NAVAL AVIATION NEWS

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HERE'S THE ANTARCTIC NAVY WAITING FOR 'DEEPFREEZE'

WOULD YOU CARE TO INSPECT THE HONOR GUARD, ADMIRAL?

THE OLD MAN SURE THREW THE BOOK AT US!

IT DIDN'T HAPPEN ON MY WATCH, CAPTAIN

WHAT'S YOUR DATE OF RANK, LIEUTENANT?

IT WAS A WONDERFUL PARTY, DEAR, LET'S GO HOME.

COLD CHALLENGE TO COURAGE

THERE IS A VAST, cold land, mysterious and strange, that lies at the bottom of the world. Desolate, forbidding, lifeless, this virtually unknown seventh continent has been locked in ice for a hundred million years—locked in ice a thousand feet thick and hidden behind almost impenetrable barriers.

First lines of defense of this enormous earth area are the violent seas encircling the entire continent at this, the meeting place of the Atlantic, Pacific, and Indian oceans.

Secondary defense, a protective shroud of floating pack ice, girdles the white continent, extending out for hundreds of miles. This ocean of ice, capable of freezing overnight, can catch and hold a ship in its grip—beset it—and, with a whim, can grind even a steel hull into fragments.

Closer in to this land of mystery are the ice shelves, perpendicular cliffs that rise without a break a hundred or more feet. Fed by billions of tons of glacier ice, poured down from the icecap, these frozen ramparts guard a silent, frozen land.

LED BY ICEBREAKER, SHIPS OF TASK FORCE SAIL IN BATTLE LINE THROUGH ICE PACK OF THE ROSS SEA TO LITTLE AMERICA

POLAR ICE CAN BESET EVEN SUCH ICEBREAKERS AS THE EDISTO

POWERFUL ICEBREAKER GLACIER LEADS SHIPS TO ANTARCTICA

EXTENDING hundreds of miles from shore, the ice shelves are washed by waters a little less frigid than themselves. Weakened by the intolerable pressure of the cataracts of ice eternally flowing from behind, these walls of ice 'calve'. Great chunks break off into icebergs, characteristically perfectly flat on top. These bergs vary in size, ranging from the dwarfs no bigger than a house, to giants as large as the state of Rhode Island. Floating juggernauts, they are a menace to any ship within range.

It is alleged by some, from thrilling, and almost fatal experiences, that icebergs act as if they had brains: they sometimes chase ships like a homing device.

The story is told about the *Mount Olympus*, the *Merrick* and the *Yancey*, during *Operation Highjump* in 1947. They had moored to the ice shelf inside the Bay of Whales for off-loading. The entrance from Ross Sea to the bay was choked with floe ice so that it was only about 400 yards wide. One day a berg, a million-ton monster, moving about a mile an hour *against* wind and current, sailed into this gate between the ice walls. There it stopped. It blocked the entrance completely, bottling up the three ships inside the bay. And there it remained an uncomfortably long time, holding them prisoners.

Then the great mass of ice started moving again. Sailing into the bay itself, it came to rest against the ice shelf, in line with the three ships. They hurriedly cut loose from their moorings and dashed for safety in the open waters of the Ross Sea beyond the edge of the shelf.

And then a storm came up, forcing the smaller *Merrick* and *Yancey* back into the Bay of Whales. The *Mount Olympus* crew thought they had the better of it—while they had the wild storm, the other two ships had the berg!

PRESSURE ICE AND FROZEN EXPANSE ARE GRAPHIC CONTRAST OF NATURE'S STRENGTH AND ENORMITY TO PUNY MAN-MADE SHIPS

For two days the iceberg remained in control of the situation. Then, so the story tells, as if weary of waiting longer on its intended victims, it moved through the entrance again with perfect navigation, without scratching so much as an ice cube, and eventually disappeared over the western horizon.

Another instance illustrated the perverseness of the big bergs. The earth's most spectacular iceberg region is the open water just north of the Ross Pack. During the Antarctic summer of 1946-47, a string of these icy giants stationed themselves from two to ten miles apart, stretched in a five-hundred mile fence. Holding the pack ice behind them, they delayed the summer break up about two months.

The ice bucked by *Highjump* ships that year was much worse than any hitherto reported. That encountered in December was thick and heavy, normal for October—Antarctica's early spring. Weather conditions had been reported normal, so the bergs' picket fence was thought responsible for the unusual pack ice condition beyond.

If the brave and hardy can successfully navigate the stormy seas, evade icebergs, break through the ice pack, and establish a beachhead upon the continent itself, there still stand barriers to this well guarded land.

Around its entire perimeter rises a continuous wall of mountain ranges. Towering fantastic heights, these incredibly rugged mountains are a Maginot line of ice and rock. They oppose all entrance except over the highways of ice, the Antarctic glaciers that spill in frozen rivers through every crack and valley in the rim of the mountains.

These, the world's most massive glaciers, are traversed by pressure ridges and cracked by yawning crevasses of magnitudes only to be found in this land of superlatives.

SLEDGE DOGS ARE STILL BEST MOTOR POWER IN POLAR CLIMES

OILER NESPELEN IS AT HOME IN THE ARCTIC OR ANTARCTIC

And all these difficulties are added to the fact that this is the coldest land in the world. All attendant disastrous effects of intense cold upon the human body and machines are magnified many times.

The South Pole has been called the "Southern Hemisphere's brew vat of storms." In some sections, as in the "land of the blizzard," the winds for days, and even weeks, vary only between storm and hurricane velocity. These winds are accompanied by blizzards so severe that it seems there is nothing anywhere in the world but flying snow.

What is the strange fascination about this forbidding land? What is the lure that has called men to search for, and to explore this frozen region, under pain of certain death for any mistake?

Since 1739, when Louzier Bouvet discovered a new land, Bouvet Island, 1400 miles south of Capetown, and saw for the first time the table-like icebergs of the Antarctic, there have been few years that did not see some venturesome souls searching for new lands in that unknown area.

When a man can look over a terrifyingly wild land, filled with maximum danger, in an infinity of space, and know that no living being has preceded him, that *his* are the first eyes to behold, and *his* the first feet to tread, then he experiences an ecstasy of satisfaction in accomplishment that abrogates all else. For that, the true explorer will willingly endure all dangers and privations, and will ignore the ever-present threat of death.

At this moment there is underway the beginning of man's greatest and most concerted effort at exploration of the great white continent. Twelve nations are making plans for setting up 26 Antarctic continent bases for coordinated scientific observations during 1957-58, the International Geo-physical Year.

This world-wide probe of the earth we live on, its seas around and air above, marks the first time that so many nations have combined on such a large-scale, peaceful enterprise. Previous expeditions to the Antarctic have largely been conducted by individual nations working separately.

DEEPFREEZE DOGS TRAINED IN SUMMER

BALLOON EXPLORED MINUS 113° AREA

SNOW CORE IS TAKEN IN DEEP SNOW WELL

Antarctica is geography's last terrestrial unknown. It has been said that less is known about the interior of that great continent than about the sunny side of the moon. Its exploration has always been adventure of the highest magnitude, for the obstacles it hurled in the path of the tresspassor upon its remoteness have always been of the same high power.

But gradually, this far-away wilderness of cold is yielding its secrets. For more than 300 years, men have persevered in their searching for a key to unlock the mysteries that have been ice-bound for a hundred million years. Like a swain, wooing a cold, proud beauty, they have carefully planned their campaigns, and, suffering rebuffs, have made attempt after attempt to win their goal. With each new effort, they have gained a little more. And, in time, like the successful suitor, they will point to the accomplishment of their greatest desires and say, "This I have conquered."

And they will know the complete fulfillment that comes to but few men, and to them only at rare and great moments.

One example of the unprecedented international cooperation is the acceptance by the United States of responsibility for handling weather information for all nations.

For the first time, daily weather maps will be issued for the Antarctic regions. Representatives of the interested nations, at a planning meeting, agreed that all the stations both on the Antarctic continent, and on the surrounding islands, would regularly report their local weather conditions to the weather central, which will be located at the United States' main base, at the new little America. (Former site partially caved off.)

There, all reports will be consolidated. Based on this, weather experts will make forecasts for the individual areas, which will be broadcast daily to all stations.

What a help a daily weather report would have been to the tragic Scott in his vain race with Amundsen to the South Pole 43 years ago!

United States participation in this great effort will be supported by the Defense Department. RAdm. R. E. Byrd, USN, (Ret.) is O-in-C of the U. S. Antarctic Programs.

PORTABLE SEISMIC RAY DETERMINES SNOW'S PHYSICAL TRAITS

PLANES' HANGARS BUILT OF SNOW BLOCKS, ANTARCTICA, 1940

With a record of vast polar explorations—he has engaged in Arctic explorations, and in four Antarctic expeditions over a period of 21 years—Adm. Byrd's name is a household word. Called the "foremost polar expert of his day," Adm. Byrd, in his capacity as leader, is the senior representative for President Eisenhower, and the Defense Department in this long term program.

Task Force 43 has been assigned the task of logistic support for the U. S. Bases, three of which are to be constructed during the 1955-56 Antarctic summer.

Another doughty polar explorer, RAdm. George Dufek, USN (Ret.), veteran of four expeditions, two each Arctic and Antarctic, is the task force commander. It is he who gave the name *Deepfreeze* to the operation.

After reading accounts of members of various expeditions—including the recent USS *Atka* one—who enjoyed foods left from previous groups, such perishables as cookies, butter, and steak kept in perfect condition in this super deep freeze,—one asks, "And what else *could* the name be?"

Known as the "Volunteer Task Force," TF-43 has a complement of 1805. It is about a third the size, personnelwise, of the 1946 expedition *Highjump* with its approximate 4,000 men, and 13 ships.

Task Force 43 is composed of the task force staff, surface complement of seven ships, an air development squadron, designated VX-6, and a special construction battalion.

For the ships involved, *Deepfreeze* is in the category of another fleet operation. It is, however, an operation admittedly somewhat out of the ordinary for most of the men aboard the ships, a great number of whom have had no previous duty in the high latitudes.

For the task force staff, the officers and chiefs of VX-6, and for the entire Seabee battalion, it is strictly a volunteer tour of duty.

When Alnav 8 put out the word that applications were invited for duty with the task force expedition, BuPers was flooded with requests, about 4,000 for the fewer than 300 billets to be filled. Officers' detail desks, too, waded through many letters beginning with the words, "It is requested that I be considered for assignment to duty—"

ON BOARD ATKA, SCIENTIST TAKES READING FROM BAROGRAPH

FILLING EMPTY HELIUM BOTTLES WITH POLAR AIR FOR STUDY

ON EARLIER CRUISE, ADM. DUFEK AND CDR. GIMBER WATCH ANTARCTIC APPROACH

ADM. BYRD FLIES OVER THE SOUTH POLE

MORE THAN a month ago the task force sailed on the first leg of its journey, and has now put in at New Zealand. From there the three icebreakers of the force, the Navy's *Glacier* and *Edisto*, and the Coast Guard *East Wind*, have continued on their way into the Antarctic. It is their first task to explore the ice pack and to verify the landing site at Little America. They will put ashore a 10-man reconnaissance party to begin marking a safe trail from Little America Station to the site of Byrd Station, the second base to be constructed this first year. Byrd Station is located at 80°S, 120°W in Marie Byrd Land, many, many hard trail miles over that part of the Ross Ice Shelf, and the high Rockefeller Plateau.

At both Little America Station and at McMurdo Sound, site survey parties will land. Their job is to determine the base sites and to evaluate the ice and snow in preparation for VX-6's aircraft to make landings. McMurdo Sound is across the entire width of the Ross Shelf from Little America, and is bordered on the Victoria Land Coast side by the network of the Mackay and Ferrar glaciers.

With two small 'fuel farm' YOG's in tow late this month, the four other ships, two AKA's *Arneb* and *Wyandot*, and the MSTS cargo ship *Greenville Victory* and the AOG *Nespelen*, will take stations out from New Zealand at 250-mile intervals.

The ice breakers will station themselves at like distances in the ice pack. Thus, the seven ships will form an unbroken line of radio picket ships and rescue stations for the flight of the squadron aircraft from New Zealand to Antarctica. During this precedent-setting flight, no airplane will ever be more than 125 miles from the nearest ship, in the event a ditching becomes necessary.

Air Development Squadron Six, air arm of Task Force 43 is, in a broad sense, a composite squadron. The aircraft, 15 in number, are of six types—two R5D's; two R4D's ski-rigged; two P2V-2N *Neptunes*, ski-wheel installations; three HO4S-3 helicopters; four UC-1 deHavilland *Otters*, and two UF-1 Grumman Triphibian utility planes, wheel-pontoon-ski equipped.

Once in Antarctica, VX-6 has a three-fold mission. During Phase One, the squadron aircraft will lend support to the building of the two major bases, at Little America, and Byrd Station, as well as the Air Operating Facility, McMurdo Sound.

In 1956-57, Phase Two, VX-6 planes will support construction of two other bases. During that time, some 500 tons of materials will be air-dropped for use by the Seabees in their construction of a base at the South Pole itself. Air Force planes—six or more C-124-C *Globemasters* will undertake this air drop.

A second task is the aerial mapping missions that the squadron will fly over unexplored areas. The P2V's are expected to be the stellar performers in this work.

From beginning to end, the squadron will be flying ice reconnaissance missions, and will be alert at all times to assist any surface party in distress — air-snow rescue!

As a safety measure, the wingtips and tail of each VX-6 plane have been painted a brilliant "International Orange," for high visibility in the vast white world.

To some VX-6 officers, a tour in the polar region will be "old hat." Cdr. G. K. Ebbe, squadron commanding officer is a veteran of the North Polar expedition *Ski-Jump One*. He has also made a number of Air Force Ptarmigan (Weather) flights over the North Pole. Cdr. E. M. Ward, VX-6 operations officer, flew with *Ski-Jump One* and *Two*.

Administrative officer, LCdr. C. O. Fiske sailed to the Antarctic with the privately operated Ronne Antarctic Research Expedition, in the 1946, where he engaged in extensive aerial mapping operations. In addition, he has participated in numerous Arctic expeditions.

Cdr. R. P. Wiegand and LCdr. C. S. Shinn were both members of the Operation *Highjump* group in their 1946-49 expedition to the Antarctic.

While LCol. H. R. Kalp, USMC, VX-6 executive officer, is not familiar with polar regions, he did have extensive experience in cold weather air-drop operations over Korea. This will prove useful to him in his present task.

Since the earliest use of an airplane in Dec. 1928 for exploration of the South Polar region, the worth of planes in this endeavor has been given full recognition. From that first flight in the Antarctic made by British Sir Hubert Wilkins in his Lockheed-Vega, planes have added hundreds of thousands of miles to the known, and the mapped, territory of this remote and forbidding land, by aerial exploration.

First flight over the South Pole was made by RAdm. Richard E. Byrd, in November 1929 in a Ford tri-motored monoplane, flying the 1600-mile round trip from his Little America base in 19 hours.

By the modern miracle of flight, Adm. Byrd accomplished approximately the same distance in less than a day that it took Roald Amundsen 99 tortuous days to travel by dog sledge, only 17 years earlier.

THROUGH the maximum possible use of planes in this land of extremes in intense cold and in adverse weather, recent expeditions have made vast strides in knowledge about the Great White Continent.

