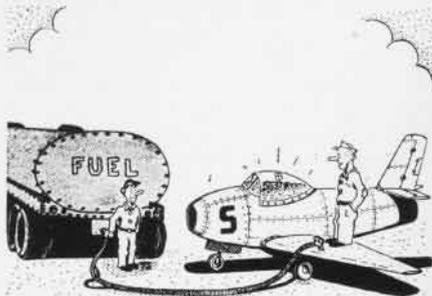
All the power developed by the turbine is used in driving the compressor, and the few required controls and other accessories. For installation in aircraft, the basic unit is surrounded by a sheet metal enclosure which makes it a packaged power unit suitable for remote operation.

In patrol and other large aircraft, the gas turbine compressor unit is installed within the aircraft. Thus it can start its engines many times without using external power. For carrier-type aircraft, the gas turbine compressor is being mounted in a streamlined package resembling a belly tank. This unit is used as a ground source of compressed air for starting the engine.

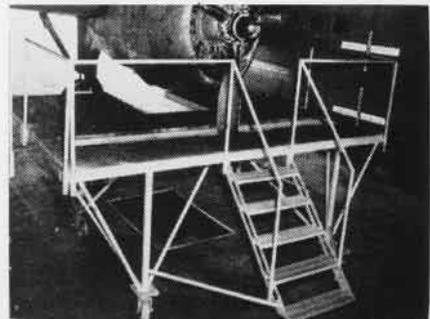
The package is so made that wheels can be stored within it, and the complete

package mounted on a wing rack or pylon and carried as an external store. It is visualized that the store will be carried on cross-country flights, ferry hops and staging operations at the option of operating personnel, but that it will be left at the base or on the carrier during combat operations. For a time, one of these external stores, complete with fuel tank, gas turbine compressor, battery and other accessories, will be delivered with each aircraft.

Pneumatic starting systems are at present being installed in or will be installed in the following aircraft: A2D-1, A3D-1, F3D-3, F4D-1, F10F-1, F3H-1, R3Y-1, XA2J-1, XF3H-1 and XP5Y-1.



O.K., WILLY, TURN IT OFF!



STAND MAKES NACELLES EASILY ACCESSIBLE

## Corpus' New Work Stand

NAS CORPUS CHRISTI—A contour fitting type work stand, allowing maximum accessibility to all sections of the engine nacelles, has been designed by W. A. Beadle, ADC, attached to Advanced Training Unit 12.

The stand has certain desirable features: a propeller well which allows the propeller to be pulled through; safety rails which can be raised and lowered without detaching them, and an attached ladder which gives easy access to the working platform.

A set of four of these stands was built by O&R and have been used by Advanced Training Unit 12 for a long enough time to prove their worth.

The Industrial Safety Department of O&R states: "The four new engine stands recently obtained by the unit and presently being used in Hangar 41 are excellent from the safety standpoint and appear to offer definite efficiency advantages. The unit is commended for designing and obtaining these new stands."

Although primarily designed for use with PB4Y-2 aircraft, the stands can be used satisfactorily on R4D, R5D and P2V type aircraft.



STREAMLINED STORE ENCLOSES AIR COMPRESSOR; CAN BE CARRIED ON WING RACK ON LONG FLIGHT

# LETTERS

SIRS:

In reference to the letter on the letters page, October issue, we wish to express our most hearty congratulations to the author of the letter concerning mirror flashing devices in life rafts.

We are in agreement with the possibility of breakage, so we wish to submit a few ideas on that same principle.

1. A reflecting material could be fused to a thick walled, plastic balloon. In an emergency, the balloon could be inflated with a lighter-than-air gas. The balloon then would be airborne and in constant motion.

2. A large cloth bag could be used as an outer covering for the balloon. This bag could be covered easily with a reflecting material. By inserting a balloon in the bag and inflating it with gas, it would be airborne and in constant motion. A cloth bag could be easily stowed and ruggedly constructed.

The above-mentioned ideas are the result of a discussion in this unit. If the ideas sound reasonable, we could work up a working model.

THE CREW

P4Y-2 ENGINEERING  
BLDG. 35, GROUND TRAINING  
NAS CORPUS CHRISTI

† BuAer says the idea above won't work. 1. Use of lighter-than-air gas suggests helium with a relatively low lift compared to hydrogen. Hydrogen is dangerous to handle and it leaks through most fabrics which would be used to make a lightweight balloon. In addition to leakage problem, heavy apparatus would be necessary to provide the quantity of gas required. This extra weight might better be used to provide more mirrors, if necessary, or providing other survival aids.

