

NAVAL AVIATION

NEWS

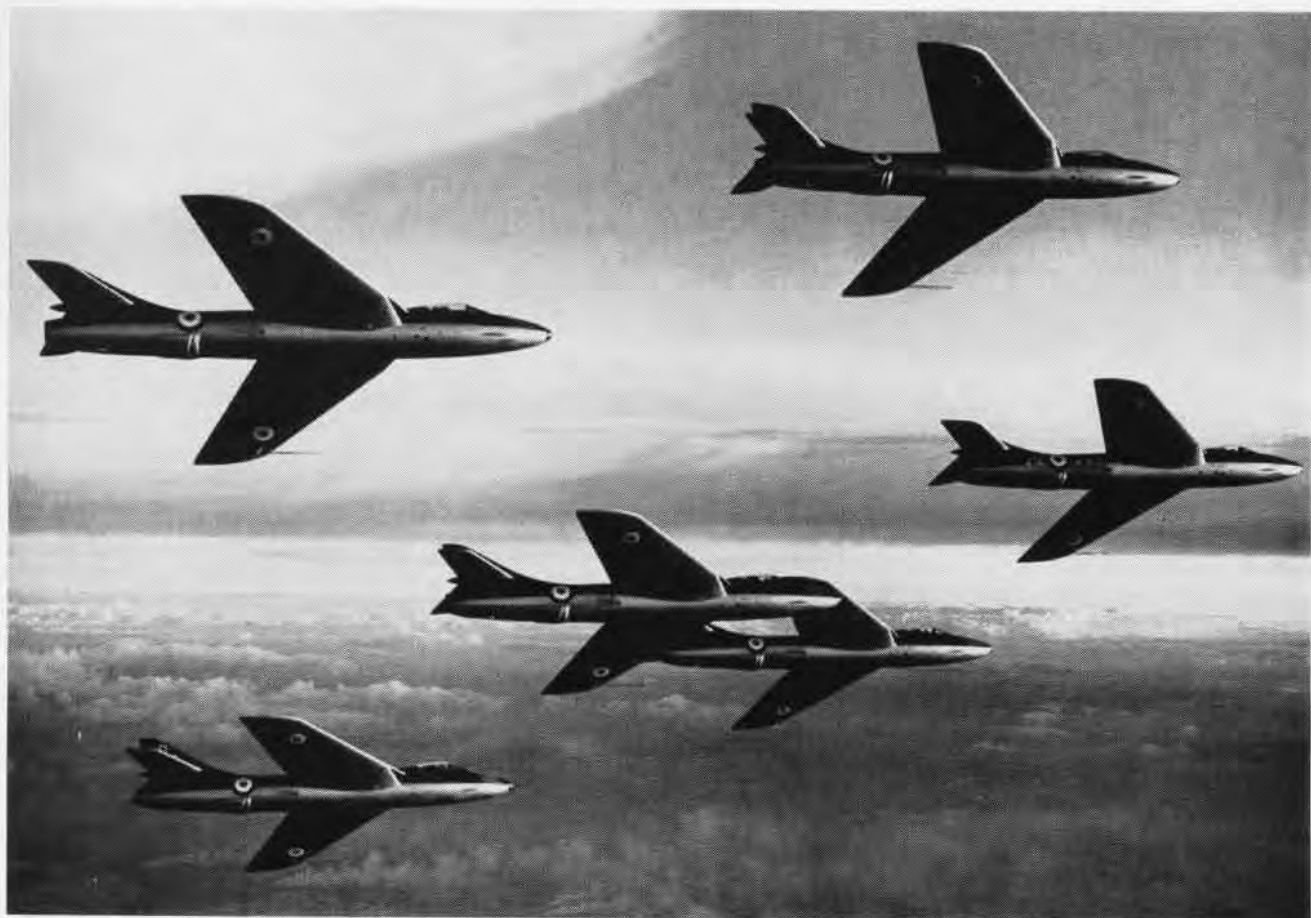


37th Year of Publication

MARCH 1956

NavAer No. 00-75R-3





BRITAIN'S HUNTER BY HAWKER

Pictures of the Hawker 'Hunter,' courtesy of 'Flight,' show the clean lines of this first-line RAF fighter. The speedy plane carries the automatic gun-ranging ra-

dar. It works in conjunction with the gyro gun sight, controlled by a twist-grip on the throttle. Guns with ammo in 'swap' 'package,' fire 1200 rounds a minute.



1941



1956

CORPUS CHRISTI



MARCH 1956





A GREAT AIR STATION WAS TO RISE ABOVE THESE SAND DUNES



ALL SEAPLANE TRAINING STARTS IN CORPUS CHRISTI SNB'S

THIS MONTH the Naval Air Station, Corpus Christi, is celebrating its crystal anniversary. On the 12th of March, 1956, NAS CORPUS is 15 years old. And Capt. S. L. Meade, station CO, has directed the busy training station to pause in its crowded schedule to celebrate that event.

Much has happened in these 15 years; many changes have taken place. Many men have come for training, have completed that training, and have gone. The station itself has grown. From the original 2050 acres, its area has expanded to the more than 6800 at present. And this is exclusive of the outlying stations.

While the mission has remained the same—to train pilots to fly Navy planes—some of the methods have changed. And all of the planes are different.

The town of Corpus Christi, a city of more than 108,000 souls, has grown in population more than twice over in these 15 years of war and peace. It, too, has spread out in area toward the four compass points. Though it is a busy bustling city with many interests, its inhabitants are still warm and friendly, and Corpus Christi is still a "good Navy town."

Sixteen years ago, this quiet little South Texas town had a population of only 57,000. Natives of the town and of the surrounding Nueces County enjoyed a leisurely life. For the most part, fishing in Corpus Christi Bay under the

warm Texas sun, or ranching on the broad acres were the occupations which furnished them an adequate livelihood.

All in all, this part of the Southwest, rooted in history older than Plymouth or Jamestown, and with a strong Spanish influence, had an easy, uneventful manner of living.

True, Europe was embroiled in a terrible war. But the marching feet of Hitler's legions as they overran country after country, and the roar of his death-dealing planes as they bombed helpless peoples into submission was far, far away. War had not, as yet, touched Corpus Christi.

As the decade turned, however, and as the year began to wear away, war began to come closer. America's stakes in the conflict were becoming clear, and the race for preparedness was on. The draft had started. Tanks, guns and planes began to pour off the assembly lines. Expansion was the keynote in the Armed Forces.