First Antarctic use of a seaplane was made by the Second Byrd expedition, 1933-35. A twin engine Curtiss-Wright *Condor*, ski and pontoon equipped, operated from open water near the edge of the impenetrable Ross Ice Pack. Two great flights into Marie Byrd Land carried out elaborate surveys beyond the eastern margin of the Ross shelf.

Four years later the U. S. Antarctic Service Expedition, headed by Adm. Byrd, used scouting sea planes to guide the ships of the expedition through the ice. From the base in Marguerite Bay, along the Palmer Peninsula, spectacular flights were accomplished. These discovered new coastlines around the 30° longitude in regions that had defied all earlier attempts.

Using three planes, the Ronne Expedition, 1946-48, explored 250,000 square miles of unknown territory in the Weddell Sea area. It was this expedition that ascertained that the Continent is indeed *one* continent, not two, as some had thought, divided by a Weddell Sea-to-Ross Sea strait.

Operation *Highjump*, essentially a naval expedition, used PBM's and R4D's. *Mariners*, supported by the seaplane tender *Pine Island*, operated on both sides of the Palmer Peninsula. Six R4D's, ski-wheel equipped, took off from the *Philippine Sea*, JATO assisted, and landed on the Ross Ice Shelf at Little America, from where they operated.

Flights of these two plane types covered an area more than half the size of the United States, of which over 400,000 square miles had never before been seen by man.

SHIP-TO-ICE SHELF FERRY WAS NEW USE FOR ATKA 'COPTERS

VX-6 SKI-EQUIPPED P2V'S USE JATO FOR SNOW TAKE-OFFS

Even with the magnificent contributions made by planes, however, there is nobody who holds the opinion that planes are all that are needed to further exploration of this great land. Nothing can take the place of human perseverance, of hardiness, and of courage.

The history of polar exploration has been a story of outstanding courage and accomplishment. It is a story in which American names stand high in the list of heroes.

To an American, young Capt. Nathaniel B. Palmer, in his 44-ton sloop *Hero*, measuring only 47 feet long by a 17-foot beam, went the rarest of all experiences, that of discovering a new continent.

IN 1820, the year after he had found the way to the Shetland Islands sealing grounds, Capt. Palmer led an eight-ship fleet back to that stormy area to explore for new islands where seals might be found. He mapped the other Shetlands, then sailed southward in search of the land he had seen from a high point on Deception Island.

In November of that year, Palmer discovered, and landed upon the rocky, icy shore of the land that proved not to be an island, but rather the last undiscovered continent in the world. In his honor the northern peninsula of Antarctica has been named Palmer Island.

It was another American, a Naval officer, to whom fate gave the chance to prove beyond a doubt, that this land was a continent and not a series of islands and archipelegoes bound together by the age-old ice.

Lt. Charles Wilkes was commander of the 1839 United States Exploring Expedition. His orders were "to make researches and to attain as high a southern latitude as possible, between the longitudes of 160° and 45° east."

The squadron that set forth in Aug. 1839 on a four-year expedition was made up of two sloops of war, a gun brig, a supply ship, and two small tenders, all ill-adapted for the work in prospect.

Handicapped by his ships' condition, beset by terrible storms, and hindered by heavy ice, Wilkes howbeit reached the continent on 19 Jan. 1840. For 1500 miles he sailed along the "icy barrier" sighting land and making soundings. He wrote: "I gave the name of Antarctic Continent."

Ulysses, greatest of all explorers, has, through Tennyson, laid down rules by which all men of great courage move—

"Yet all experience is an arch wherethrough
Gleams that untravelled world . . . . .
To strive, to seek, to find, and not to yield."

GRAMPAW PETTIBONE

Lightning Strikes Twice

The following two accounts are quoted from the minutes of a field Aviation Safety Council Meeting:

Item 21. DOAKES, J., Capt, USMC, AD-4B - pilot landed wheels up at air station. Pilot was using wrong radio frequency, had no landing clearance from tower, didn't circle a strange field, didn't observe tower for lights.

a. Better flight planning and use of published instructions would have prevented this accident.

Item 32. DOAKES, J., Capt, USMC, AD-4B - second wheels up landing in 39 days. Wheels watch mistook bottom fuselage light for approach light. Pilot was under emotional strain. No material malfunction.

a. Robot pilots.

b. Fixed landing gear.

Grampaw Pettibone Says:

About all I can say for this lad is that he is mighty consistent. He probably couldn't get his mind off that first landing long enough to remember to put his gear down for the second one.

When you come right down to it, a wheels-up landing is a pretty dumb stunt. Those who haven't joined the club get quite a charge out of recommendations such as robot pilots and fixed landing gear as solutions. But look at it from the angle of the pilot who finds himself the center of attraction out there on the runway. His first regret is that he didn't make a hole in the deck big enough to hide both himself and his flying machine. He searches his soul for the reason for this predicament, but being an aviator of sorts about the only justifiable answer is "it's just one of those things." In other words, by the time a crash crew arrives, our boy has convinced himself that a wheels-up landing could happen to anyone under the right circumstances.

Well, believe it or not, he is right. Pilots can go along for years with no difficulty, but there is not a pilot living who isn't faced with some emotional difficulty at one time or another during his career. As a general rule, the older a person gets the more responsibility he takes on, which forces him to adjust himself continually to

changing situations. There are those who just can't adjust themselves fast enough and encounter periods of high emotional strain. This doesn't mix with flying, but then it's hard to convince some people that flying requires anything but muscular coordination.

Most of us firmly believe that we are immune to pre-occupation and mental blocks because we have enough self-discipline to leave our troubles in the ready room. This is fine until we find ourselves out in the middle of the runway sans wheels. To the question, "Wha hoppen-" we are forced to admit we were under an emotional strain. In a few cases

pilots will say they thought the wheels were down. There is a slight difference between one who *thinks* the wheels are down and one who forgets them entirely. The former is a victim of a disrupted habit pattern and the latter is a victim of hyper-emotion. In either case they don't have a leg to stand on, not to mention the wheels.

It is a pretty stiff jolt for the average pilot to find himself a member of the club, and it will be a long dark night before he does it again. But if the lesson doesn't stick and he repeats the performance practically before the paint has a chance to dry on the first machine, he needs a long vacation.

Lightning has been known to strike twice in the same place with only a singe. My advice to twice-losers is to make a few changes in the thinking mechanism just to keep it from striking a third time. This might even include taking up golf on a full time basis.

Insurance Policy

The following is an account of a fatal AD-6 accident as witnessed by the LSO:

"The pilot was making his second night field carrier landing approach. He had previously completed four peroids of NFCLP in this phase of carrier qualifications. The first pass was fair with a rather fast start. The second pass was near perfect up to the time he commenced to roll out of the final turn into the straightaway.

"While still in a 10 to 15 degree left bank with approximately 10 degrees of turn remaining, the aircraft began to lose altitude due, apparently, to the pilot's dropping the nose of the aircraft as he rolled out of the turn. I gave him a low, which he did not answer. The low was followed by an immediate wave-off.

"The wave-off was answered by an immediate burst of power. However, the aircraft continued to lose altitude and the port wing dropped quite rapidly. Initial contact with the ground did not appear to be of such extent as to render the aircraft non-flyable. The wing dragged on the ground and

the aircraft seemed to right itself enough so that the main gear was on the deck for a short while.

"At this point the aircraft became airborne again, and again the left wing dropped. The aircraft had completed approximately 125 degrees of roll and was some 130 feet abeam and to the port of the LSO platform when the port wing again came in contact with the ground. The aircraft cartwheeled and came to a stop about 300 feet to the left of the runway.

"The aircraft had apparently torque-rolled due to the sudden application of power and back stick from which complete recovery was never made. If this is not the case, then the pilot continued to drop the nose and left wing even after applying power to take a wave-off. There was never a stall due to low airspeed only. In any event, a serious accident might have been avoided had the pilot stayed on the ground once the main gear came in contact with the ground."

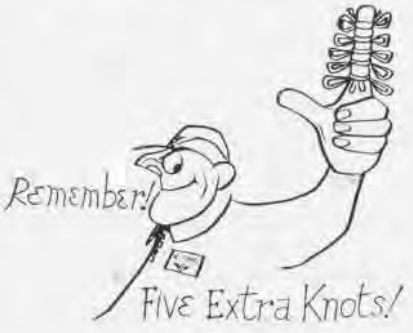
Grampaw Pettibone Says:

That's just about the way I size it up too, lad. The records show that putting a damaged plane back into the air lowers the chances for survival geometrically. Unfortunately, it seems to be a natural reaction for pilots to two-block the throttle to get out of a jam no matter what the jam may be. The only way out of a stall is increased airspeed and lower angle of attack. This should be simultaneous, but is a rather difficult maneuver at best when there is no altitude to spare.

If you are forced to maintain or increase your angle of attack to hold your altitude, you leave yourself wide open for a torque-roll in a high-powered piston aircraft. If the aircraft starts to settle and the application of power does not stop the rate of descent, pulling back on the stick will only aggravate the situation.

It is rather redundant to say the only way to beat this thing is not to let yourself get low and slow. But I'll say it over and over again. *"Watch the Airspeed!"* An extra five knots up to the final can be lost in two seconds with a little practice and it is the best insurance policy in existence. It's a policy where you are your own beneficiary. *Watch the Airspeed!* If you lose it at low altitude you have about as much chance of getting it back as you would of getting your head back if you lost that. It could be you'd lose both, but it would always be in sequence—airspeed first.

Now, on the other hand we arrive at a situation where a landing and take-off are practically one and the same thing. Whereas throttle may be used judiciously to get out of landing situation, the rule of thumb for damaged or malfunctioning aircraft on take-offs is *"Abort!"* If there is any doubt in any pilot's mind where the landing leaves off and the take-off begins, just bear in mind one thing. If any part of the airplane touches the ground, from there on, it is a take-off if you go back into the air. If you are slow enough to be on the ground, you have just landed. If it is on anything but the landing gear, you have just crashed.



I am sure that anyone in his right mind would like to know how badly damaged his flying machine is before he attempts to get it back into the blue. If he doesn't know, it is all the more reason why he should never leave the ground. Newton had the whole project wired when he said, "Momentum is more conducive to longevity, when it is decreasing." Well, he should have said it anyway.

Dear Grampaw Pettibone:

Very recently an F9F-6 pilot aborted his take-off run because of "very ineffective rudder control". It was discovered that the rudder cables had not been connected following tail removal for maintenance purposes.

Realizing, of course, that this serious bit of negligence is not a "first" in aviation, how about the following?

This same aircraft had flown one hour and 15 minutes on the previous flight without rudder control and no mention of a rudder discrepancy appeared on the yellow sheet. Could this be the first indication of rudder control being removed from future aircraft?

LT USN

Grampaw Pettibone Says:

My hat's off to that second lad who managed to diagnose his trouble before it got out of hand. About all I can say of the first one is that he came out of it smelling like a rose.

As for your question, Bub, we both know you are pulling our weary old leg. In a jet, conscious rudder movement is practically nil for ordinary flying. In fact, on a navigation hop, you may never use rudder even in turns. But try taking off in a cross wind, or making a carrier approach, or holding the pipper on the target without it. When you need it and you ain't got it, you are like the fella who is up the creek without a paddle. The only difference is, he can get out and swim.

NORFOLK *Explorer Scouts get pre-flight briefing by NARTU pilot Lt. Outten. Accompanied by two adult advisors, these boys completed a one week encampment aboard NAS Norfolk. Air Explorer Squadron 300 is sponsored by the Norfolk Naval Air Reserve Training Unit.*

JETS *of air provide lift for this experiment in vertical flight as pilot literally rides a column of air. This NACA model was a forerunner of today's Hiller flying platform.*

CAPT. DAVID *McCampbell, champion Navy ace of WW II (34 kills) and world heavyweight champion Rocky Marciano (43 KO's, 49 bouts) exchange greetings at Grumman's Bethpage Plant. Appropriately the plane is a Tiger.*

TV Controlled Landings

Alameda Tower Installation Made

NAS ALAMEDA recently became the first installation of its type to harness television for control of aircraft. Heretofore, certain approaches, taxi-strips, and portions of runways have been partially blocked from the unobstructed view of control tower personnel by intervening buildings.

A prohibitive cost of elevating or relocating the control tower, and the added consideration that viewing distance to the end of the runway would still exceed half a mile, influenced the decision to install the closed-circuit television system. Three remotely controlled cameras have been strategically placed so that by selection of appropriate lenses in each, and controlling the direction of focus, tower personnel can readily identify and direct aircraft on critical sections of the field. Three 12-inch video monitors in the control tower give a clear picture of the traffic situation.

The advent of jet aircraft and an increase volume of traffic necessitated this more positive means of control. Capt. L. E. French, CO of Alameda said that on the basis of preliminary tests with demonstration equipment, the TV camera picked up significant details much better than the human eye possibly could. This was particularly true in the case of aircraft markings and identifying numerals.

Balloons Carry Air Mail

Recovery Crews Get Speedy Service

Men assigned as recovery crews for upper air research balloons out in Arizona receive mail via the balloons they recover. These balloons are being used at Holloman Air Development Center in New Mexico to carry delicate instruments high into the stratosphere for scientific research.

Letters carried by the balloons are from wives at Holloman to men in Arizona waiting to pick up the packages carried by the huge balloons. The packages, containing equipment to find out what rarified atmosphere, extreme cold, sky brightness, and other high altitude phenomena will do to men and equipment, are parachuted to earth after being released from the balloons by radio command or timing device.

Because the recovery crews live in a specially designed vehicle which can "home in" on a balloon, they move around in the desert and are never in one place long enough to receive regular mail. That was why the balloon mail idea was initiated.

The mail system is one way, but recipients relay by radio that the mail is getting through. Delivery time for most of the mail is only eight hours, which beats any of the scheduled deliveries from Holloman to the remote locations of the men.

Douglas Uses New Process

Strengthens Steel Used for Aircraft

Bubbles — usually associated with gum-chewing youngsters or burlesque queens — are being used by Douglas Aircraft's in the manufacture of Navy jet aircraft.

The bubbles, billions, of 'em, are embossed in large sheets of stainless steel used in Douglas A2D *Skywarriors* and F4D *Skyrays*. The bubbled sheets are being used to cover air conditioning vents, heat vents, and heater ducts.

The bubble-embossed metal has been found to add strength and aid in the formability of the metal. It also increases heat deflection 100 percent over flat, unembossed metal.

The bubbles measure approximately ⅛ of an inch and there are 36 of them to each square inch of the sheet stock.

Forming of the bubbles on 14″ x 57″ x .002 and .004 stainless foil sheets is accomplished by high pressure forming against perforated grids in a heavy press, at 3700 pounds psi.

Then the embossed "bubble" sheets go to the stretch press for general shaping of the metal. After forming over the stretch press die, they are next shaped in the hydro press at pressures ranging from 10 to 15 tons.

Different sized bubble patterns can be obtained by use of varied grid sizes in the initial operation.

New Unit is Formed at JAX

Bombing Practice Scored by Radar

The Navy's first radar bomb score (RBS) unit has been formed at NAS JACKSONVILLE. Designated as Detachment Able of FASRon-51, the new unit with LCdr. L. M. Showalter as O-in-C will operate under the direction of ComFAirJax.

The mission of the RBS unit is to score, by radar tracking, the practice bombing of Navy aircraft.