2. A round object does not act as a reflector. It is a dispersing agent. Reflectors are never convex—they are flat for best reflectance and concave or parabolic as in headlights.



SIRS:

The picture of the F6F tearing in half on the arresting wire has just come to my attention in your September issue. I made the statement to fellows on my ship that the accident happened aboard the USS *Princeton* (CV-37) in 1946 when Capt. John M. Hoskins was in command.

My belief that it happened aboard the *Princeton* was doubtful at the time I received the NEWS because the barrier stanchion look like Mk IV gear, whereas the *Princeton* was equipped with Mk 7 gear. . . . It is my belief that February to March 1946 is the approximate time of the incident.

I was a member of the original arresting gear crew aboard the then new *Princeton*. At the time of the accident I operated #3 barrier, the first barrier that the F6F engaged after tearing apart on contact with the deck pendant. As I remember, no one was injured in the crash, but the plane was a total wreck.

The only additional information I have is that the F6F was one of three or four on board at the time and was used for photo reconnaissance with other squadrons in the Guantanamo Bay, Cuba, area.

EUGENE F. MCCLUSKEY, ABU2  
USS SIBONEY



SIRS:

In the past there have been discussions concerning the spinning of landing gear wheels before landing to conserve tires.

Can I learn the faults and defects of ideas so concerned, or isn't there enough loss to carry on with the idea.

ANDREW R. KERN

STOCKTON, CALIF.

† The Navy uses pre-rotation tires with flaps and small motors to rotate the wheels of the R60 *Constitution*, not so much to save rubber as to cut down landing shock stress on the struts. P2V's originally had flaps to spin the wheels in the slipstream but they created a bad supply problem since tires were not interchangeable. A torn flap also unbalanced the tire, and some tires even set up reverse spins in turbulent approaches. To be effective, a wheel must spin at about 70% of the landing speed.



SIRS:

On the October 1951 issue of NAVAL AVIATION NEWS, on page 10, two F9F-2P's were shown with a caption inferring that these aircraft were flying close air support missions.

This picture, taken by Lt. J. E. Smith in April 1951, shows two of VC-61's photo reconnaissance planes flown by Lt. Charles A. Hooper and Lt. George Elmies.

The vanguard of carrier based jet-photo reconnaissance in Korea, the pilots of this detachment flew more than 55 photo missions apiece, signified by the camera emblems on the sides of the planes.

VC-61 HOWARD W. CREWS, CDR  
FPO SAN FRANCISCO



SIRS:

The personnel of the U. S. Naval Arctic Test Station and the U. S. Naval Construction Battalion Detachment 1801 were proud to see the name of this isolated station in your article "Aerology Gear Arctic Tests" in the October issue of the NAVAL AVIATION NEWS. I can assure you that the publication is well read and enjoyed each month here at the Top of the World, since every man attached to this activity commented on your statement that BUAER established the U. S. Naval Arctic Test Station.

Actually BUDOCKS established the Arctic Test Station in 1947 to perform tests on equipment and techniques at the direction of the Port Hueneme NAVCERELAB. In addition to its own tests, this station provides space for the work of the Bureau personnel engaged on various Navy projects including those of BUAER, BUSANDA, BUSHIPS and ONR.

ROLAND D. HILL, LT., USN  
Officer in Charge

POINT BARROW, ALASKA

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### ● THE COVER

A. C. Connell, AN, of the Navy Parachute Unit, NAAS El Centro, Calif., lands in the desert using an orange-and-white Arctic chute being tested by the unit. Photo by Theodore Trekas, PR1.

### ● PHOTO CREDIT

Back cover photograph by George Long, Acme Newspictures staff photographer, taken at NAS Los Alamitos.

### ● SUBSCRIPTIONS

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A winged mailed fist climbing from a carrier deck typifies VF-726, a Glenview Reserve squadron flying F8F's, one of the best prop fighters. Its insignia denotes the speed and toughness of Navy squadrons.



## SQUADRON INSIGNIA



One of the busiest squadrons in the Korea war is HU-1, whose helicopters have rescued hundreds of downed pilots and wounded ground troops. Their latest job was to fly UN conferees to peace meets.





NAVAL AVIATION

# NEWS

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