Typical of this expansion was that in the number of Naval aircraft. Near the end of the "lean thirties," the Navy had only about 1000 planes. The 1938 Naval Expansion Act authorized procurement of enough planes to bring the number to not less than 3000. On the day after the Germans occupied Paris in June 1940, the authorized strength was increased to 10,000 planes; the following month the number was jumped to 15,000, well on the way to the ceiling number of 27,500 authorized in 1942.



CROWD AT A&R SHOP HEAR DEC. 8 PEARL HARBOR BROADCAST



NAVAL AIR STATION MEN MARCH, HONORING A TEXAS FESTIVAL

This prospective tremendous increase in aircraft posed an intolerable accommodation and traffic problem to the inadequate 1939 system of 11 Naval Air Stations and eight Naval Air Reserve Bases scattered throughout the country. The need for additional air stations far overshadowed the need for most other facilities in the Navy.

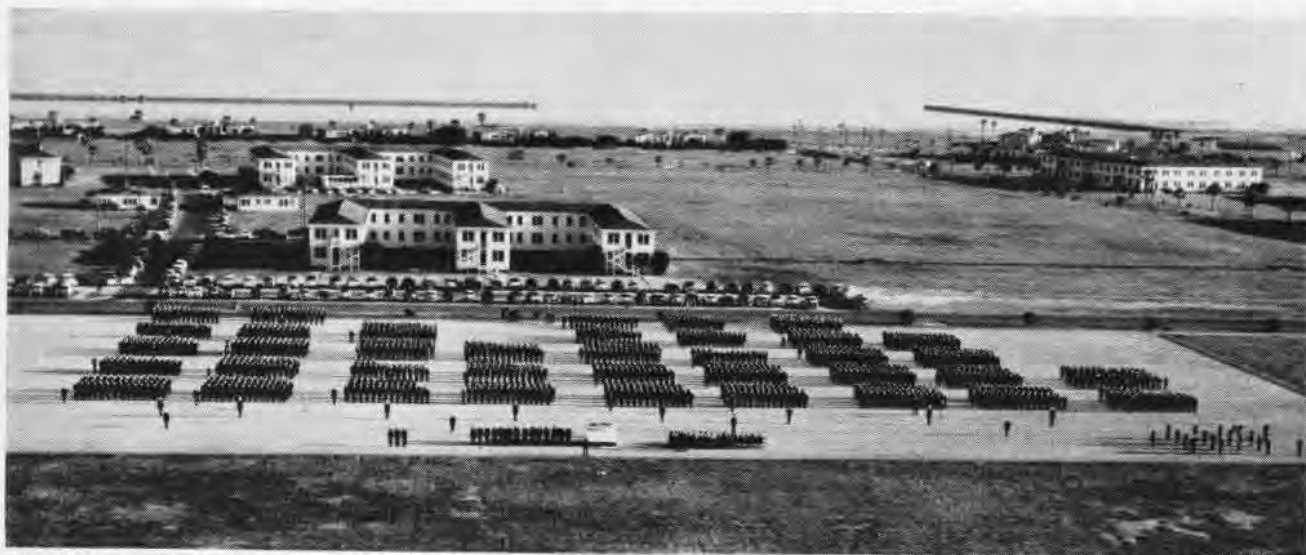
Topping the priority list for naval aviation ground facilities was a second training station for pilots of a size comparable to that of Pensacola, the oldest of naval air stations. Pilots would be needed as fast as American industry could build the planes. And pilots had to have long months of training.

In the selection of the location for this great new training station, careful consideration had been given to all possible sites on the continental seaboard. Because the Gulf Coast offered nearly ideal training weather, and because another training station on the Gulf could readily be coordinated with Pensacola, choice was narrowed to that area. Corpus Christi Bay and its adjacent lands afforded

and scrub oaks to a vast open, level space. The shore line was extended far out into the bay by hydraulic fill operations, adding a 500-acre area that would be used later for sites for quarters. Ground for the first building was broken 28 June 1940.

Immediately the structures began to go up—much of the construction of permanent, steel-frame type. Along the waterfronts on the north and east, the seaplane areas were developed, with three seaplane hangars and six ramps. The western third of the area was devoted to the landplane area; land hangars were built near the Oso Barracks. Mess halls, repair shop, storehouses, ground school and general utility buildings followed. And four all-important asphalt runways were built, three of which were 5,000 feet long, the other, 6,000 feet.

Work on the many components of this vast project progressed with such rapidity that nine months, almost to the day, after the first ground had been broken, the Naval Air Station and Training Center at Corpus Christi was



NAS CORPUS CHRISTI OFFICERS AND MEN IN FORMATION FOR FIRST PERSONNEL INSPECTION OF 1956 MAKE A STRIKING SCENE

fine dual accommodations; it offered areas suitable for both seaplanes and landplanes. The fact that it was close to the halfway line between the Atlantic and Pacific coasts was advantageous, as was the nearness to a supply of aviation fuel. Of no small consideration—it was in an area where there was little existing air traffic.

Final decision settled on a site ten miles southeast of Corpus Christi, facing Corpus Christi Bay to the north, Oso Creek to the west, and Laguna Madre to the east. Flour Bluff was the location. This was a small fishing village, surrounded by land covered with sand dunes, mesquite brush, and scrub oak. Around it were a few sparsely scattered tourist cabins, farms and fishing piers.

And so it was that the government—the Navy—in mid-1940 moved into Corpus Christi. Abruptly there was a distinct change in the way of life in that land of sunshine. Hundreds of men and machines arrived. There was work to be done, lots of work, and fast. The slow days were gone; in their place there was work 24 hours, around the clock.

Giant shovels and bulldozers changed the sand dunes

placed in commission and was ready to receive its first class of cadets.

But the near-miracle speed of progress on this great project was not without many difficulties. To say that construction conditions were not ideal is an understatement. Beginning in the fall of 1940 and continuing until after midsummer of 1941, the rainfall in the vicinity was twice that of normal, and additional operations were required to combat mud and standing water. It was necessary to use crawler-type tractors to tow truck-loads of material to the construction area.

During the summer months, mud changed to dust in a few hours beneath the hot sun. Construction workers were known to complain, "This is the only place in the world where a passing truck can splatter mud in your eyes and at the same time kick dust in your face."

And all the time the high winds that persisted created dust storms that not only were very annoying to the workers and slowed the progress of construction, but even caused a considerable amount of damage to the equipment.