THOMSON AND HOLT ARE PROUD OF LINCOLN'S CONWAY AWARD

MCCARTNEY AND MCCUBBIN REJOICE IN SANTA ANA'S VICTORY

TROPHY WINNERS

DARBY

KNORR

FORBES

ARNHOLDT

PHILLIPS

TROPHY TIME is here again and winners have stepped up to receive plaques and plaudits. For Reservists in Naval Aviation, there are three top prizes: the Edwin Francis Conway, Noel Davis and CNATRA Trophies. The competition is keen, and the tremendous efforts put forth to win the awards makes them all the more cherished.

Naval Air Station, Lincoln, Neb., emerged this year as winner of the coveted Conway award. This means that NAS LINCOLN is the most efficient air station in the entire Naval Air Reserve Training Command. Skipper of the station is Cdr. F. H. Holt, and Cdr. J. R. Thomson is his executive officer. They spearheaded the drive to make the station worthy of trophy qualification. It is the first time this station has been so honored.

The winning squadrons slated to receive the Noel Davis Trophy have been announced. VP FASRon-935 receives this award for the fourth consecutive year while HU-911 and VPP-936 are selected for the honor for the third consecutive year. Commanding officers of these three units are LCdr. W. C. Sloan, LCdr. D. F. Phillips, Cdr. Eric Arnholdt.

During its four years when it won the Davis trophy, VP FASRon-935 has had two skippers. LCdr. Leonard D. Booth was commanding officer for the first three years, the place LCdr. Sloan now holds. Booth, by a special SecNav Letter of Commendation, was authorized to wear the commendation ribbon for his success in leading his men to their first three victories in the Noel Davis Trophy race.

MASSEY

The Davis Trophy is awarded annually to the most efficient pay unit of the Naval Reserve by type, based on inspection and examination by RAdm. D. V. Gallery, CNARESTRA, and members of his staff. Other units honored and their commanding officers are as follows: AWS-93, Capt. D. W. Darby; VF-931, LCdr. R. F. Klingerman; VA-722, LCdr. I. G. Forbes; VS-872, Cdr. G. B. Catterton; VR-801, Cdr. G. R. Tamalis; ZP-753, Cdr. D. E. Massey; AAU-674, Cdr. G. H. Vanta, and AGU(s)-801 (AI), Cdr. C. W. Knorr.

AWS-93 at NAS WILLOW GROVE who has won the award for the second time, has received a Letter of Commendation from SecNav. AAU-674, NAS ATLANTA, received their second Noel Davis Award as did VR-801 based at MCAS MIAMI.

Plaque holder for the Chief of Naval Air Training Award is NARTU, MCAF SANTA ANA. Cdr. A. L. McCubbin and his XO, LCdr. E. L. McCartney, led their men to victory over 26 other Naval Air Stations.

CATTERTON

SLOAN

TAMALIS

VANTA

KLINGERMAN

ESSEX

"IT IS MY intention and expectation that between us we shall make the name *Essex* carry fear and destruction to our enemies . . . and be an everlasting credit to our country and our flag." This terse statement to the officers and crew was the prophecy, wish and resolution of the first commanding officer of the *Essex* upon the day of her commissioning thirteen years ago on December 31, 1942. Today that skipper is Adm. D. B. Duncan, Vice

Chief of Naval Operations. The *Essex* has more than lived up to his announced expectation.

In her first 13 years, CVA-9 can boast a record of 17 battle stars. A Presidential Unit Citation in WW II and Navy Unit Commendation in the Korean conflict are proof of her fighting worth.

First of the big carriers which were called the *Essex* class and became the heart of the fast carrier task force, the *Essex* spearheaded the drive across the Pacific. Before the *Essex* was commissioned, the United States had been fighting with its pre-war carriers—*Lexington, Saratoga, Ranger, Yorktown, Enterprise, Wasp* and *Hornet.*

Eleven carriers of the *Essex* class had been ordered in 1940 and in July 1942, 13 additional carriers were authorized. These ships carried the battle to Japan, constituting, according to one authority, "the greatest naval weapon of all pre-atomic-bomb time."

In World War II, the *Essex* was known as the "Fightin'est Ship in the U.S. Fleet." She participated in every Pacific engagement from Tarawa to Tokyo Bay. She was in the Pacific combat zone for 17 continuous months.

From her decks rose fighters, torpedo planes and dive bombers to hammer the enemy ships and strongholds across the Pacific. Air Groups Nine, Fifteen, Four and Eighty-Three—in that order—as well as two Marine Corps squadrons, VMF-124 and VMF-213, flew from the *Essex* in World War II.

The *Essex* made her fighting debut in the Marcus raid introducing the F6F *Hellcat* in combat. In the early morning darkness of 31 August 1943, Air Group Nine was launched and roared in over the target before the first light of dawn filtered over the horizon. For ten hours the island came under incessant attack as Japanese planes were caught and burned on the runways and all air facilities and major installations were destroyed.

And it was this pattern of destruction that the *Essex* with other offensive forces followed. By 1945 a veritable air armada made up of the fast attack carriers pounded Okinawa and broke loose on the shores of Japan.
of hard work and attention to duty."

The *Essex* participated in each major Fleet engagement after the Battle of Midway—the Philippine Sea, Leyte Gulf and the East China Sea. The *Essex* established a record in 1945 when she remained for 79 days in operation without dropping anchor. The enemy succeeded in putting her out of action only once—and then only for a week—by a *kamikaze* attack in November 1944.

When the *Essex* emerged with the victors and finally headed for the mothball fleet in 1947, she had steamed a quarter of a million miles, destroyed with her air groups 1,424 enemy planes—710 in air combat—sunk a carrier, six destroyers, and auxiliary and merchant ships for a total of 365,000 tons. She could also claim partial credit for the sinking of two carriers, seven battleships, 24 cruisers, 48 destroyers, and over 200 auxiliaries.

But the *Essex* was not to remain long out of commission, for the cold war grew warm, then hot. In late 1949, she was put in the hands of thousands of workers at the Bremerton Navy Yard. Literally ripped apart, the ship was redesigned, remodeled, rebuilt, and recommissioned.

Thus in June 1951, the old warrior was ready to sail again, and on August 21, the 30,000-ton flattop arrived in Korean waters to operate with Task Force 77 and alternate as Flagship. She logged another "first" when she launched the F2H *Banshee* twin-jet fighter on combat strikes.

Before the tour ended March 25, 1952, Air Group Five, operating from the *Essex* flight deck, had destroyed more than 1,800 Communist troops, destroyed or damaged at least 640 sections of rail track, 80 highway bridges, 870 buildings and 1,218 rail cars.

IN JUNE 1952 the *Essex* again left for Korean waters. During the eight and a half months of this second tour since her recommissioning, the *Essex* unloaded 31,000 tons of bombs and rockets and more than a million rounds of machine gun fire. Flying 7,606 sorties with TF 77, Air Task Group Two participated in coordinated UN strikes all the way from the front lines to the Yalu river in North Korea.

Since this tour, the *Essex* has had two other tours in the Far East. Earlier this year she provided air cover for the Tachen Island evacuation in Formosan waters.

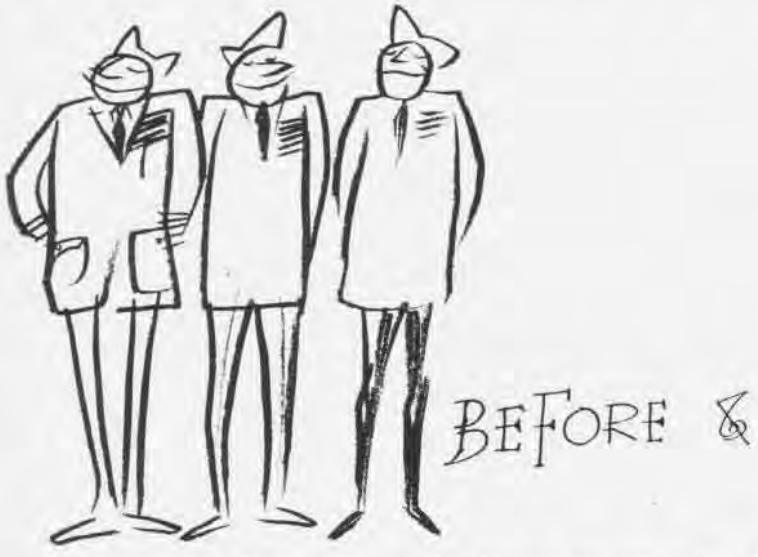
She returned to the United States June 16, 1955. Ahead of her lay months of further modernization. The *Essex* will not lag in fashion behind the great attack carriers she leads. She too will have the angled deck.

OFF KOREA IN 1951, CREWMEN PUT TAIL HOOK IN 'UP' POSITION

ESSEX' WW II RECORD PROVED HER POWER, VALOR, ENDURANCE

THE GRAY ANGELS

by RAdm D.V. Gallery, USN



IN 1948, Rear Admirals Appollo Soucek, "Bat" Cruise, and I got up a three-plane section to appear at the opening of Idlewild and the Cleveland Air Races. We flew McDonnell *Phantoms*, the Navy's first service type jet fighter. We called ourselves the *Gray Angels*, and decided we would not try to steal the show from the *Blue Angels*, but would merely fly by in a dignified manner in a reasonably close formation.

On our first performance at Idlewild, RAdm. Cruise had a flame-out while we were circling the field at 5,000 feet. He made a dead stick landing on the duty runway as if he had been doing it for years.

After the show when we were trying to take off for Patuxent, the tower taxied me into a line of about twenty prop planes at the end of the duty runway. While my idling jets were eating up many pounds of fuel per minute, I heard the following, "Air Force C-57 to Idlewild—How about letting me go ahead of these people, I've got a Brigadier aboard and he's giving me a bad time about this delay."

"Idlewild to C-57 pilot. Wait. I'll see what I can do."

This was too much for me. The next transmission on the air was, "Navy *Phantom* to Idlewild. I've got a Rear Admiral on board and the old S.O.B. is jumping up and down and *really* chewing *me* out. How about getting me out of here?" . . . It worked!

At Cleveland we made one low pass in front of the stands each day to wind up the Navy show. At the briefing session for all pilots before the first show, the Navy controller ran through the program, leaving the *Gray Angels*' part to the last. When he came to us, he said (although not *exactly* in these words), "Now you three old poops just wait at 5,000 feet five miles west of the field until we call you in. When we do, you'll have a clear field and all you have to do is follow the big white line across the field from west to east, passing the stands at 75 to 100 feet altitude. There will be no other aircraft around you for you to worry about." Then he looked at us as if to say, "Even you guys ought to be able to do *that*."

On the opening day of the show we took our assigned position west of the field and listened for our cue. As the Navy show progressed, I noted that the controller was changing the order of events from that given in the briefing, and toward the end was obviously playing it by ear bringing units across the field as they happened to be available to fill in gaps in the program. I didn't enthuse over this idea, but there was nothing I could do. Finally the controller called us down.

We tightened up into a nice three-plane 'Vee', lined up on the big white line, nosed over and down we came. We cleared the tree tops at the edge of the field within two seconds of our assigned time, eased down to as low as I thought was reasonable, and I was just thinking to myself, "We've got it made." But at this point I saw a bunch of rapidly growing specks dead ahead and here came a 12-plane Marine *Phantom* Squadron, also making a low pass, following that same white line, but in the opposite direction! There was nothing we could do but go *under* them! Which we did, the two formations crossing smack in front of the grandstand.

The mechs on those three *Phantoms* of ours all claimed they found weeds in the intake scoops after that flight.

The feature account of the "Blue Angels" (NANews August 1955) caused a number of Naval Aviators to reminisce about other demonstration teams that have existed at one time or another. Herewith is a hairy tale from the annals of one such team written by one of the members, RAdm D. V. Gallery, now Chief of Naval Air Reserve.

All the spectators at this show commented afterwards on the precision and timing of this maneuver. Rear Admirals Cruise, Soucek and I were quite modest about it and said, "Any Navy trained pilots could do it—after a little practice." But that ain't what we told the guy in the tower right after we landed!

Yorktown Rejoins Fleet

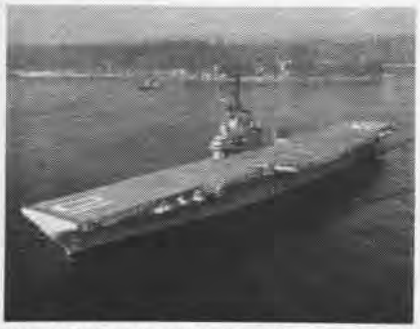
Eight-Month Conversion Completed

The USS *Yorktown* (CVA-10) has rejoined the Fleet. The 40,000-ton carrier left Bremerton recently after undergoing an eight-month conversion period.

She now has the hurricane bow, angled deck, a new and improved Primary Flight Control Station, endless reeving arresting gear, and modified deck-edge elevators. The *Yorktown's* conversion cost approximately $7,000,000, and the end result is another modern jet age aircraft carrier.

The reconversion was accomplished in the shortest time of any modernization in the present Navy program. She arrived with a full complement of men, and her crew remained intact during the revamping operation.

The carrier will embark aircraft of Air Task Group Four from NAS ALAMEDA the first of the year. Capt. E. O'Beirne is CO. of the *Yorktown*.



USS YORKTOWN PUTS TO SEA FOR TRIALS

VP-8 ASSISTS AF IN RESCUE

CO AND CREW OF VP-8 WHO MADE HAZARDOUS FLIGHT TO ASSIST THE TRAPPED SEALER

A HARDY crew and a P2V-5F of VP-8 assisted the Air Force recently in rescuing 35 people from the Norwegian sealing vessel *Jopeter*. The squadron was deployed to Thule, Greenland, for ice reconnaisance from Argentia, Newfoundland, when the Air Force Rescue Squadron at Thule requested assistance. Cdr. L. R. Burnett skipper of VP-8 assigned Lt. E. M. Dassler and his crew to the job.

The vessel, caught in an ice pack, was in imminent danger of being crushed. ASR at Thule was unable to reach the ship because of the limited range of their rescue craft.

Dassler and his crew took off in their long range *Neptune* after it had been loaded with a variety of rescue packs and emergency equipment. The *Neptune* struggled through some of the worst ice the crew had seen during its time up north.

Because of ice return, it was all but impossible to locate the ship by radar. Finally, after four hours and 12 minutes of flight time, the P2V-5J was over the area where the *Jopeter* was believed to be trapped. Dassler made a radar let-down 15 miles off the shore of the island of Store Koldewey. He broke out of the overcast at 150 feet with visibility of from 0 to 2 miles. The ship was finally picked up on the scope.

Dassler flew in at about 50 feet and passed over the vessel. On the second pass, with bomb bay doors open, two of the three emergency packs were jettisoned. The third hung in the bombracks and it was then that H. W. Gaspar, AO1, disregarding his own safety, crawled back into the open bomb bay and, clinging to the rack supports, prepared to release the pack manually. When the plane was directly over the ship, Gasper released the last rescue pack.

The plane remained in the area as long as it could, then turned and headed back across Greenland to Thule. VP-8's plane was the first at the scene. Later an Air Force rescue team reached the stricken vessel by helicopter, hopping from gasoline cache to gasoline cache, and evacuated all aboard.

Other men who participated in the flight were: Lt. J. H. McCalla; co-pilot; Ltjg. C. G. McDowell, Navigator; Ens. V. A. DiCarlo, 2nd navigator; G. M. Brantley, AD1; H. F. Willis, AD2; W. A. Cross, AT1; L. M. Magill, AT2; J. E. Sjorgren, AT3; and J. J. Daley, ATAN.

GASPAR, DASSLER LAUDED BY VP-8 CO

HERE SIX *big U. S. Navy free balloons are being transported from their hangar to the field for launching on routine training flights.*

LTA STUDENTS, *almost without exception, find free ballooning one of the most exciting and thrilling experiences in flight training.*

BALLOONS, BALLAST AND BAG-RIDERS

By Ltjg. E. R. Preston, Jr., SC, USNR

BALLOONS, man's first air transport, are still part of Naval Aviation in this age of jet aircraft and rocket missiles. At NAS GLYNCO, Georgia, free balloons very like their Eighteenth Century predecessors are being flown.

Nearly 175 years ago, in 1783, the Montgolfier brothers made history when they filled a balloon with heated air to make it the first passenger-carrying vehicle of the still unconquered air. Almost immediately afterwards, another inventor, J. A. C. Charles, built a balloon filled with hydrogen, and to him must be credited the essential features of the modern balloon.

Employed by explorers, scientists, carnival promoters, and enjoying a renaissance as a sport of the 1920's, balloons are now an integral part of the training syllabus of Naval Airship Pilots. This is practical training, for in the event of engine failure, the pilot will find the airship's performance similar to that of the free balloon.

Based on the same physical law by which a body immersed in water floats by displacing a substance of greater weight, the free balloon, a rubberized cotton envelope filled with helium, seven times lighter than air at sea-level, floats in the atmosphere. In order to carry passengers, all that is needed is to place a net over the bag, tie a basket to the net and get in! All this sounds as simple as climbing aboard a ferris wheel and twice as amusing, until one considers how extensive this powerless ascent might become.

Ideally the balloon would continue to rise into the thinner air with the internal pressure of the balloon increasing as the outer pressure of the atmosphere decreases. Eventually and obviously, this sort of "duty involving operational or training flights" might be ended with an acceleration equal to that of gravity! If sealed, the balloon would ultimately burst. It is therefore necessary to have an opening at the base of the bag, through which expanding helium may be bled off as altitude increases. This presents a problem, however, for as the balloon passes the altitude point of equilibrium, the remaining helium inside the bag becomes insufficient to sustain lift. The aircraft then becomes heavier than the air it displaces and accelerated descent commences under the influence of gravity. It is clear that free ballooning is far from effortless. The pilot must constantly control the rate of both ascent and descent.

Take-off is effected by removing sand bags which weigh down the five-foot square wicker basket cockpit during inflation of the balloon. When enough weight is removed so that the lift of the bag is equivalent to the weight of the four or five passengers and the several sandbags retained on board, the wingless, engineless aerostat becomes airborne. It is launched with a good shove from the ground crew at the command "Up Ship." By disposing of the sand ballast over the side, the crew keeps the balloon going up. The descent is made by releasing helium from a manual valve in the bag.

Once aloft the pilot is at the mercy of the wind. He cannot control direction, only altitude. As the balloon drifts lazily, it is so quiet that the crew can hear conversations on the ground from 2,000 feet.

While going up in balloons is fun, the real object of balloon operations at Glynco is to develop the prospective airship pilot's ability to maneuver an airship to a safe landing in event of engine failure. Of special value to the student is the extreme vulnerability of these 35,000 cubic foot bags to weather factors. Although all flights are conducted in fair weather and under carefully observed wind conditions, multiple problems present themselves on any flight, thanks to the proximity of the Atlantic Ocean and the Okeefenoke Swamps. The passing of a cloud between the sun and the bal-

loon cools the gas, contracts it, and causes a rapid descent. Conversely there is a rapid ascent when the sun shines again.

Updrafts may force a balloon atop a cloud layer and make it necessary to release large amounts of helium to effect a "break through" down through the cloud. The descent is increasingly rapid when the sun is covered, and faster yet if rain below the cloud loads the balloon's vast surface with water. When this happens, the basket is a center of great activity as ballast goes overboard to check the fall.

Flights are on record where everything including the crew's flight suits and shoes were jettisoned in attempt to slow descent! In this situation as in others, experience with the flight characteristics of a lighter-than-air-craft is important, for should too much ballast be dropped, the balloon will commence to climb with far less ballast aboard to check a future fall.

Ground hazards such as TV antennas, flag poles, houses, and most important, high voltage electric power lines, provide additional excitement for the balloonist. Landings in pine tree forests and on lakes are hilarious and usually comfortable. In open fields where the wind may drag the balloon or where there's an occasional stump or fence-post without tree-tops to break a fall, landings may be inadequately described as *uncomfortable*.

As training flights at Glynco normally consist of a number of successive landings and take-offs, thereby facilitating crew switches which minimize the number of students flying on any single inflation with the costly helium, land-based support of free ballooning takes on importance, particularly from the supply point of view. Free ballooning receives the enthusiastic approval of both instructors and student officers, and sliding through tree-tops, banging from one to the next, or aquaplaning through the marshes is believed by all, including the author, to be sport without equal. However, for the NAS supply officer, LCdr T.E. Stevenson, the highly expendable nature of all parts and pieces of the balloon presents a particularly difficult procurement problem.

LCdr. Stevenson's civilian assistants, L.C. Placzankis and J.W. Reynolds, point out that Glynco is one of the very few military activities now operating free balloons, so procurement must, in nearly all cases, be handled entirely on a contract basis directly through the Aviation Supply Office. Most items are peculiar to free balloons, and there is little chance that airship parts may be substituted.

ChPClk. Roy E. Neill, the commissary officer, is concerned with the support of the free balloon operations, for his galley furnishes flight rations for the balloonists. This logistic operation is based on the optimistic premise that those aboard will have enough peaceful moments for eating while in flight.

AS THE *free balloon ascends, pilot finds it necessary to dump still more sand ballast.*

PILOT, *at left, dumps sand ballast from basket to effect slow take-off at NAS Glynco.*

BALLOON *is readied for flight. An airship will follow balloon and later report landing site.*

THE DISBURSING officer, Ens. B.M. Velotas, is not normally connected with free balloon operations; flights rarely have a scheduled destination nor do they exceed the ten-hour minimum per diem reimbursement. Nevertheless, he too may become involved in the problems of free ballooning. For example, one dramatic case involved the Navy pay check of a free balloon pilot. Ens. Velotas had delivered it to the pilot prior to a flight one morning.

Approximately six hours later, the pilot was back in Disbursing with a white and soaking wet Treasury check, obviously fearful it would not be honored. The local bank officials cordially agreed to honor it, however, upon learning that the check had ridden the pilot's wallet into a river, through a thunderstorm, then into a swamp and later was rescued by the U.S. Coast Guard near the coast.

For Glynco, the rapidly growing station near the famous Golden Isles of Georgia's coast, the wingless, engineless flight of free balloons makes for variety. The roster of operating aircraft types is believed by station officers to be unparalleled at any other air station in the Navy. The 1500-man station flies five types of aircraft: jets, propeller-driven aircraft, helicopters, airships, and free balloons.

At Glynco, the long years between balloon and jet are represented. Whether the aircraft has wings or not, helium gas or jet thrust, NAS GLYNCO supports it. There are certainly faster ways to travel than by balloon, but the aeronauts insist there is no more exciting or dramatic way to go through the air with the greatest of ease than to drift through by balloon.

Veep's Brother a NavCad

Young Nixon Accepted as an AOC

Edward C. Nixon, 25-year old brother of Vice President Nixon, has been accepted as an Aviation Officer Candidate. By virtue of his four years of study at Duke University, he will be commissioned an ensign after four months of pre-flight at Pensacola.

Young Nixon graduated recently from recruit training at NTC SAN DIEGO as honor man of his class. His nine months of training at Pensacola will be climaxed by an actual landing aboard a carrier at sea. Then he will have a choice of flying single engine jet aircraft at Corpus Christi or of taking multi-engine training at Hutchinson, Kansas.

After receiving his Navy wings, Nixon will serve two years with a Fleet squadron or at a shore base.

MACDOWELL INTRODUCES NIXON TO AN F9F

Unit Lands Drone by GCA

Approach Made at NAMTC Pt. Mugu

GCA Unit 47 at NAMTC Pt. Mugu recently logged its 2000th approach by bringing in a drone. In such an operation the radio instructions are relayed by the GCA unit to the aircraft controller. After the aircraft was sighted, the landing was made visually by Cdr. S. O. Violett.

The unit set something of a record in May 1954 when they recorded 342 instrument landings. By August, the unit had logged an impressive 1,000 IFR's within an eight month period. Officer-in-Charge of the Pt. Mugu unit is LCdr. C. W. Adair.

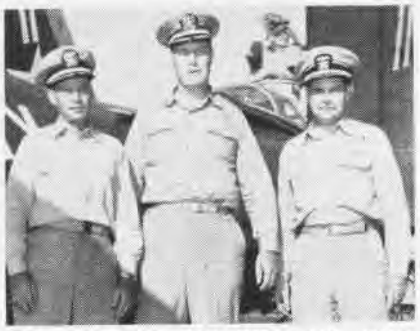
CAG-12 Gets Critical Eye

Past CO's on Hand as Observers

A recent operational readiness inspection of the USS *Hancock* with CAG-12 aboard was an unusually thorough one from the standpoint of the air group. This was due to the fact that two former CO's of CAG-12, Cdrs. K. S. Van Meter and G. P. Chase, were observers.

Van Meter, now operations officer for the USS *Shangri-La*, was CO just before the present skipper, Cdr. C. N. "Tex" Conatser. Chase, operations officer for ComFAir Hawaii, skippered the outfit when it was still in a reserve status at NAS MIRAMAR.

The unit saw action in Korea while flying from decks of the *Oriskany*.



CDRS. CONATSER, VAN METER AND CHASE

CVA Aids Assault Victim

Greek Girl Given Money by Crew

A 12-year old Greek tavern maid, Spiridoula Rapti, will long remember the kindness of the Yankee sailors of the USS *Intrepid*.

While the big carrier was anchored off Piraeus, Greece, the crew received word that the little girl was in serious condition in a local hospital. She was suffering from burns and a brutal beating that had been inflicted upon her by her employers.

SAILORS' KINDNESS RELIEVED HER PAIN

The tavern where the girl worked had $50 stolen from it and the owners accused Spiridoula. In an attempt to make her confess, they beat her and burned her with a hot iron.

Hearing of her plight, the crew started a collection to assist with her hospital bills. Before the ship left Piraeus, $1,033.40 had been accumulated and presented, along with wishes for a speedy recovery, to the little girl.

Her employers were arrested and jailed. In the photo above, LCdr. J.F. Sowar, the *Intrepid's* public information officer, and the child's mother are shown visiting her at the hospital.

VICE ADMIRAL *Thomas S. Combs, DCNO(air), recently returned from a trip to the Far East. His tour took him to the Philippines, Hongkong, Formosa and Japan. In the picture above, Adm. Combs (center) is shown as he discusses U.S. Navy air bases in the Philippines with western Pacific Commanders. Left to right, RAdm. G. W. Anderson, Commander Formosa Patrol; RAdm. H. D. Felt, Asst. to Deputy DCNO for Fleet Readiness; VAdm. Combs; RAdm. Fitzhugh Lee, ComFair Western Pacific, and RAdm. Hugh H. Goodwin, ComPhil and Commander NavForPhil.*

LATEST DEW JUGS PRESENTED

ASSISTED *by a squadron member, McLain displays banner which he fired on during Gitmo qualifications that led him to fighter fame and winner of the third individual NANews Dew Jug award.*

A HIGH flying Navy lieutenant and a *Cougar* squadron have emerged as NANEWS latest Dew Jug winners. The awards were presented after the winners qualified under the new radar rules of air-to-air fixed gunnery. Lt. Roy "Dead Eye" McLain of VF-13 walked off with the individual award; VF-43 won the squadron honors.

RAdm. D. S. Cornwell, ComFairJax, awarded McLain his Jug at ceremonies after he hit a phenomenal 84.2% hits. Previously, Ltjg. S. T. "Shootin Sam" Martin of VF-22 held the award with an 80.7% hits.

The Dew Jug winner credits his success to six weeks of intensive air-to-air gunnery training at FAGU EL CENTRO, good equipment and top-notch maintenance, such as his squadron provides.

While flying his F9F-8 *Cougar*, McLain swooped in on a standard 6 x 30-foot gunnery sleeve at 25,000 feet and peppered it with 126 of 150 rounds of 20mm. ammunition. He made four passes at the banner, which was speeding along at about 165 knots. VF-13 is commanded by Cdr. L. B. McCuddin.

A few days later at NAS ATLANTIC CITY, Cdr. Fred Luebke of CNO's gunnery training division presented the commanding officer of VF-43, Cdr. T. N. Coppedge, Jr., the squadron award as officers and crew members looked on. Coppedge had assumed command of VF-43 after the honors were won.

WITNESSES *at McLain's presentation by RAdm. Cornwell were Cdrs. McCuddin, Clarke, Luebke.*

CDR. COPPEDGE *and high men, Barnhart and Wellman, who paced VF-43 to win Dew Jug.*

Cdr. J. R. Dierker ramrodded the outfit at the time of the gunnery meet at Gitmo. He's now serving with ComAirLant's staff in operations.

The squadron has been on temporary duty with VX-3 at Atlantic City for the test and evaluation of the relatively new TACAN radar gear but are home-based at NAS JAX.

Spearheaded by Ltjgs. R. C. Barnhart and Hal Wellman, the squadron pilots racked up 26.7% hits in the F9F-8 *Cougars* after a week's air-to-air gunnery training at 15,000 and two weeks at 25,000 feet. Over 80% of the pilots who fired during the competition were first cruise aviators, and each had 600 or less flight hours under his belt.

During the 1000-hours flight time at Gitmo, the squadron maintained a 97% availability of aircraft. This high aircraft availability was attributed to an ex-squadron member, J. A. Uber, ADC, and his maintenance crew. R. G. "Blackie" Blackman, ADC, is now VF-43's maintenance chief. Another chief petty officer, E. A. Simpson, AOC, and his crew received high praise from the squadron CO for keeping ordnance equipment in top operating condition. Simpson's 16-year practical experience in aviation ordnance was a contributing factor to the squadron's success.

LCDR. A. S. FADDEO, *XO, Simpson, Blackman and CO Coppedge pose with squadron award.*

In addition to firing the winning score for the Dew Jug, the squadron conducted tests on the *Cougar's* fire control system at Guantanamo Bay.

VF-43 also won ComAirLant's coveted Battle Efficiency "E" and the Aviation Safety Awards for 1955. These laurels were presented after the squadron returned to Jacksonville and reported to their parent unit, CAG-4.

● Concrete is being used in the assembly of the Navy's guided missile *Regulus* by Chance Vought. Used as a dummy payload, the concrete reduces cost and expedites deliveries without using strategic materials and metals.