FIRST AVCADS TO SOLO IN 'YELLOW PERILS' AT NEW STATION



INSTRUCTOR GIVES ATU-100 STUDENTS A PRE-FLIGHT BRIEFING

A MAJOR difficulty was encountered during the excavation for foundations. Clearing the site of the brush so loosened the fine sand that it drifted into the excavations and failed to support the heavy equipment. Sometimes it seems that no sooner was a hole dug than the sand filled it up again. Wind and sea action made it necessary to construct quay walls and bulkheads along the waterfront as support for the shifting sand until it settled.

An unusual problem, peculiar to this area, was presented by the nearness to the station of a wild burning gas well that was spewing out salt water as well as the gas. The high winds carried salt spray all over the station, causing more construction difficulties,—rusting of metal and corroding of wires. Eventually the fire of this burning well was extinguished and the well was capped, cutting off the salt water flow. And this problem came to an end.

Through a "speed-up" schedule, enough of the construction was completed to permit the commencement of operations almost a year and a half ahead of the original schedule. The momentous day arrived—March 12, 1941. Corpus Christi was crowded with dignitaries come to witness the occasion. The late Secretary of the Navy Frank Knox and his party were among the honor guests. Capt. Alva D. Bernhard USN, read his orders appointing him first commanding officer of the U.S. Naval Air Station, Corpus Christi, and the station was officially placed in commission.

Cdr. R. D. Lyon, USN, was the executive officer of the newly commissioned station.

The first group of fifty-two cadets arriving at the station on 20 March 1941, only eight days after the commissioning, were greeted by the noise created by the riveters, carpenters, tractors and bull-dozers that were still much in evidence. Their ground school classes started on the first of April, and thus the "University of the Air" was in session at this, the Naval Air Station that was to be called the world's largest and finest.

In rapid succession, auxiliary fields were completed. Rodd, Cabaniss, Cuddihy, Kingsville, Chase and Waldron fields enlarged the scope of training in this area and facilitated the rapid turnout of Naval aviators for the fleet.

From this beginning, training of pilots was expanded and conducted with such vigor that before World War II was over, more than 35,000 men had completed their training and had received their wings there. Several thousand additional aviators have completed training in the Corpus Christi area since WW II.

Since that first class of cadets, the main station at NAS Corpus Christi has not given primary training. With the opening of Rodd, primary moved there, and aviation cadets were assigned to Corpus Christi (and Pensacola) for the intermediate stage of their pilot training. (See *NANews* 1 June, 1944). There, as they learned to fly SNJ's, SNV's,



PLANE CAPTAIN BUCKLES IN ATU-400 PILOT



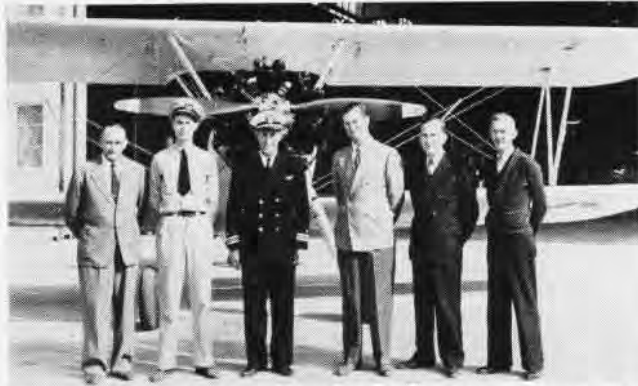
TBM ROARS AFTER 'START ENGINE' SIGNAL



1942 CADETS START ON EARLY MORNING HOP



LATEST PLANE OVERHAULED BY CORPUS O&R DEPT. WAS A WV-2



FIRST PLANE OVERHAULED BY DEPT. WAS THIS N25, IN 1941

SNB's, OS2U's, PBY's, and N3N's, they were given the specialized training that eventually qualified them for duty with carrier and land-based squadrons.

Fresh from his primary training, the cadet arrived at the intermediate center and plunged immediately into a rigorous induction week schedule that included physical and mental examinations and ground training courses. One week from the time of his arrival, he was ready for the basic stage of his intermediate course.

Here the cadet learned to fly the SNV, intermediate transition between Primary's "Yellow Peril" and the more advanced SNJ. His time was divided among squadron activities, ground training school, military and physical training, code room, and the battalion barracks.

From three to four weeks of instrument training followed the basic stage. During this important instructional period the cadet spent hours in Link trainers and under the hoods of SNV's and SNJ's. Normally, cadets got their basic training at Cabaniss and Cuddihy Fields, and their instrument training at Chase Field and the main station.

On completion of basic and instrument training, the cadet branched out into a specialized type of flying and was assigned to one of several kinds of advanced work. He

may have gone to a patrol bomber squadron to fly PBY's from the seaplane area on the main station; to an observation scout squadron to fly OS2U's and N3N's on floats from Laguna Madre on the main station, or to carrier-type training at Kingsville or Waldron Fields. In CV squadrons, cadets flew SNJ's and devoted considerable time to aerobatics, gunnery navigation, instrument flying, glide bombing, primary combat and format tactics. Aerobatics included loops, slow rolls, Immelmans, spins, and wingover.

AT THE SAME time, these fledgling aviators were going through their long months of training, an entirely different group of fliers was also undergoing instruction at NAS Corpus. It was here that the men came who already were aviators—men who in civilian life had met the requirements and held a commercial pilot's license. Already commissioned—they came to Corpus Christi as student officers to learn Navy techniques of flying.

Many are the tall stories that came from these groups of men about the difficulties they encountered in their time of transition from civilian to military fliers. Just because a man had been a successful crop duster didn't necessarily mean that he'd make a good dive bomber!



THE NAVY'S MULTI-ENGINE SEAPLANE TRAINING IS DONE AT CORPUS CHRISTI IN GIANT PBM'S, SHOWN IN FORMATION TAKEOFF



MANY SEAPLANE PILOTS WERE TAUGHT IN FAMOUS OLD OS2U'S



BACKBONE OF INSTRUMENT TRAINING IS STILL THE BEECHCRAFT



HOME OF THE BLUE ANGELS WAS LONG AT NAS CORPUS CHRISTI

UPON GRADUATION, many of these pilots remained in the Training Command as instructors. Others went into multi-engines, flying the patrol bombers or transports. Some of them joined squadrons aboard carriers.

In 1945 the war had ground to its weary end. Demobilization and the point system took its toll in naval aviation no less than in all other branches of the Navy. Planes were being mothballed, fields inactivated, and the number of pilots needed was drastically cut. From the wartime peak of 21,067 pilots trained in 1944, peacetime anticipation was to train less than ten percent of that maximum number.