'Inasmuch As Ye Have Done It

"JUST A MINUTE *and you'll see a wonderful present," says the delighted guest at the party FASRon-114 gave for orphans at Kodiak.*

THE WISE *Men of the first Christmas could not have been happier bringing gifts than the officers and men of VJ-62 at NAAS Sanford.*

THE SHY young man from Japan on the cover of *Naval Aviation News* this month soon overcame his shyness as the Navy Bluejackets on the USS *Princeton* put him at his ease. He is only one of the thousands of youngsters all over the world who were entertained last year by ships, stations, and squadrons of the Navy.

This year hundreds of other parties are planned, and they will be as scattered geographically as the Navy is

IT'S A PLEASURE *when one good fellow meets another at the carrier Princeton's party.*

ALL GUESTS, *armed and unarmed, will never forget VJ-62's second annual Christmas party.*

A DARING *young man came to the Boxer party in San Francisco riding a police motorcycle.*

Into One Of The Least Of These

ABOARD *the Salisbury Sound at Okinawa, two little girls in costume are among the guests.*

HOPALONG *Cassidy, traditional Santa Claus at NAS San Diego, gave out each gift with care.*

BUT THE TWAIN *do meet in peace and understanding aboard the Princeton at Yokosuka.*

STEADY *does it as the small guest takes his drinks across the deck of "Sweet P."*

itself. Whether the party is at home or abroad, it is given with enthusiasm.

Last year FASRon-77, a support unit within the huge NATO command, had their party for orphans from Naples. They decided to call their venture *Operation Ambassador*, because "ambassador," as defined by Webster, is "an official messenger with a special errand." It was the right title!

Operation Ambassador would be a good name for the parties to be held this month. It is appropriate not only to an understanding among nations, but it carries out the spirit of the message, *Glory to God in the Highest, on earth peace, good will toward men.*

'ALLELUIA!' *shouts the happy guest as the Boxer's Santa places a gift in her eager hands.*

VA-45 MEN *at NAS Jax load baskets of groceries for delivery to the Navy Relief Society.*

VJ-62 BROUGHT *a load of gifts and toys to the Children's Christian Home, Mt. Dora, Fla.*

VR-23 WHICH *supports Atsugi orphange, had toys and clothing collected by Oakland Cubs.*

A SONG *is special when you can act it out, and these guests of NAS Memphis show their gay enthusiasm as they pantomime a chorus.*

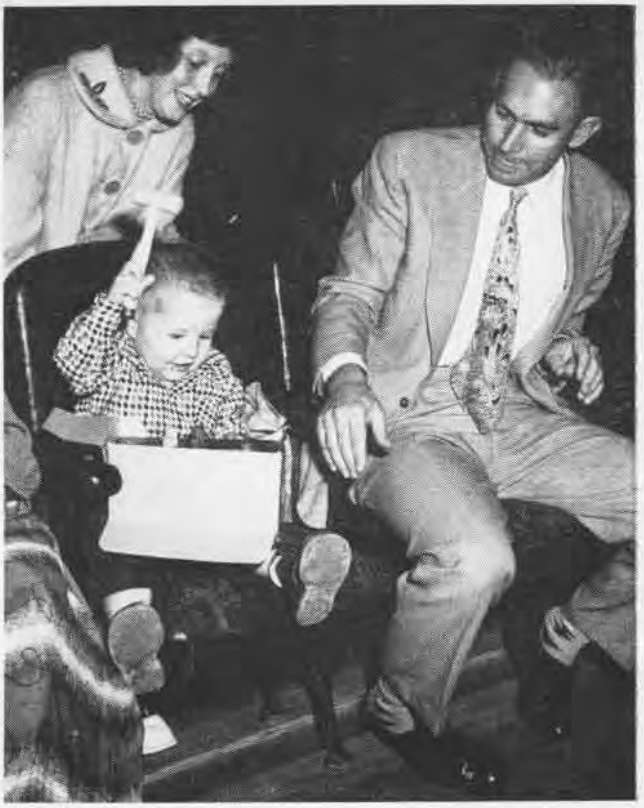
"NOEL, NOEL, *Born is the King of Israel" was a carol the quartet sang when the Randolph entertained their special holiday guests.*

AGAIN AND AGAIN *all over the world, children were given royal entertainment and gifts as Navy men went all out to celebrate Christmas. In Naples, FASRon-77 had 325 orphans as guests at NATO headquarters.*

HONOR GUEST *in Manila, as everywhere else in the world, was Santa Claus at a party the USS Wasp (CVA-18) gave for Philippine orphans.*

FOR CHILDREN *at Memphis, it was a gala occasion with good food, gay entertainment and all that goes to make up Christmas time.*

CHRISTMAS *simply could not have been better, according to this youngster at VJ-62's party.*



"LET JOY *be unconfined!" and it was, as one happy, jubilant party-goer in Florida showed he knew exactly what a block-buster is for.*

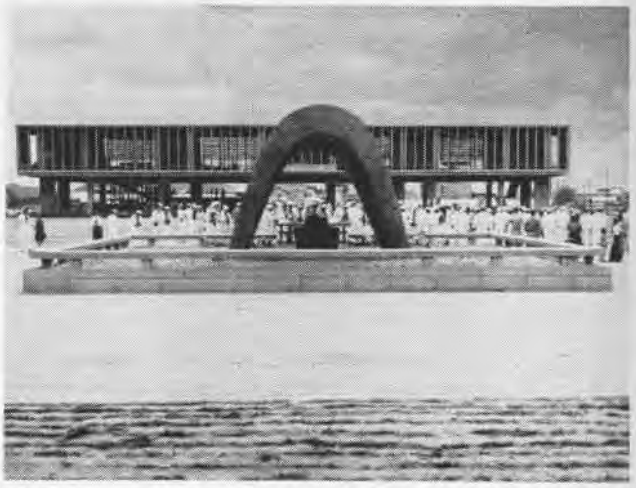
SOME ONE *needs an alert that Santa Claus is just behind them, but probably they will miss their chance of seeing the hero of the tale.*

THE PAUSE *that refreshes at the end of the party and a wish that Christmas came twice a year!*

Ye Have Done It Unto Me'

HORNET HAS IWAKUNI LIBERTY

HORNET *visitors watch activities at Itsukushima Shrine on the Island of Miyajima. The famous shrine was built more than 1300 years ago.*



"SPIRITS *be in peace. The errors shall never be repeated." That saying is inscribed on cenotaph of Hiroshima's Atomic Bomb Museum.*

HIROSHIMA'S *Exhibit Hall shows atomic blast scars. Restored, it will be peace monument.*

THE CREW of the USS *Hornet* had the peculiar sensation of going "up river" as it passed between scores of islands en route to its anchorage off NAS IWAKUNI, Japan. Located 400 miles southwest of Yokosuka, Iwakuni is ideally located for leave and excursions. The nine-day stay of the *Hornet* at its "up river" destination was devoted to rest and recreation for the crew.

Chaplain A. C. Volz of the *Hornet* arranged conducted tours, and hundreds of the men took this opportunity to visit historic Hiroshima, Miyajima, and Kure. A short boat trip enabled the airmen to see one of the most beautiful landmarks in Japan, Itsukushima Shrine Torii. The surrounding mountains gave them many pleasurable hours of exploration.

Hiroshima was only a short distance away by train. Cameras were busy as the men made their personal records of the city and the still-present scars left by the first A-bomb blast.

The U. S. Navy took command of NAS IWAKUNI in October 1954, replacing the USAF, which used it during the Korean conflict.

The NAS, commanded by Capt. W. E. Premo, Jr., is now the home of ComFAirWing-6 and FASRon-120. Capt. N. A. Campbell is *Hornet* CO.

KINTAI *Bridge, near Iwakuni, is one of the wonders of the Far East. Hornet sailors marveled at this example of Oriental Engineering.*

THE GRAND *Torii of the Itsukushima shrine, far center, is a symbol of worship. Site is considered one of Japan's most beautiful landmarks.*

'SURVIVORS' POSE IN FRONT OF 'DOWNED' PLANE, WITH SURVIVAL GEAR USED IN TEST.

FIRST STEP IN ERECTING TEEPEE SHELTER

ORI INCLUDES SURVIVAL TEST

LTJG. FRANK WEIDMAN of VP-40 and his P2V crew were the targets of a surprise test during a recent squadron Operational Readiness Inspection by FAW-3. He was told that his plane had been "shot down over enemy territory" and to simulate an emergency landing at NAS QUONSET POINT.

And there the simulation ended! The eight-man crew was graded on their efficiency in removing survival equipment from the plane, and then they were whisked away to the Great Swamp of Rhode Island. Throughout that night and the next day, they were at the mercy of the elements. They had to subsist on whatever the swamp and all their ingenuity could provide them.

LEAN-TO SHELTER IS SMALL AND COZY

Primary needs—food and shelter—were the first problems to cope with. Any fish they could catch with their improvised fishing gear comprised of parachute shroud lines, or palatable vegetation discovered in the swamp supplemented the small quantity of survival rations salvaged from their "downed" aircraft.

Parachutes, cut up and utilized to make Indian teepee-style tents and lean-to's, provided their shelter from the high winds and heavy rains which later caused disastrous flood conditions.

The latter-day 'Robinson Crusoes' in Lt. Weidman's crew (above, l to r) included W. J. Palmer, AT3, M. J. Vidulich, AO1, J. A. Burch, AT3, L. W. Jagger, AD1, Ltjg. Weidman, K. O. Waibel, AM3, Ltjg. P. H. Ditmar and Ens. E. H. Mordt. They came through the camping trip with flying colors.

This survival test, devised by Ltjg. Charles R. Krigbaum, Air Intelligence Officer of FAW-3, is the first such examination of the survival knowledge of crewmen to be incorporated into the annual ORI's of Wing squadrons. Capt. William A. Moffett, ComFAW-3, planes to include similar tests in all future Readiness Inspections.

According to Lt. Krigbaum, such future tests will provide even more rigorous examinations. Crewmen will demonstrate survival techniques during even longer stays in the swamp.

'CHUTE' IS DRAPED AROUND SHELTER FRAME

TEEPEE COVER IS HELD DOWN WITH PEGS

Weekend Warrior NEWS

LCDR. CHARLES *Coler, New York Reservist, swears in eight NavCads he recruited from student body of Academy of Aeronautics at Flushing.*

VC-33'S DETACHMENT, *inland at Grosse Ile during hurricane warning period, study Lake Erie charts before gunnery and bombing practice.*

Reserves Answer Flood Call

Weekend Warriors demonstrated their readiness to meet an emergency when they were called upon to lend assistance in the rescue and relief operations in the flood areas of Mexico.

There arose an immediate and urgent need for transport aircraft. A call went out to RAdm. D. V. Gallery, CNART, to provide planes. Within 30 minutes, five planes were enroute from Naval Air Stations Dallas, Olathe and Minneapolis to Belleville, Ill., to pick up water purification units for fast delivery to Tampico, Mexico.

In addition, other RAD's and RSD's from reserve squadrons at Los Alamitos, Seattle, New York, St. Louis, Grosse Ile, Glenview and Atlanta were dispatched to take part in the airlift that flew 2,500,000 pounds of food, clothing and medical supplies into the flood area. The aircraft operated from NAS CORPUS CHRISTI.

Typical of the reserve participation was that of VR-832 of NAS NEW YORK. This squadron was on a two-week active duty cruise at Dallas when word was received of the emergency in Mexico. The squadron immediately departed for Corpus Christi where the reservists made numerous flights each day to Tampico.

Miami Has a Family Affair

Richard Newton, Jr., a new member of NARTU Miami Reserves, was among a group of young weekenders who graduated recently from the 85-day accelerated summer training program. On hand to congratulate him on his accomplishment was his father, Richard Newton, DCS, an old hand around the NARTU organization.

AIRMAN RECRUIT *Richard Newton, Jr., receives congratulations from father at NARTU Miami.*

NAS SEATTLE *chose "Miss Weekend Warrior" and Capt. Horney, station CO, presented trophy.*

VS-741'S ALLIGATOR *mascot accompanied the squadron to NAS Floyd Bennett for training.*

MIAMI'S *Biscayne Bay provided the setting for survival training for summer trainees.*

THESE *64 members, count 'em, of ZP-951 have returned home to Santa Ana after completing their two-weeks active duty training at NAS Lakehurst. ASW training occupied their time in the East.*

Perfect Score in Rating Exam

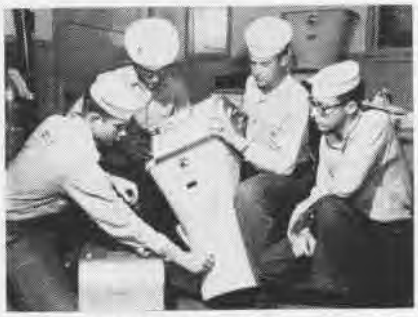
Weekender Robert L. Bowles, a NARTU, JAX Reservist, hit a perfect score recently during an examination for advancement in rating to PHA3. His 4.0 is the highest score ever to be achieved by a reservist in that unit. He reports to NARTU one weekend a month and drills with AWS-74.

Reserve PH's Train at VJ-61

A basic course for PH strikers was conducted during the 85-day Accelerated Training Program at NAS OAKLAND last summer. During the course of instructions, the trainees spent a week aboard the USS *Kearsarge* off the coast of San Diego. From the *Kearsarge*, the men reported to VJ-61 at NAS MIRIMAR and were exposed to the latest aerial photographic methods and equipment for an additional week.

Task Group 71 Completes Tour

Task Group 711, composed of FASRON-711 and VS-711 recently completed 14 days training duty at NAS LOS ALAMITOS. Commanded by Cdr. F. A. Clark, the 130 enlisted men and 31 officers packed-up bag and bag-



RESERVE PHOTOGS *of Oakland were briefed on K-38 camera by VJ-61 at NAS Miramar cruise.*

gage and airlifted from land-locked NAS DENVER to Los Alamitos.

Although several squadrons were based aboard Los Alamitos, the air station was able to provide logistic support necessary for the maintenance crews to obtain 89% availability of the 15 aircraft attached.

NARTU Miami Honors New Men

Three new Weekend Warriors have been honored for being the outstanding graduates in each of three schools conducted during the summer training program at NARTU MIAMI. They were Richard Hamon, AA, Electronics; Donald Miller, AN, Metalsmith and Robin McClary, AA, for Airman Apprentice School. Cdr. T. A. Chisholm, Jr., Acting CO of NARTU MIAMI, made the presentations at the graduation. The awards are based on exemplary standings in academic and military studies.

Clark Leaves NAS Lincoln

Personnel at NAS LINCOLN are going to miss LCdr. John W. Clark. In the seven years of his association with VF-761, he has not missed a single monthly weekend drill, two-week annual training cruise or inspection. For six of those seven years, Clark drove from Newman Grove, Neb., to Lincoln, a distance of over 80 miles each way. He was superintendent of schools at Newman Grove.

Cdr. Clark is going to a new job with the Texas College of Arts and Industries at Kingsville, Tex., where he will be a professor in the education division. He recently received a doctorate in education from the University of Nebraska, which qualified him for the new position.

In December 1953, Clark was named "Man of the Month" throughout the Naval Air Reserve Training Command for his efforts in recruiting members for the Air Reserve.

THE SMOOTH *manner in which Task Force 711's cruise moved along from start to finish demonstrated the value of weekend drills to keep our Reserve Navy in a high state of operational readiness.*

SGT. A. L. GARCIA *straps LCdr. Clark into a TV-2 for his last jet ride from NAS Lincoln.*

LET'S LOOK AT THE RECORD

NAS Begins IFR Training

Oceana Squadrons Log 186 Flights

As a result of a recent all-weather conference called by ComAirLant's Instrument Training Officer, Oceana's carrier squadrons have taken a realistic step toward improving their all-weather flying capabilities. From 19 August to 27 September, squadrons logged a total of 186 flights to and from off-shore operating areas during actual instrument conditions.

Representatives from CNO, AirLant, NAB 5, NAS OCEANA and Fleet squadrons based at Oceana attended the all-weather conference.

Emphasis was placed on four points considered to be of prime interest to other Fleet support air stations: Reducing instrument clearance time to a minimum; procedures to allow for maximum operations with minimum delays during instrument conditions; training air group pilots in tower procedures; and increasing a competitive spirit between pilots and operations personnel.

'E' Two Years in Succession

VA-105 Pilots Make Night Carquals

VA-105 has been awarded the Battle Efficiency "E" for the second consecutive year. The presentation took place recently at NAS JACKSONVILLE where the squadron, along with the rest of ATG-201, was making preparations to join the USS *Bennington* on the West coast. Cdr. S. W. Forrer, squadron skipper, accepted the award from RAdm. D. S. Cornwell, ComFAirJax.

Although the squadron isn't an all weather or night attack unit, each pilot is qualified in night carrier landings. This was accomplished one evening when pilots racked up 92 landings in two hours and 45 minutes.

Squadron honors include an Atlantic Fleet dive bombing record when VA-105 pilots had a group average error of 47.2 feet and 20 pilots earned a total of 28 individual "E's." The squadron also holds the ComFAirJax records for glide bombing, rockets, high altitude dive bombing and, until recently, the record for loft bombing.

THE CREW ON ARRIVAL AT PATUXENT RIVE

A3D's Fly Cross Country

First Non-stop Formation Flight

Three A3D *Skywarriors* have been flown on a non-stop cross country formation flight for the first time. Three crews from NATC PATUXENT RIVER made the flight recently in connection with the commissioning of the USS *Forrestal* at Newport News, Va. Owing to bad weather, the fly-over was cancelled after the flight arrived from Edwards AFB.

Crew of one plane (above) was comprised of RAdm. C. H. Duerfeldt, ComNATC, co-pilot, LCdr. F. W. Botts, pilot, and James T. Lusk, AD2, plane captain.

Two "Firsts" for AF Pilot

Rogers Makes Angle Deck Landing

An Air Force exchange pilot flying with VF-13 has copped a couple of squadron honors. Not only was he the first pilot from VF-13 to qualify on an angled decked carrier, but Capt. Russell Rogers set an all time high for the Atlantic Fleet in air-to-air gunnery fired under radar rules.

He performed the twin feat while the squadron was deployed to the Caribbean for three months. He fired 150 rounds in four runs and amassed an outstanding 65% hits. Gunnery runs were made at 15,000 feet in a Grumman F9F-8 *Cougar*.

The new titleholder comes to the Navy from Air Force Fighter Squadron 94, Capt. Eddie Rickenbacker's old Hat and Ring outfit.

Rogers flew 100 missions during the Korean war piloting F-51's and jets.

A Thousandth Mark Twice

Pilot Scores in Catapult Launchings

Accomplishing the 1,000th mark in any phase of aviation is notable, but when a pilot chalks up a double 13,000th record, he wins a special distinction.

Lt. Cliff E. Nord achieved this unique mark when he catapulted off both the port and starboard catapults of the USS *Philippine Sea*.

Exactly one month after being the pilot of the 13,000th plane "shot" off the aircraft carrier's starboard catapult, the photo jet pilot chalked up number 13,000 for the port, winning recognition for himself and his unit.

With probably the Pacific Fleet's busiest catapults, the *Philippine Sea* holds the record with 27,000 shots.

200 Days Without 'ACOG'

Barin Again Beats Its Own Record

The slogan in the Basic Air Training Command seems to be "Watch Barin Field Beat Records." In the September issue of NANEWS, p. 19, we reported that Barin had achieved the almost phenomenal feat of 100 days with no aircraft on the ground (ACOG).

The outfit has now come up with a record that is going to be hard to beat. They recently completed their 200th day without ACOG. All hands agree that the most important man in the entire operation is James N. Looser, AD3, the ACOG expediter. When a part is needed, Looser locates the needed gear and it is picked up by another member of Barin's crack maintenance team.

At a celebration given in recognition of the record, Cdr. E. T. Uptain, NAS Operations Officer, asked Capt. C. M. White, station CO, "What is the secret?" The reply was, "A lot of hard work and attention to duty."

IFR-IQ?

Information concerning aircraft expected to be overtaken, approached, or passed within a distance of less than ten minutes flying and within 1000 feet or less vertically, is called ..... traffic.

Answer on Page 40

Hairy Rescue Near Whidbey

'Copter Crew Stars in Bold Role

Under extremely hazardous conditions, three members of NAS WHIDBEY ISLAND's crash crew performed a daring rescue of a civilian lookout from a 6,494 foot peak in the Cascade Mountains. The patient, 18-year old William George, was suffering from acute appendicitis and could not be brought down by pack animal.

The lookout station, from which George was picked up, is located on the side of the mountain peak, on a 40 foot wide ledge. On one side of the ledge there is a sheer drop of 1,500 feet, and on the other, a 1,000 foot precipice looms.

In a dead calm, and after four passes over the spot, the pilots, Lt. F. E. Jewell and V. R. Sampair ADC (AP), set the front wheels of the copter down in the small space in front of the lookout building. The rear wheels were suspended 1,000 feet in the air! While Lt. Jewell kept the front wheels balanced on the rock, W. G. Bauman, AD1, helped load the sick man aboard.

The helicopter had left Whidbey at 1530. The lookout was taken off the mountain shortly after 1730. By 1800 he was in the Yakima hospital.

All Rhode Island Company

RAdm. Hoskins Administers Oath

In late September, RAdm. John M. Hoskins, ComFAIRQuonset, administered the Oath of Allegiance to 64 men who will make up a Navy "All Rhode Island Company". The company was formed as part of the Navy's Recruiting "Buddy Program".

This program is normally authorized by BUPERS when 64 or more men from a particular state give indication that they would like to participate. Once formed, they go through training together and in many cases, are stationed together after graduation.

After the ceremonies, the company proceeded to State Pier where they boarded the USS *Dickerson* for the trip to NAS QUONSET POINT. There they boarded an R5D and flew to NTC BAINBRIDGE for their indoctrination.

Safety Awards Presented

Patrol Units Win Pacific Honors

Three West coast patrol squadrons—VP-4, VP-47 and VP-48—have been awarded ComAirPac's Quarterly Flying Safety Award. Each squadron qualified by completing one quarter of a calendar year without an accident.

VP-4 won the safety laurels for flying 1851 accident-free hours in P2V *Neptunes*. VP-47 logged 1613 hours in their P5M-2 *Marlins*, and VP-48 tallied an impressive 2393 hours for the same period in P5M-1 *Marlins*.

Skippers of the squadrons are: Cdr. J. W. Lawyer, VP-4; Cdr. L. D. Davis, VP-47; Cdr. J. F. Davis, VP-48.

Old Record Beaten at NAS

Saufley Logs over 1500 Flight Hrs.

The flight instructors and student pilots at BTU-1, Saufley Field, on 10 October set an all-time field record for daily syllabus flight hours. They logged over 1500 hours to break the old station mark set two years ago. The previous high of 1425 hours had been set on 27 July 1953.

The record is significant in that Saufley fliers attained the new peak with only 650 students and instructors. This was 215 less than the number that made the 1953 record.

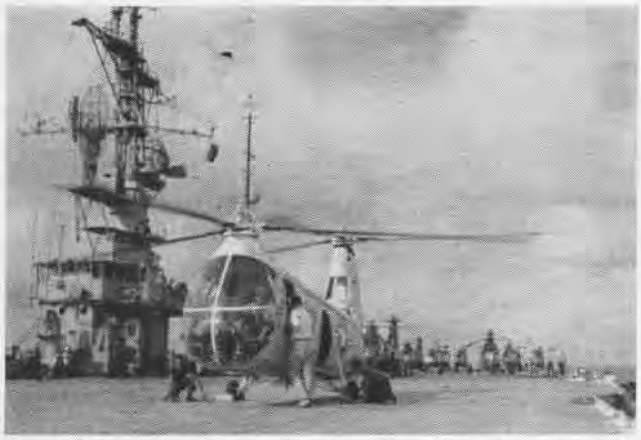
THANKS *to the wives of the officers of the Antietam, a transformation was made in the wardroom during in-port periods.*

MEDAL OF HONOR *winner as WW II Marine flier, South Dakota's Governor Joe Foss bids farewell to old friends after American Legion Convention at Miami. They are LCols, W. M. Lundin, J. R. Christensen; Maj. R. J. Larsen.*

LIKE A GIANT *sea monster which has had its tranquility disturbed, the atomic-powered USS Nautilus rears out of the ocean during an emergency surfacing. Nearby, a hovering HUP-2 awaits to transfer a passenger. The Nautilus was operating with the Leyte and elements of CTG-81.2.*

A HUMOROUS *side-boy salute is given LCdr. F. A. Fox as he leaves post as catapult officer of the USS Intrepid. He's going to NAS Olathe.*

SAIPAN TEAMS RESCUE FLOOD VICTIMS



A RETRIEVER *attached to HTU-1 from NAS Pensacola stands by for take-off from the Saipan to help flood victims of Hurricane Janet.*

IN THE READY *room aboard the USS Saipan, Cdr. B. C. LeFever, CO. of HTU-1 briefed pilots and aircrewmen on their rescue missions.*

A THRONG *of interested Mexican spectators, themselves out of danger, watch intently as crews refill gas tanks of the helicopters.*

THREE hurricanes in four weeks have reduced Tampico to rubble. During the clean-up after *Hilda* and *Ione,* the area was again hit by Hurricane *Janet* which added to the devastation. *Janet* touched battered Tampico and swung south to deal heavy blows to several Mexican villages.

Hardest hit was Tempoal where water crested at 72 feet. Planton Sanchez was completely cut off from the outside and a doctor had to be flown in by helicopter. In El Higo, four doctors were caring for 5,000 people. Flying over Lagogna de Pueblo Viego, pilots saw no sign of life except for a few farm animals.

Alerted to assist the Mexican people, the USS *Saipan,* commanded by Capt. W. I. Martin, with elements of HTU-1, arrived off the coast of Tampico on 1 October.

Fourteen helicopters, 16 pilots and 46 enlisted men undertook the tremendous task of flying food, medicine and clothing to flood areas and rescuing people from roofs, trees and rafts, and the hurricane-driven swirling flood waters.

AFTER JANET *passed south of Tampico, flood waters swirled in from the Tamese River to cover everything with a heavy coat of dirt.*

A MEXICAN *mother and her three children found temporary shelter from flood waters atop this church. They were rescued by a 'copter.*

SCENES LIKE THIS *one were typical of those sighted during the rescue work. Roofs were swept away and waters still stood in the streets.*

BOATS BECAME *a popular mode of transportation in the flooded area. Many lives were saved by prompt action on the part of helicopters.*

THIS HELICOPTER *drops its sling and moves up to rescue six people from the porch of the house at left. Waters covered 80-mile square.*

THREE SMALL *Mexican children were cared for by helmeted soldier as mother and father are assisted from the helicopter after rescue.*

HER FACE *covered, this woman is carried from a Navy helicopter to an aid station for medical attention. An HUP-2 sits in background.*

A RETRIEVER *returns aboard the Saipan to pick up another load of food and supplies for the stranded Mexican populace near Tampico.*

TF-1'S REPLACE THE AVENGERS

THIS IS *a familiar sight to many ball-turret gunners of the combat Turkeys as they were launched on torpedo carrying missions during WW II. This shot was taken as Avenger left Bennington.*

ONE OF THE last *Avengers* on duty in the Pacific is on its way to NAS Litchfield for a well-earned rest. In October, Ens. Richard D. Cyr, a VU-1 pilot, climbed into the cockpit of the 13-year old veteran and started the engine. The Turkey's Pacific swan song had begun.

The flight was a brief one, extending only seven air miles from NAS BARBERS POINT to NAS PEARL HARBOR. There the *Avenger* was loaded aboard a ship and started its 'last mile' to NAF LITCHFIELD PARK, Arizona.

The *Avengers* have earned the right to retire after long and faithful service to the Navy. These versatile old birds are being replaced with a new plane which joined Fleet service last month. Grumman's TF-1, a transport, cargo-carrier, utility, trainer version of the S2F-1, was delivered to a VR-5 detachment at NAS SAN DIEGO, VR-22, VR-23 and VR-24.

The new plane, as yet unnamed, is powered by twin Wright R-1820-82 engines and carries a crew of two, nine passengers or two tons of cargo. In the S2F version of this plane, the after end of the engine nacelles is used to carry sonar buoys. In the TF-1, this space is used to house crew and passenger survival equipment.

It was in early June 1942 that the *Avenger* made its combat debut in the Pacific. A large Japanese force was driving toward Hawaii with a powerful invasion fleet. The target was Midway. This base, once captured, was to establish an invaluable Jap stepping-stone to strategic Oahu. In the ensuing three-day battle, the Japanese Imperial Navy lost four carriers and a heavy cruiser and were turned back in utter defeat. This battle marked the turning point between Pacific defensive and offensive tactics.

AVENGER performance at Midway indicated the Navy had a sound design. The Grumman plane became the finest torpedo bomber in the world, as well as the world's largest single engine aircraft. An 1800-hp engine pulled it through the air at 235 knots and it could cover a distance of 1,510 miles without refueling. Its official title was *Avenger*, but the pilots who flew the plane affectionately dubbed it "the Turkey."

The plane saw action throughout the Pacific for the remainder of WW II, demonstrating its capabilities in a variety of missions.

A few of the old Turkeys remain on duty with the Fleet. NAS ATLANTIC CITY has two TBM-3E's, which are utilized for air-sea-rescue missions. VR-23's Atsugi detachment still fly six of the TBM-3R's, which were used for COD from shore to ship during and shortly after the Korean War.

Although there are few *Avengers* still on duty, there are many pilots around the world who remember the heavy stick pressures, the push-pull-screw type propellor control, the little overhead "ventilator," the abrupt rise of the nose when the flaps were lowered, and the many other idiosyncrasies which were all a part of one of the most efficient and reliable Navy planes ever built. The Turkeys are gone but they surely will not be forgotten.

THE NAVY'S *new TF-1 was integrated into the Fleet in November when a substantial number of the aircraft were delivered to FlogWing units. Nameless TF-1 will perform a variety of missions.*

NAS Accident Prevention
And Grampaw Pettibone is Happy

Two airmen at NAS MOFFETT FIELD have made Grampaw Pettibone happy —so happy that he walks around the Pentagon clicking his heels together.

The airmen, VF-152's C.F. Sanford and VF-154's J.D. Little, saved two aircraft from damage and possibly two lives, which is even more important.

Sanford was standing a wheels-up watch at Fallon while his squadron was deployed there. A formation of *Furies* from VF-214 entered the flight pattern for a landing. The first three planes of the flight made landings, but when Sanford was able to get a clear view of number four plane, he saw that his wheels were up. Unable to fire a flare, he waved his paddles frantically at the pilot. The plane was a mere six feet off the runway when the pilot saw Sanford's signal. The pilot regained altitude and came in for a normal landing on his next try.