By the middle of the following year, Naval Air Training had undergone such a reorganization that it was, in fact, a complete metamorphosis. An administrative fusion of the primary and intermediate training stages resulted in a single Commander, Naval Air Basic Training. Headquarters was at NAS CORPUS CHRISTI, with the 26 week syllabus being conducted both at Corpus and at Pensacola.

While ground school subjects remained the same, the new Basic syllabus returned to the pre-war policy of giving students a thorough check-out in all types of Naval aircraft. Single-engine land, twin-engine land, multi-engine sea, and carrier qualifications were all mandatory courses.

Instructors at Corpus Christi devoted their energies to the primary formation, and single-engine instrument course. Students there had but two airplanes to fly—first the N2S, and then the all-metal SNJ *Texan*.

For their multi-engine and carrier problems, students flew the PBY's, SNB's and SNJ's at Pensacola.

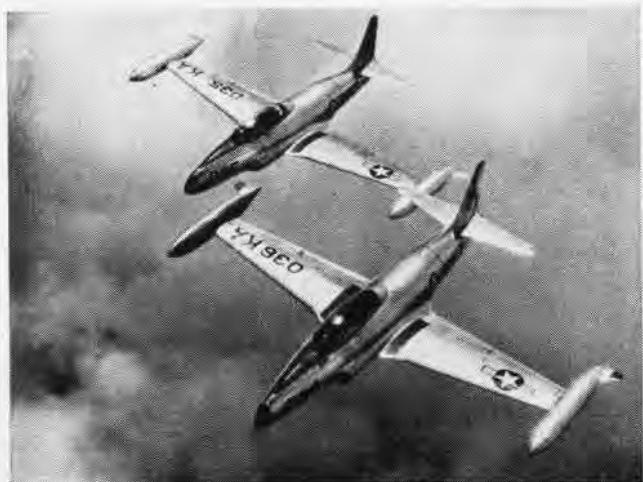
Man-power shortage plagued the training program at every turn. Release of ground officers threw the job of instructing upon aviators, most of whom were unprepared for that task. Shortage of enlisted man-power kept planes on the ground that should have been flying. That seriously slowed down the syllabus. In an effort to relieve that bottleneck, a flight-line engineering training and work program was included in the syllabus. Thus the cadets serviced their own planes and aided in the 30-hour checks.

More regrouping in Naval Air Training was effected in the latter part of 1947. Pre-flight and Basic Training was located in the Pensacola area. Advanced Training had headquarters at NAS JACKSONVILLE, with a subordinate command at Corpus Christi. Still further shifting in November and December 1948 moved all the Advanced Training Command Units from Jacksonville to Corpus. Now the South Texas station was the Advanced Training Base.

THE MARCH OF TIME was measured off at NAS CORPUS CHRISTI by the disappearance of old planes, and the appearance of new ones. When VO type planes were taken off battleships and cruisers, all VO training stopped, and in March 1949 the OS2U's were retired. Jet training commenced in the Advanced Training Command in mid 1949 when the first TO-1's, Lockheed *Shooting Stars*, reached Corpus Christi.

That same year the *Blue Angels*, Flight Demonstration team, moved into jets, and their home base was changed from Pensacola to Corpus Christi.

In November of that year, the last TBM students completed training, and the venerable "Turkeys" were put in cold storage, to be taken out when the need arose during



TV-2 TWO-PLACE TRAINERS IN FORMATION OVER KINGSVILLE



FROM JET TRAINERS TO COMBAT JETS IS BIG STEP FOR CADET

the Korean War. They remained in use this time until late 1955 when they were replaced by the two-in-one S2F's.

In answer to a need for Anti-Submarine pilots, ATU-6 was re-established in 1951 to train VS fliers in TBM's. The sub-hunting pilots now train at Kingsville, and, in ATU-400, they fly the Grumman S2F's.

After the Korean war hiatus, reactivation of the *Blue Angels* in late 1951 found them flying at Corpus Christi, this time in F9F-5's. They remained at the Texas base until July 1955, when they moved, in their F9F-8 *Cougars* to Sherman Field, Pensacola.

Training in the South Texas area is now in three types—jets, anti-submarine and in seaplanes. The TV-2's, S2F's, T-28-B's and PBM's are a far cry from the "Yellow Perils," SNV's and N3N's of the early days, but the mission is the same.

There is no better reflection of the growth and specialized objective of NAS CORPUS CHRISTI than its gigantic Overhaul and Repair Department. Not only has it serviced planes for Corpus Christi through the years, but it has done Navy-wide overhaul and repair of all types of planes.

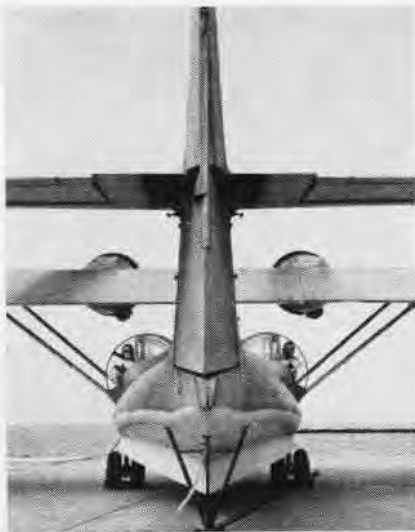
At the present its work load encompasses such wide variation as single and multi-engine planes, jet and conventional, aircraft, engines, components, and training devices.

It is doubtful if there is a single pilot in the Navy who has not at one time or another landed at Corpus Christi. Either he took flight training there, or has stopped on a cross country. To these men, the words and pictures showing NAS CORPUS as it is today, and as it has been in its 15 years of existence, will call up recollections—each man with his own memories.

NOT THE OLDEST, nor yet the youngest, Naval Air Station Corpus Christi, is one of the Navy's largest air stations, and is among its finest. And so we join all the alumni of the station; all those who are now serving or have served there; all the good citizens of that area of Texas; and all the other friends everywhere in saying: "Happy birthday, NAS Corpus Christi. May you have many happy returns of this fine day. And may you contribute many more long years of useful service as you continue to train Navy men to fly in protection of our beloved country."



PBM-TRAINED PILOTS ARE READY FOR P5M-2



MANY CADETS MET SEAPLANES THROUGH PBY



TYPICAL 1942 SCENE AT CORPUS CHRISTI



GRAMPAW PETTIBONE

Back-Firing Home

Tucked in with the morning dispatches of accidents that *did* happen, was this unclassified message from Commander Task Force 43.2 of one that *didn't*.