Little displayed his alertness and soundness of judgment while standing a night security watch. While making his rounds on the VF-154 flight line, he detected an oil leak under one of the squadrons *Furies*. Upon investigation, he found that the leak was from the jet's magneto-generator seal. He immediately notified the squadron's maintenance department and the plane was grounded. Further investigation revealed a heavy contamination in the engine oil system.

Sanford was lauded by his squadron, while Little received a Letter of Commendation. Grampaw Pettibone takes time here to pass along his "Well Done" to both these quick thinking airmen.

AN AIR FORCE *YC-123E cargo aircraft takes off from waters near NAAS Philadelphia on a flight to demonstrate the new Pantobase landing gear. The landing gear, designed and developed by the Stroukoff Aircraft Co., is highly stressed land and water skis which can be used for water, ice or snow operations. The plane is also equipped with conventional landing gear for land operation.*

Training Aid at Memphis
Illustrates Aileron Boost Control

Eugene L. Wright, aviation structural mechanic first class and an instructor in the AM "A" School at NATTC MEMPHIS, found his students were having difficulty understanding how the aileron boost control system worked. Students were finding up up-hill work to learn.

Explanations went something like this: "Control stick movement is transmitted to the forward or inner idler assembly by the push-pull tube. Movement of the inner or forward idler assembly causes the forward end of the beam to move with the idler . . ." and so on.

Something was needed to clarify this description. On a plywood board, Wright mounted a mechanical linkage unit of lucite plastic, a control stick and a metering valve. He connected all three and colored the linkage beam red.

To complete the system, he coupled an actuating cylinder to the metering valve with hydraulic lines, and mounted an aileron at the bottom of the board. Mechanical linkage was installed and, with the movement of the stick, the aileron worked.

Wright's training aid was just what the doctor ordered. It filled the gap between instructor and student. Understanding the complex system was no longer difficult.

Wright built the entire aid, except for the plastic mechanical linkage unit, from scrap metal and salvaged parts. The job took him just 40 hours.

PRODUCTION *models of the Navy's F4D Skyray are coming off assembly lines at Douglas' El Segundo Plant in BuAer's new paint scheme. All new models of the A4D Skyhawk, A3D Skywarrior, AD Skyraider and the Skyray will be delivered to Navy with a grey top and a white bottom.*

New F11F-1 OFT Ordered
Link to Put a Tiger in a Trailer

The Navy has awarded a contract to Link Aviation for construction of a trailer-housed flight simulator for the F11F-1 *Tigerjet*. Link will develop the new Operational Flight Trainer in conjunction with the Special Devices Center at Port Washington, N.Y.

The new training device will simulate various conditions a pilot experiences in flight, such as rough air and high and low speed buffeting.

Various other simulations, such as engine noise, sound of flaps and landing gear retracting, and cockpit air blower, can be heard in the cockpit. Visual effects will include clouds and lightning. The instructor can even inject the sound of a crash.

The trainer will be completed and delivered in the summer of 1956.

FASRON MEN CHECK INTERNAL CARRIER

Internal Loading Speeded

FASRon-102 Chief Saves by Salvage

Internal carriers, salvaged from a crashed aircraft, help speed up the time required to load torpedoes into aircraft.

Formerly, when preparing Torpedoes Mk 34 Mod 1 for aircraft loading, FASRon-102, NAS NORFOLK, transported the ready torpedoes to the plane and then attached the internal carriers. This meant delivering the torpedoes that much earlier to take-off time or that much later in the event of an emergency.

Now, with the aid of salvaged carriers, J.O. Davis, TMC, delivers the torpedoes all ready for hoisting into position. By exchanging carriers on loading, spares are always on hand.

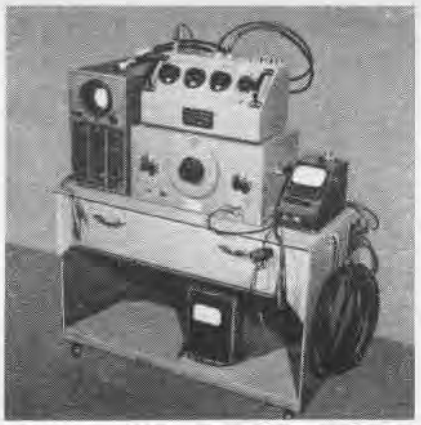
Portable Unit Saves Time

Chief Designs Torpedo Test Unit

When the mountain wouldn't come to Mohammed, he went to the mountain. D.M. Garrison, AOC of FASRon-3, NAS NORFOLK, followed that example. When he had trouble bringing torpedoes to the test equipment, he assembled a portable test unit and brought it to the torpedoes.

Formerly, when the torpedoes were hooked up electrically and made ready for final testing before being buttoned up, it was often inconvenient to move the four sections to the test equipment. In addition, it was not always possible to hook up torpedoes in the immediate test area. This was particularly true in an emergency.

Garrison's rolling test buggy solves this problem. The portable test unit consists essentially of a homemade box equipped with a single drawer and a set of casters. Power is brought into the unit on the right side, and the individual pieces of test equipment are



PORTABLE GEAR INCREASES EFFICIENCY

plugged into that source. The oscilloscope, attenuator, signal generator, and vacuum-tube voltmeter are mounted on top. The multimeter is stored on the bottom shell, together with any other instruments that might be required. Tools and other miscellaneous items are kept in the drawer.

With this rig, Garrison has effected a substantial savings in time required for testing the Torpedo Mk 34 Mod 1.

VW-4 Recruits a Company

Recruits Leave for Great Lakes

Ninety-four men from Florida were sworn into military service recently at NAS Jacksonville to form the first all airman Naval recruit company of its kind. Sponsored by the Hurricane Hunters of VW-4, the company left immediately after the ceremony for the Great Lakes Naval Training Center.

Cdr. E.L. Foster, CO of AEWRon Four, administered the Oath of Allegiance for the new Navy men who call themselves "The Hurricaners."

Formation of this group was the direct result of the combined efforts of officers and enlisted men of VW-4 with Naval recruiters throughout Florida.

PART OF VW-4'S RECRUIT AIRMEN COMPANY

'THE ME-262's TAILPIPE WAS THIS BIG'

Baffling Maneuver Solved

Former AF Pilot Now Has Answer

During WW II, Don Schultz, now a Chance Vought test pilot, flew photo hops over the Messerschmitt Aircraft factory in Germany in a P-38 *Lightning*. During these missions, he and other American pilots noticed that Me-109 pilots would lower their landing gear during what appeared to be high speed rolls, a maneuver that threw the Americans off balance.

A short time ago, Schultz and a new member of the Chance Vought team got together, and now Schultz has cleared up the mystery.

The new member is Karl Baur, Messerschmitt's former chief test pilot, and first man to fly the Me-262, the first jet used in combat.

Baur explained to Schultz that the Me-109 had bad spin characteristics, and the pilots had to pop their landing gear to recover from spins in combat.

Runway at ALF Extended

3,000 Feet Added to Beaufort Strip

The Marine Corps Auxiliary Landing Field at Beaufort, S. C. has undergone a face lifting. One of the station's old 5,000-foot asphalt runways has been re-surfaced, and a new 3,000 foot section added.

With completion of this contruction, the field can now handle heavy and jet type aircraft. Concrete end zones have been stabilized to withstand the terrific heat from jet burners during turn-ups.

Other construction work will involve the rehabilitation of 13 buildings, construction of eight enlisted men's barracks, a subsistence building, a BOQ, one Class C maintenance hangar and four squadron hangars, as well as 115,000 square yards of concrete parking apron for additional aircraft.

GROUND 'FLYING' TESTS CONTROL SYSTEM

THE MOST unbirdlike airplane in the world is "flying" in the structures test laboratory at Chance Vought Aircraft. It is a 15-ton "fighter" made of huge steel girders to test the flight control system of the new Navy XFSU-1 supersonic day fighter.

Hooked up to this monster of steel are the latest "electronic brains" to help determine the fighter's reactions to movements of the ailerons, elevators and rudder. The mock-up slightly resembles the operational flight trainers which the Navy has used for years to teach instrument flight.

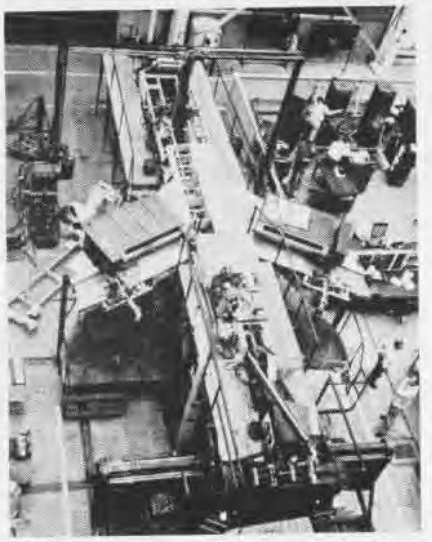
It has no jet engines, only electrically driven pumps furnishing hydraulic pressures to actuate the control surfaces. The only thing faintly resembling an airplane is the wide-open pilot's seat with a four-instrument panel in front of it and a six-foot section of the XFSU-1's tail with a vertical stabilizer atop it.

Everywhere the Control System Simulator, as it is called, has huge steel beams and girders instead of the usual aluminum, magnesium and other light metals used in today's jet fighters. But in the areas that actually operate when the pilot moves the stick are the exact parts as found in the XFSU-1. Linkages back to the rudder, elevators and ailerons are working parts, even though there are no rudder, elevator or aileron surfaces to move.

In place of those surfaces are moving arms that duplicate mass and inertia of the surfaces. These are hitched to scientific instruments which measure the force applied when the stick is moved. The simulator gives an accurate picture of the workings of the control system through its mechanical, hydraulic and electronic components.

After three months of "flying" in the simulator, Vought engineers put in more than 300 hours of "stick time." By the time the XFSU-1 flew, they had more than 500 hours of "flight experience" in the plane. The stick which the pilot uses to operate the control surfaces has built-in "feel".

The equations of motion which enable the simulator to respond like an airplane are set up on the analog com-



LOOKING *on the simulator from above, one sees the rudimentary wings and fuselage.*

puter machines, the "electronic brains" which stand in rows beside the simulator. All manner of forces which affect the plane are fed into the problem. Twelve different measurements can be computed on Brush Recorders and 36 others on oscillographs which go to make up the electronic part of the testing equipment.

Construction of the XFSU-1 simulator began almost as soon as the plane itself was past the "dream" stage. Its plans were the first engineering design releases before the day fighter itself took shape. It kept a crew of 25 men busy for 16 months building the simulator from its design go-ahead to the first operations on 1 October 1954.

BRAIN CENTER *of the simulator is based in recording machines and analog computers.*

One of the leaders in getting the project underway was J.W. Ludwig, who helped develop operational flight trainers for the Navy when he was attached to the Special Devices Center during World War II.

Ludwig planned a simulator using aircraft parts for the control system, power controls, feel system and dampers. It does not move around as does a Link trainer, but remains fixed to the floor of the test lab, with only the linkages and actuator arms for the missing control surfaces moving.

These stub arms react to or transmit the force which the actual airplane's own hydraulic system can produce. Instead of moving an aileron or rudder against slipstream forces found in supersonic flight, the arms twist steel beams four inches square and six feet long. The measure force exerted on these beams then is recorded.

Since the simulator does not bank or climb when the pilot pushes the stick, the four instruments on the panel show the degree of bank, G force, altitude, and sideslip angle. Through the analog computer machines, data can be compiled on the plane's reaction to the pilot's stick movements.

SOME OF the groundwork for the XFSU-1 simulator was laid in a somewhat similar mockup of the F7U-3 which Vought engineers used to improve its feel system. The result of the latter investigation was a major modification of the original *Cutlass* system which gave a simple, workable artificial feel to the stick of the production airplane. This setup did not have the analog computer panel tied in with its experiments as does the new XFSU-1 simulator.

A study of new aircraft designs indicated that vibrations set up in the control surfaces of aircraft tended to become higher in the transonic and supersonic ranges; while at the same time the natural tendency of the plane to overcome these vibrations became less. This increased the problem of designing feel and power controls. Use of the simulator to discover the effect of this high frequency vibration obviated the danger of testing for it in actual flight with the finished plane.

NRL DEVELOPS DRY LUBRICANT

BASIC research at the Naval Research Laboratory in surface chemistry—what happens chemically at the surfaces of liquids and solids—has paid off in the development of a "miracle" lubricant with a wide variety of potential military and industrial uses.

In the form of an easily applied plastic film only a few ten-thousandths of an inch thick, the combination dry lubricant and corrosion preventive is serviceable from 75 degrees below zero to 500 degrees above. Polytetrafluoroethylene, better known by its tradename, "Teflon", and previously well-established as a protective coating and electrical insulating material, is the material used.

Following tests at NRL of automatic pistols, rifles, ammunition and similar ordnance equipment which were coated with thin films of Teflon, the Marine Corps has completed extensive field tests of coated infantry weapons. These tests have established that "the original coating of Teflon provides satisfactory lubrication for an almost indefinite period following issue." In addition, the dry lubricating film also proved to be "a suitable preservative for long-term storage of weapons under those conditions which might exist in a storage site", and it is "much superior" to the conventional preservative both in corrosion prevention properties and in maintaining combat readiness of weapons.

Additional work by chemists at NRL indicates that this plastic coating will also be a useful long-lived dry lubricant for a host of other military and industrial applications.

This development grew out of NRL research for BUORD's requirement for all-weather lubricants for aviation ordnance during the Korean War and earlier basic research for the ONR on the wettability of Teflon and other plastics. An interim solution to the problem of lubricating automatic aircraft cannon from minus 70 to plus 160 degrees F. was supplied to the combat forces in Korea within 90 days, through the use of synthetic oils and greases which were the product of previous NRL research.

Both BUORD and NRL realized, however, that there were continuing problems with aviation ordnance lubricated in a conventional manner with oils, greases, or waxes. Such lubricants pick up and retain dust, dirt, debris and water. This contamination of the lubricant causes it to thicken and also invites ice adhesion at high altitudes.

NRL CHEMIST, *V. G. Fitzsimmons, helped develop Teflon used here to coat cartridges.*

What was needed was a lubricant which would have:

1. A coefficient of friction of 0.1 or less over a temperature range of minus 75 to plus 500 degrees F.
2. Good adhesion to brass and steel over the same temperature range.
3. No softening or melting point over this temperature range.
4. Repellence to both water and dirt.
5. Negligible solubility in any oil or solvent which would be likely to contact it.
6. Ease of application without affecting the cartridge metal.
7. Ability to prevent atmospheric corrosion of brass and steel.
8. Economy in terms of cost of application and adequate availability in time of war.

Out of the 14 most promising dry film lubricants investigated, only thin films of Teflon could meet these requirements.

The gun-firing tests at NPG DAHLGREN, using Teflon-coated cartridges, have indicated a degree of freedom from cartridge malfunction not previously obtained with conventional lubricants or with uncoated cartridges.

'Copter Engine Unveiled

British Show Secret Napier Oryx

The British have lifted the veil of secrecy from one of their new helicopter engines. The Napier *Oryx*, a 750 horsepower turbo-gas generator which will be used in the Percival P.74 helicopter, follows the rotor tip method of propulsion.