"RECAP OF FLIGHT 6 DASH 7 JAN X P2V BUNO 122465 PLANE CDR LCDR J W ENTRIKIN HAD FLOWN 1060 NAUT MILES FROM MCMURDO SOUND ON AN INVESTIGATION OF THE ANT-ARCTIC ICE CAP X HE HAD MADE A ROUTINE POSIT REPORT AT 061030Z X A FEW MOMENTS LATER AT 061051Z HE ELECTRIFIED THE RADIO AND CIC ROOMS OF THE USS WYANDOT BEING USED BY VX-6 AS AN AIR CONTROL CENTER X SOS SOS SOS COMMENCED FLOODING THRU EARPHONES AND LOUDSPEAKERS X ANXIOUS HUSH FELL AS POSIT AND REPORTS WERE COPIED THAT STBD ENG WAS FAILING AND BOMB BAY TANKS JETTISONED X

"AT FIRST IT SEEMED LIKE HOPELESS SITUATION FOR CREW AS PLANE 1000 MILES FROM BASE AND 12000 FT ICE CAP TO CROSS X SINGLE ENG ALT OF HEAVILY LOADED PLANE ONLY 6000 FT X TEMP MINUS 21 CENT X PLANE MANAGED TO MAINTAIN 13000 FT BY NURSING FAILING ENG ALONG X ENG BACKFIRED VIOLENTLY APPROX EVERY THREE MINUTES AND FUEL CONSUMPTION ON BAD ENG WAS 400 LBS PER HOUR YET LITTLE POWER WAS BEING DELIVERED X RPM FLUCTUATED WILDLY BETWEEN 2200 AND 2900 RPM X PORT ENG FUNCTIONED NORMALLY DURING FIVE AND ONE HALF HOUR FLIGHT BACK TO MCMURDO X

"CREW COMPLETELY STRIPPED A/C OF EVERYTHING EXCEPT ESSENTIAL RADIO AND

45 DAY SURVIVAL EQUIP X THREW OUT ALL PERSONAL BELONGINGS X ENTRIKIN MANAGED TO HOLD ON TO A PACKAGE OF ENLISTED PROMOTION EXAMS SO WAS NOT COMPROMISED BY BEING SCATTERED ACROSS ICECAP HUNDRED OF MILES FROM NOWHERE X STBD ENG FAILED COMPLETELY 10 MINUTES PRIOR LANDING ON MCMURDO ICE STRIP X PLANE HAD ONLY 150 GAL FUEL REMAIN ON LANDING DUE HIGH FUEL CONSUMPTION ON RETURN FLIGHT X HEATERS TURNED OFF TO SAVE 30 GAL GAS PER HOUR X CANTEEN WATER IN COCKPIT FROZE SOLID AND CREW SO COLD THEY SHIVERED VIOLENTLY EVEN THOUGH WARMLY DRESSED X

"ALL SHIPS CMM SEABEES AND SQDN PERS TURNED TO IN A MATTER OF MINUTES TO MARSHALL ADDITIONAL SURVIVAL EQUIP CMM REFUEL AND HANG JATO BOTTLES ON SAR A/C AND READY PLANES FOR INTERCEPT AND ESCORT OF THE CRIPPLE X ONE BONE WEARY CREW WAS AWAKENED AND BRIEFED AFTER RETURNING ONLY HOURS BE-



FORE FROM A FIFTEEN HOUR RECON MISSION X

"ALL A/C FREQ BECAME SILENT SO AS TO PROVIDE CLEAR CHANNEL COMM BETWEEN PLANE AND AIR CONTROL X SOLEMN FACED OFFICERS AND MEN DROPPED BY AIR CONTROL TO RECEIVE ORDERS AND AS QUICKLY DEPARTED TO PROCURE REQUIRED SUPPLIES X MANY A SILENT PRAYER WAS SAID AS THE SECOND HAND SEEMED TO STOP AND THE TENSION MOUNTED X COMM REMAINED EXCELLENT UNTIL 061430Z WHEN ALL CONTACT WAS LOST X WEAK M O'S HEARD FOR FEW MINUTES SHORTLY AFTER 1500Z X AN R5D AND P2V WERE HOMING IN ON THE CRIPPLE X

"AT 1540Z RADAR SPOTTED THE CRIPPLE AND ESCORTS 102 MILES AWAY OVER PEAKS OF 10000 FT MTNS TO WEST X HAD IT MADE NOW AS PLANE NO LONGER IN DANGER OF GOING DOWN ON ICECAP X AFTER SINGLE ENGINE LANDING ON ICE RUNWAY 30 MILES TO SOUTH CREW BROUGHT TO SHIP BY HELO FOR HOT COFFEE CMM FOOD AND THAWING X CHAPLAIN OFFERED THANKS AND PRAYERS FOR ASSEMBLED PLANE CREW AND SHIPMATES FOR THEIR SAFE DELIVERY X

"ENTIRE PLANE CREW FUNCTIONED EFFICIENTLY AND WITHOUT PANIC THROUGHOUT THEIR FIVE AND ONE HALF HOUR ORDEAL X ALL ARE DESERVING OF COMMENDATION X BESIDES PLANE CDR CREW COMPOSITION AS FOLLOWS LT E D ELLENA COPILOT CMM LT R M LYNCH NAVIGATOR CMM E S GANN ADI PLANE CAPT CMM P ROSENBERG AT1 RADIOMAN CMM T H STALLING PH1 PHOTOGRAPHER X END OF MESSAGE"



Grampaw Pettibone Says:

I don't know about the rest of you, but I got a big lump in my throat about half way through this dispatch. This crew faced an emergency over terrain where rescue would have been extremely difficult—had they made any mistakes. They knew what had to be done, and did it, and that's why they're alive today.

Incidentally, it's been some years since you've seen any names on these pages, but there's an exception to every rule. In my book these boys are Aces.

Ready To Go?

The pilot of a TV-2 was getting ready to go out on a training flight when he was asked by a ground officer if it would be all right for him to go along for a ride. The ground officer, who was attached to the Reserve squadron in the capacity of administrative officer, stated that he qualified in the oxygen chamber and had been up in the TV-2 before. However, he wanted a little refresher briefing on the ejection procedure. The pilot hurriedly went through the procedure and later stated that he had said something like this to the ground officer: "When you get the arm rests up in position, you are ready to go"—meaning, of course, that he was ready to be ejected.

The plane was started and as the pilot closed the canopy and started to taxi out, he was called on the intercom by the ground officer who reported that HE HAD THE ARM RESTS UP AND WAS READY TO GO!



The pilot immediately recognized the danger of an inadvertent ejection and ordered the ground officer to hold his hands in the air until he could decide on the correct procedure.

He signaled for the line mech to come over and advised him of the situation, whereupon the mech promptly placed his head in the rear cockpit and began tinkering with the ejection

seat mechanism. Trick of the year!

Seeing this new and added threat, the pilot ordered the line mech away from the plane, secured the engine and called for technical assistance.



Grampaw Pettibone Says:

They tell me this fellow in the back seat didn't realize just *how* ready to go he was until after they carefully removed him from the rear seat. Fortunately, the actions of the pilot prevented what might have been a very serious accident.

The squadron CO who sent in the "near-one" reports that every pilot in the squadron has been re-briefed on how to check out prospective passengers.

Another Close One

During carrier qualifications aboard the *Oriskany*, five pilots, using AD-5N's, were engaged in arrested landings and cat shots. No crewmen were carried on these flights.

I don't see anything wrong



The parachute in the rear compartment of one of the planes was not secured, and it is assumed that the chute jumped out of the seat on the first arrested landing. On the next cat shot, it was evidently projected through the aft curtain into the after fuselage compartment. Here it streamed and subsequently became enmeshed in the control cables.

The pilot noticed that the plane exhibited a constantly increasing right wing and tail heaviness, which he was unable to completely trim out. This condition was particularly noticeable after the cut and during subsequent cat shots. However, the hop was completed without mishap.

When the plane was being pre-flighted for the next hop, the chute was discovered tangled in the control cables.



Grampaw Pettibone Says:

Needless to say, the plane captain got "THE WORD" after this fiasco, and I'll wager that this particular pilot is now a little more conscientious about pre-flight inspections.

Loose gear in a plane is dangerous at all times, but downright treacherous in carrier operations.

Woops!

The following was taken from a dispatch report on an aircraft accident:



ABLE X SNJ-6B X EASY X FCLP X FOX X VFR X GEORGE X STU TAXIED INTO OUTDOOR HEAD X HOW X PLT ERROR X JIG X EASY X KING X CHARLIE X RIGHT WING CHANGE X NAVY OUTDOOR HEAD DAMAGED X



Grampaw Pettibone Says:

If ya gotta go, ya gotta go.

Newcomers

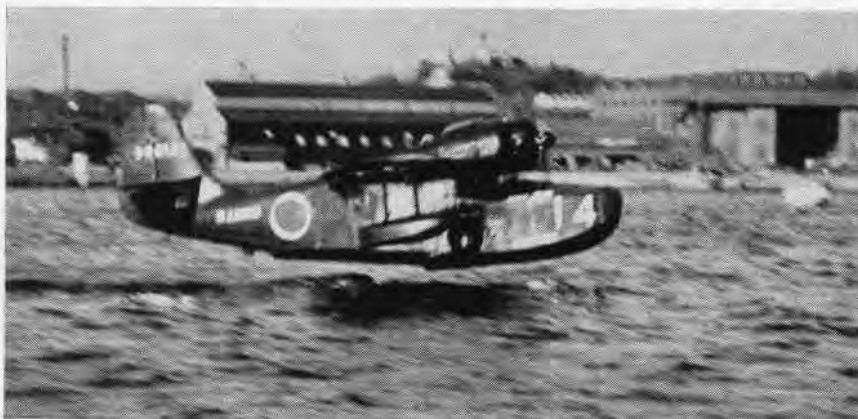
Not long ago a FLOGWings pilot was directed to fly to Philadelphia International Airport to pick up 45 passengers whose destination was Glenview, Illinois. On arrival he was surprised to learn that his passengers were to be forty-five brand new recruits. As a matter of fact, there was a slight delay while he helped swear them into the United States Navy with newspaper cameramen busily recording the ceremony.

One lad who couldn't find out exactly how many years he was signing up for, backed out at the last minute. The rest still in civilian clothes swarmed aboard the transport, each man carrying a small box lunch and a bag containing toilet articles.

En route to Chicago the weather was somewhat turbulent and a good many of the new recruits became airsick. Not so, one tall recruit, who came up to the cockpit, took a look at the instrument panel and said, "Man, look at all them clocks!"

When the transport had taxied to a stop at Glenview, the recruits waited politely for the pilot to disembark first. As he neared the door, one of the recruits said, "Thanks a lot, Sarge."

OPPAMA TRAINS JAPAN'S MSDF PILOTS



THE SMOOTH waters of Yokosuka Bay offer area for seaplane pilot training. Here a Grumman JRF-5 Goose skims over the water as the pilot takes off for instrument, cross country flight.

FOUR OFFICERS and 29 enlisted men of the Japanese Navy are being trained at NAF OPPAMA as part of the Navy's program to help the fledgling air arm of the Japanese Maritime Self Defense Force gain its wings. Instruction in landings, take-offs, instruments and cross country flights are part of the training syllabus.

Once these four pilots have received their indoctrination, they will instruct other MSDF pilots. The student pilots, all veterans of WW II, are receiving flight training in the JRF-5 *Goose*, a Grumman amphibian.

Enlisted men are being trained as mechs, plane captains and mechanics.



TAKE-OFF PROCEDURE clearance is explained to Y. Sbiraisi, AT2, by H. E. Gaillouet, AT2, USN. Language differences were no barrier.



NAF OPERATIONS Officer, LCdr. Frye, instructs Cdr. T. Hitsuji in the control panel of the JRF-5. FASRon-11 de-preserved planes.



FLIGHT COMPLETED, a JRF-5 is directed onto the seaplane ramp by a ground crewman. After training, JRF's will serve in utility role.



WHILE THE FIRE watch stands by, another ground crewman gives the sign to start engine. These men live at the MSDF School, Taura.

OCS Applicants Desired College Graduates are Eligible

Immediate applications are desired for Officer Candidate School from men in enlisted status. Applicants must be college graduates, with a GCT score of 63 or better, and between the ages of 19 to 27.

The applicant may be on active or inactive duty, and may be married. In the case of active duty men, the provisions of BUPERS Instruction 1120.11A apply. Reservists who are not on active duty may apply through the nearest ONOP. Graduates must then serve three years of active duty.



LTJG. J. F. KENT, a member of the Red Rippers of VF-11, erects the emergency life raft radar reflector during squadron survival training.

More Money is Scheduled Reenlistment Ruling Affects Many

A recent finance ruling on the new percentage-based bonus for reenlistees in the Armed Forces now makes it possible for the old timers to make a choice under which bill they wish to reenlist.

The new bill, scaled to give less each succeeding time of reenlistment, differed from the old bill to the tune of \$560 in some cases. It went something like this. The older bonus was \$160 for four years or \$360 for six years. The newer of the two gives a percentage of a month's pay times the number of years on the new hitch. A maximum of \$1440 was allowed under the old bill while the new can go as high as \$2000.