Jet reaction from the rotor tips turn the blades. Reported to be the quietest system available, it is almost free from vibration. Exhaust gases and auxiliary cooling air from the engines are ducted up to the rotor gear, along the blades, and expelled from the tips.

The absence of reduction gears, driving shaft and geared motor head, saves weight. It also improves mechanical reliability and reduces maintenance costs.

The engine has a rapid, surge-free acceleration, and the control system embodies devices giving instantaneous protection in emergencies for single or multi-engine operations of the 'copter.

Wings Made of Concrete?

French Research Progress Reported

A report was made recently on research progress being made by the Societe des Avions Breguet into the fabrication of missile and aircraft wings from prestressed concrete. Grids, or strands of pretensioned "piano wire", were used to reinforce the concrete, giving a bi-axial pre-tension for a systematic reduction of wall thickness and to improve the external finish.

Pressure of 100 psi was exerted on the concrete during the setting process, and a glass-like finish was obtained comparable to that of polished marble. Tests indicated that it was possible to do down to one-quarter inch thickness using a single layer of 0.06 inch wires, and still retain desirable strength in the moulded wing. By using a lighter gauge of wire, a thickness of $\frac{3}{16}$ inch is feasible.

The surprisingly low weight penalty, three per cent, makes the process extremely interesting. Results of these tests are being followed by scientists of the Naval Research Laboratory.

Cutlass Pilot Overhaul

O&R at Jax Starts Work on Cutlass

The Overhaul and Repair Department at NAS JACKSONVILLE has received the Navy's first F7U-3 *Cutlass* jet aircraft for pilot overhaul. According to officials at Jax, it is the first *Cutlass* to be overhauled.

Designated as the overhaul point for all *Cutlass* jets used by the Navy, O&R Jax was 70% into the disassembly phase by the end of September.

During the disassembly phase, parts were forwarded to processing shops where various other phases of the program were carried out. Target date for completion of the pilot overhaul is set for February 1956.

The Marines' 'Mr. Rescue'

Maj. Lavoy Flies Mercy Missions

The Marines at Kaneohe Bay call Maj. John A. Lavoy "Mr. Rescue." The title is appropriate for the major has flown many air-sea rescues, evacuations and mercy missions in helicopters.

From the middle of August until mid-September, Lavoy plucked two very wet pilots from Hawaiian waters and evacuated an injured Marine.

During two tours of duty in Korea

LAVOY HAS IMPRESSIVE RESCUE RECORD

he made four air-sea rescues off carriers. Then transferring to a copter unit near the front lines, he made over 200 evacuation pickups, several of which were in front of the lines or in enemy held territory.

With the arrival of several helicopter pilots at KANEOHE, Maj. Lavoy will have more time to devote to his regular administrative operations duties.

VR-24 AIDS INDIA FLOOD AREA

TWO R5D's from VR-24 have completed a 10,000-mile flight to aid destitute victims of flood-stricken areas of India. The monsoon rains during August and September brought untold hardship to thousands of people in the Near East areas.

When the demand for medical supplies, equipment and blankets became critical, the International Red Cross Society at Geneva, Switzerland, provided tons of emergency materials. Then the call went out to Navy and Air Force units to assist in a mass airlift to the flooded areas in the Orient.

COFFMAN SENDS CODED POSITION REPORT

At three in the morning, Capt. A. H. Bowker, CO. of NAF, Port Lyautey, F.M., released the two *Skymasters* with crews to make the trip to India and back. Shortly afterwards, the stand-by crew of VR-24 was alerted and preparations started for the long flight.

In the early morning twilight, alert crews were checking the aircraft while maintenance personnel were preparing a box of spare parts in anticipation of unexpected mechanical difficulties. When preparations had been completed, the huge plane taxied out to the runway and took-off on the first leg of a 35-hour flight.

Arriving at Geneva the crew was greeted by Mr. E. Winsall, representative of the IRCS. A load of 10,000 pounds of cargo was placed aboard the plane early the following morning and the trip resumed.

Lt. H. C. Farmer landed the plane at Cairo, Egypt, for fuel after passing over the French Riviera, the Mediterranean Sea, Sardinia, and the Libyan Desert. Within an hour, the plane was airborne again for the next leg of the trip. The plane crossed the Saudi Arabian Desert at night and landed at Dhahran, Saudi Arabia, for fuel.

THE CARGO WAS OFFLOADED UPON ARRIVAL

After a thorough check by the plane's two flight mechanics, T. H. Gamache, AD1, and R. C. Frater, AD1, the trip to India continued. Upon arrival at Delhi, crew members were introduced to India's Minister of Health, Indian Red Cross officials and members of the Indian Press by Capt. W. Settle, Naval Attache to India. The Honorable Sherman Cooper, U. S. Ambassador to India, personally thanked each man for the swift delivery of the equipment and medical supplies.

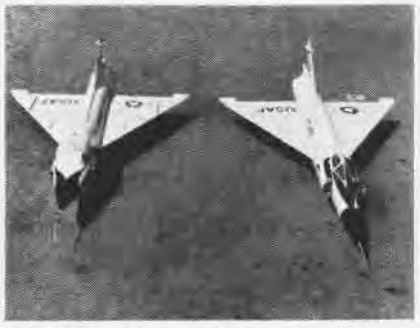
Still on schedule, the plane departed early the following morning and started home. Enroute, they established radio contact with the second R5D, inbound to India, with another 10,000 pounds of equipment and medical supplies aboard. This plane from VR-24's Naples detachment was piloted by LCdr. H. Tiejen.

Other crewmen who took part in the flight were LCdr. Hal Davi, pilot; radiomen C. K. Coffman, AL1, and D. E. Boose, AT1, and L. J. Arsenault, AN.

● The Bureau of Aeronautics has been awarded SecNav's Award for achievement in industrial safety. RAdm. C. S. Cooper, Asst. BuAer, received the award from AsstSecNav R. H. Folger.

● Evaluating the field, Carrier Air Group 14 was the first air group to use the airstrip at Cubi Point, P. I. The new air station will be commissioned in July of 1956.

NANEWS INDEX JAN. TO DEC. INCLUSIVE 1955



AIRPLANE *on left is the first TF-102A produced by Convair for the USAF. This side-by-side trainer familiarizes jet pilots with the F-102A's performance as a weapon.*

NANEWS INDEX JAN. TO DEC. INCLUSIVE 1955

CESSNA'S *OE-2 with a service ceiling in excess of 20,000 feet, joins the ranks of the Marine Corps air/ground team. Improvements include armored seats and self-sealing tanks.*

LETTERS

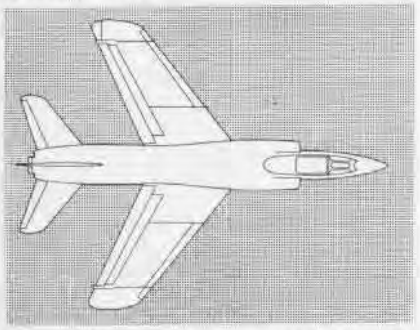
SIRS:

Honest now, could anybody identify the *Tiger* from that three-view on page one of October's NANews?

Otherwise, and as usual, an excellent issue.

DAVID A. ANDERTON

AVIATION WEEK



¶ How right you are! However, at the time the article was prepared, "Area Rule" or "Coking" was classified. The cut had been made too, so no substitution was made since the declassification came just before the October issue was put to bed. We submit herewith a corrected outline.

New CNO Writes Youngster

Promises Visit to a Navy Carrier

The Chief of Naval Operations, Adm. Arleigh Burke, recently took time out from a grinding schedule to assure a disappointed little boy that he would be given an opportunity to visit one of his Navy's carriers.

Adm. Burke had received a letter from the boy's father telling of his son's disappointment when the close of visiting hours prevented a visit aboard ship. He immediately wrote a personal letter to the son.

Dear Joey:

Your father has written me of your long wait in line to go aboard one of the Navy's carriers and how at the last minute, when you reached the front of the line, you received the heart-breaking news that visiting hours were over.

Certainly any little boy of your age who awaits his turn patiently for six hours to go aboard an aircraft carrier must be given that opportunity. Therefore, I am taking personal note of this, Joey, and as soon as the fleet schedule presents the opportunity, I will ask the naval representative in your area to give you a call and furthermore, to see to it that you are "first" in line. . . .

Meanwhile, I am enclosing a photograph of a fleet aircraft carrier which I hope you will enjoy.

Sincerely yours,

ARLEIGH BURKE

IFR-IQ?

According to OPNAV Air Traffic Control Procedures Section, the answer is: "Essential."

Ref: ANC (PCAT), Para. 2.1500.

Marine in USAF Shootfest

Rated Third at Nellis AFB Meet

Maj. George H. Dodenhoff, Marine Corps pilot on exchange duty with the USAF, won recognition as the third highest scorer at the recent USAF air gunnery meet at Nellis AFB, Nevada. He entered the competition as a member of the Phase One team of USAFE.

Maj. Dodenhoff racked up scores of 192.2 in air-to-air firing, and 55.1 in air-to-ground. The top scorer had a total of 945.8 points, while Dodenhoff ended up with a healthy 747.3 points, which assured him the "show" position.

The sharpshooting major has been attached to the 21st Fighter-Bomber Wing, at Chambly Air Base, France. With the gunnery meet imminent, the Air Force requested the Navy to extend Dodenhoff's tour of exchange duty so that he might compete, since his tour was to end prior to the meet.

Santa Claus in Navy Blue

You will note that the pictures of Christmas parties last year are the basis of our Christmas presentation this year on pages 20-23. We hope you will share the pictures and news of the parties and events this year, so that we will be able to tell the story in 1956.

Please send us in photographs and releases even though we may not use them right away. We appreciate the splendid job everyone did last year, and we know you'll do it again. Just send us the word.

CONTENTS

● SUBSCRIPTIONS

Naval Aviation News is now available on subscription for a $2 check or money order made payable to Superintendent of Documents, Government Printing Office, Washington 25, D. C.

● THE COVER

The dubious little fellow pictured was one of 80 children from two Japanese orphanages who were guests at a party given aboard the USS Princeton last Christmas. He later decided it was fun.

● THE STAFF

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Art Director

● Printing of this publication has been approved by the Director of the Bureau of the Budget, 12 April 1955.

NAVAL AVIATION NEWS

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A Merry Merry Christmas To You All

The editors and staff of Naval Aviation News wish for all of their shipmates everywhere a happy, peaceful Christmas Season. Particularly for those who find themselves separated from home and family at this time, we sincerely hope the pride they must feel in the knowledge that without them there might be no Christmases, in some small way compensates for their absence from their own hearths.

No wish of ours could possibly add to the joy and satisfaction experienced by those Navy men and women who give liberally of their time and money to bring Christmas to the less fortunate little people in many countries around the world. A special warm place in our hearts and a special Christmas wish are reserved for those who throughout the past year have made Naval Aviation News a success. The contributions of ships and squadrons and shore stations are the very life blood of NANews. Thank you for helping us tell the day by day story of Naval Aviation.

Our appreciation goes to the various offices of the Department of Defense, the Navy department—especially the Bureau of Aeronautics, the Chief of Information, the divisions of DCNO (Air)—and other government offices in Washington.

Well deserved thanks go to the Naval Photographic Center. Our demands upon excellent technicians of NPC have frequently approached the unreasonable, time—and labor wise—demands that were always cheerfully met.

We are grateful to NACA, to the public relations officers of Navy contractors, and to the aviation industry generally—always a source of current information and fine art work.

Merci to Robert Osborne, the talented creator of Grandpa Pettibone, who is still drawing that sharp-tongued character for the News. And thanks to Gramp whose barbs are not even dulled by the sentiment of Christmas, for safety takes no holiday.

Thanks to you all whether your contribution was a snapshot or a pictorial masterpiece; a squib or a feature article. Our gratitude to you whether your submission ever saw the light of day in print or whether, through force of circumstance, it found its way into the circular limbo of literary effort.

We have tried to set down those who deserve special mention for their efforts in behalf of the NEWS. If by any chance you have been omitted, it is only from the print and not from our hearts.

Fleet Air Jacksonville, Commander Naval Forces Far East, MCAS Cherry Point, and Commander Air Force Atlantic Fleet lead in quality and variety of material submitted to NANews.

Naval Aircraft Carriers Antietam, Bon Homme Richard, Coral Sea, Gilbert Islands, Hancock, Hornet, Intrepid, Kula Gulf, Lake Champlain, Leyte, Lexington, Oriskany, Philippine Sea, Princeton, Randolph, Shangri-La, Ticonderoga, Valley Forge, Wasp, Windham Bay, Yorktown; and Cruisers Des Moines, Helena, and Roanoke.

Naval Air Stations Akron, Alameda, Atlantic City, Birmingham, Brunswick, Cecil Field, Corpus Christi, Dallas, Denver, Floyd Bennett, Glenview, Grosse Ile, Guantanamo Bay, Hutchinson, Jacksonville, Key West, Lakehurst, Los Alamitos, Moffett Field, Miramar, New Orleans, New York, Niagara Falls, Norfolk, Oakland, Oceana, Olathe, Pensacola, Patuxent River, Quonset Point, San Diego, Seattle, Spokane, Squantum, and Whidbey Island; Naval Station at Sangley Point; Marine Corps Air Stations at Cherry Point, Kaneohe Bay, El Toro, Miami; First Provisional Marine Air/Ground Task Force; and Commander Fleet Air Seattle and Quonset.

Naval Air Auxiliary Stations Barin Field, Cabaniss Field, Chase Field, Chula Vista, Corry Field, El Centro, Fallon, Kingsville, Monterey, Saufley Field, Sanford, Whiting Field, and the Naval Air Facility Litchfield Park.

Naval Air Reserve Training Units Anacostia, Jacksonville, Lakehurst, Memphis, Miami, Norfolk and Santa Ana; and CNARESTRA.

Fighter Squadrons 22, 32, 41, 71, 84, 94, 155, 192; Composite Squadrons, 3, 4, 6, 34, 35, 62 and 65; Patrol Squadrons 4, 8, 9, 10, 18, 19, 22, 44, 45, 47, 49, and 741; FASRons 2, 3, 5, 11, 77, 102 and 114; Transport Squadrons 2, 3, 7, 21, 24; Attack Squadrons 45, 105, 195, 218, 691 and 724; Utility Squadrons 1, 6, and 10; Development Squadron 3; Air Antisubmarine Squadrons 20, 26, 39, 52, and 36; Fleet Air Wings 2 and 14; Helicopter Utility Squadrons 1 and 2; Photo Squadrons 61 and 62.

Marine Aviation VMF–152 and 513; Marine Photo Squadron 3, Air Wing 1, Air Group 11 and 13, Observation Squadron 6; and VMA–225.

Other great facilities; NATTC Jacksonville, NATTC Memphis; CNATRA Pensacola, FAWTULant and Pac; ComAirPac, Sixth Fleet, and the Postgraduate School at Monterey, Cal.

Research and special activities: Naval Research Laboratory, Office of Naval Research; NATC Patuxent River, NAMTC Point Mugu, NAMDC Philadelphia, Naval Aviation Supply Depot, Philadelphia, Naval Aviation Electronics Service Unit; Flight School at the University of Southern California, and Naval Aviation History.

Merry Christmas and a Happy New Year to all.

Naval Aviation News

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