The switch-over to the new bonus can be made at any time until the end of the reenlistment for which the old bonus was paid an individual.



SECNAV THOMAS WAS HOST AT CHRISTMAS DINNER FOR HIS STAFF AND PLANE CREW

SECNAV'S XMAS AT 12,000 FEET

IT WAS A VERY Merry Christmas for the ten members of the crew of the plane carrying Secretary of the Navy Charles S. Thomas on an inspection tour of Pacific and Far Eastern U. S. Naval and Marine units last December. Christmas morning found the big R6D enroute from Korea to Hong Kong over the Taiwan straits.

Aware that Christmas away from home might seem very bleak to members of the crew, Secretary Thomas made plans to celebrate it in warm family fashion. As the aircraft travelled at 12,000 feet, the Secretary made sure that Santa Claus travelled with them. He and Mrs. Thomas invited members of the crew into their quarters and gave each a beautiful silver pocket knife and a handsome inlaid serving tray. Also, each man had his picture taken with Secretary Thomas. "What a Christmas!" said Timothy N. Brisbon, SD2.

But there was still more to come, for when the airplane landed at Hong Kong all the men were invited to have a Christmas dinner with Secretary Thomas and his staff.

"That dinner was really great," states Dave Ball, SDC, a 19-year man in the Navy. He is an authority on food and as a chief steward sees to the dietary needs of VIP's travelling on aircraft of VR-1, NAS PATUXENT RIVER, Md. The soft-spoken chief, who has seen duty from submarine to

the White House, was awarded the Silver Star for bravery in the Pacific area while in the submarine USS *Rasher* during WW II.

It was Chief Ball who baked President Roosevelt's third term inauguration cake and later served as President Truman's valet.

Ball beamed with pleasure as he gave the details of the Hong Kong party Secretary Thomas gave. "We were served nine courses, but I ate so much I couldn't really say for sure."

The Secretary of the Navy's plane left Washington, D. C. in December, and by the time it returned early in January, it had covered approximately 25,583 miles. Among the places that Secretary and Mrs. Thomas visited were Kwajalein, Guam, Okinawa, Korea, Taiwan, Japan, Philippines, Wake Island and Hawaii.

Lt. H. R. Hutchinson, USN was plane commander. One of the members of the crew was almost too busy to talk with a reporter at the end of the trip, but he did have time to point out that "Christmas in Hong Kong made the entire trip one to be remembered."

● The best aircraft engines of WW II produced 3,000 hp, or one horsepower per pound-and-a-half of engine weight. In the decade since, the U.S. aircraft engine industry has developed engines with thrust outputs ranging up to 25,000 equivalent horsepower, or one horsepower for each four ounces of engine weight.

TENDER BACK FROM MIDDLE EAST



LED BY HIS chief master-at-arms, Capt. W. M. McCormick, CO holds inspection on the fore-castle of the Greenwich Bay. Shorts and skivvy shirts for crew were uniform of the day.



WHILE A NATIVE in background adjusts load of wood, camel in foreground contently chews cud.

CREW MEMBERS of the seaplane tender, USS *Greenwich Bay*, are back from the Middle East with many a happy recollection of their recent cruise.

During their six months in the Persian Gulf, the ship visited ports no American warship had ever entered before. Her crew also accumulated a salty store of sea stories that many seamen in the area will find hard to match.

They participated in an Arabian



THE CO POINTS out the nerve center of RAdm. P. L. Dudley's headquarters on tiny Bahrein Is.

By Jim Howard, J03

'*asba*, witnessed a rare exhibition of Khyber horsemanship, entertained Emperor Haile Selassie's grandson and went to the rescue of three distressed merchant ships.

They played baseball in Arabia with American oil men, provided entertainment for a television show in Pakistan, and acted as ambassadors of good will throughout the Middle East.

At sea, the seaplane tender's crew encountered 100-foot whales, giant turtles, squids and temperatures that soared to 125 degrees in the shade. Ashore, they saw endless deserts, veiled women, camels, strange oriental customs and other unusual sights.

The '*asba*, a huge meal served on special occasions, took place on Bahrein Island, just off the coast of Arabia, when a local merchant invited the Greenwich Bay sailors to dinner. Consisting entirely of cooked sheep, the dinner was served without dishes or silverware. Guests seated themselves on the floor in a semi-circle and "grabbed"—with one hand only—at the piece of meat that met their fancy.

Since Arabian custom forbids the

appearance of women in public, the event was attended only by men.

On one occasion, the crew was entertained by the Governor General of Karachi, Pakistan. To celebrate the occasion, the high-ranking gentleman ordered an exhibition of horsemanship by his famous guards, many of whom were direct descendants of the centuries old Khyber horsemen.

A stop at Pakistan offered some of the ship's amateur entertainers their first opportunity to appear on a "na-



SHORE PATROLMAN G. R. Hamby, AD2, "shakes hands" with local constabulary at Aden.



PERSIAN-GARBED crewmen man "follow me" boat to guide USS *Duxbury Bay* to anchorage.

tional" TV show. The sailors are believed to be the first American entertainers to appear on Pakistan television.

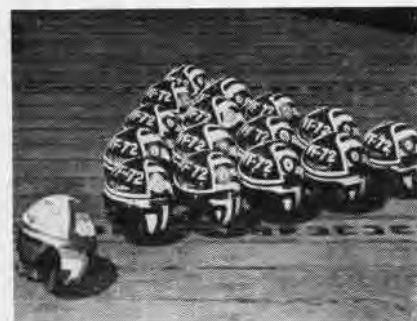
At Salala, Oman, the *Greenwich Bay* had the distinction of being the first American Navy vessel to anchor in the seaport in over two centuries.

Under the command of Capt. W. M. McCormick, the seaplane tender served as flagship to RAdm. Paul L. Dudley, Commander Middle East Forces, during the cruise.

Although the cruise was the first for many of the crew, they displayed great efficiency in performing their difficult duties in the hot climate. At least one-fifth of the crew were advanced in rating and about one-third re-enlisted during the cruise.

In November, the *Duxbury Bay* relieved the *Greenwich Bay*. The latter immediately sent a motor launch out to meet the ship with a crew dressed as Arabs.

The *Greenwich Bay* arrived state-side in plenty of time for the holidays.



CUEBALLED by CAG-7's hardbat, pilots of VF-72 display their crash helmets on the flight deck of the USS *Hornet*. Number 1 in the rack is worn by the squadron CO and 15 by an ensign. Numbers indicate seniority of wearer.

New Type CV to Join Fleet Special Training for Officers

The Navy's first helicopter assault carrier, the USS *Thetis Bay* CVHA-1, will soon join the Fleet. Preparing for the job as commanding officer and



CAPT. SOUTH (R) AND WELLS ATOP HUP-2

executive officer, Capt. T. W. South and Cdr. H. A. Wells, are undergoing intensive helicopter orientation flight and ground school at HTU-1.

Capt. South is taking the short course that is designed to familiarize senior Naval officers with the problems incident to helicopter operations. Cdr. Wells will be designated a helicopter pilot after completing a two months, 60 hour course.

Before reporting for the helicopter course at Pensacola, Capt. South was associated with the Office of the Chief of Naval Operations and Cdr. Wells was XO at NAAS WHITING FIELD.

ZP-4 Won Battle 'E' Award Presentation Made by Adm. Hughes

ZP-4 emerged as the only lighter-than-air squadron to win the coveted Battle Efficiency "E" Award during 1955. The squadron is based at NAF WEERSVILLE and is commanded by Cdr. D. R. Levy.

Cdr. Levy accepted the award from RAdm. F. M. Hughes, Commander, Fleet Air Wings, Atlantic.

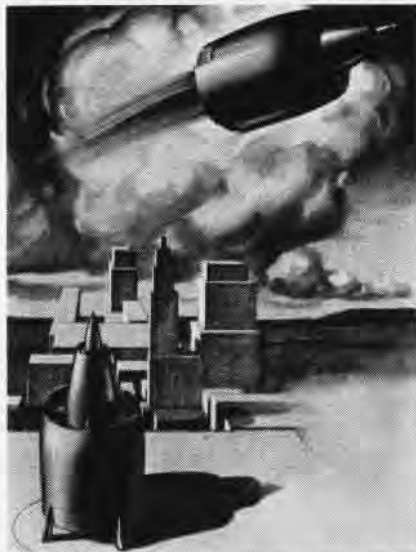
Research on Kaman Design ONR Contracts for Ring-Wing Craft

The Office of Naval Research has awarded the Kaman Aircraft Corporation of Bloomfield, Conn., a contract to conduct research on an annular-wing or ring-wing type aircraft.

The ring-wing can best be described

as a "flying barrel" consisting of a circular or barrel-shaped wing which is open at each end and which has the body of the aircraft supported inside the barrel wing. The body of the aircraft is smaller in outside diameter than is the inside diameter of the barrel-shaped wing so that air passes over the inside surface of the barrel wing as well as over its outside surface.

The ring-wing can be powered by a conventional piston engine jet or a gas turbine engine. It combines certain advantages of the helicopter and the airplane in that it can take off and land vertically as does a helicopter, and it



STRANGE DESIGN OFFERS AERIAL GAINS

can fly forward at speeds comparable to a conventional propeller or jet-driven airplane.

Kaman Aircraft has retained Dr. Manfred Rauscher of Zurich, Switzerland, as consultant on the ring-wing project. He is a noted authority on aeroelastics and founder of the Aeroelastic Laboratory at MIT.

NRL Develops Gun Grease Promising Use in Low Temperature

The Naval Research Laboratory and BUORD have come up with a new semi-fluid synthetic grease for aircraft machine guns. It appears suitable for a wide range of uses involving low temperatures and icing conditions.

It contains rust-inhibiting and anti-wear additives and is compatible with the oil-resistant rubber used for "O" and "T" rings in the pneumatic feeder units for aircraft guns.



VP-47 MADE SMOOTH CHANGE TO NEW PLANE

T-TAIL SQUADRON AT IWAKUNI

—By Cdr. William H. Huff, USN



TRACTOR PULLS T-TAILED MARTIN P5M-2

PATROL SQUADRON FORTY-SEVEN, the first "T-tailed" outfit, with 10 aircraft, approximately 40 officers and some 240 enlisted men, might be considered an average seaplane squadron. But that is for statistical purposes only, of course, for according to the squadron, from Cdr. John W. Lawyer, the Commanding Officer, through "Tommy Thompson, the Martin Tech Rep, to the last and lowest boot aboard, VP-47 is the greatest."

For ten years, a PBM squadron, VP-47 received its first P5M-2 in October 1954. The squadron didn't get its last one until six months later, in March 1955. Less than four months after this, in July 1955, the Operational Readiness Inspection was held.

During the transition to the new aircraft, VP-47 underwent an almost 100% turnover in personnel. It was still operating well under allowance. Yet the squadron received an over-all "Excellent" with an "Outstanding" in ASW—its primary mission.

Of course, seaplane outfits have a reputation to live up to. Back in May 1919, LCdr. A. C. Read flying the NC-4 seaplane was the first to fly the Atlantic.

A little over six years later, in August 1925, Cdr. John Rodgers set out in a PN-9 seaplane to conquer the Pacific between the West Coast and Hawaii. Rodgers made 1,841 miles by the normal aerial route, and the last 450 miles "under all plain sail." The trip took some 10 days, one day by air, nine days on the surface. However,

this established a record accepted by FAI as the world's distance record for seaplanes.

In WW II, seaplanes were used for a variety of missions: mine-laying, "black cat" missions, bombing patrols, anti-submarine operations, air-sea-rescue missions, and reconnaissance in forward areas.

It was in the latter part of WW II that the squadron now designated as VP-47 came into existence. On 1 June 1944, it was commissioned VP-27 at NAAS HARVEY POINT, N. C. It became VPB-27 on 1 October 1944, and then reverted to the designation of VP-27 15 May 1946. In November of 1946, its new designation was VP-MS-7, and in September 1948, it became VP-47.

In 1945, the squadron patrolled the western Pacific out of Saipan, undertook ASW operations in support of the assault on Okinawa, and patrolled the China coast in July and August. Immediately after the cessation of hostilities, it was located in Sasebo, Japan, and went to Kaneohe in March 1946.

From that time until the spring of 1949, the squadron remained at Kaneohe. Its home port then changed to NAS SAN DIEGO.

In January 1950, VP-47 deployed to the western Pacific with its headquarters at Saipan, one detachment at Yokosuka and one at Sangley Point, P.I. With the opening of hostilities in Korea, the squadron was on a wartime basis and operated mainly from Iwakuni. Advanced base units operated

from Inchon and Chinhae, Korea, at brief intervals.

Two more combat tours followed. From August 1951 to March 1952 the squadron participated in the Formosa-China Coast operations. On the second, in the last months before the Armistice, VP-47 was at Iwakuni.

The most recent tour of VP-47 in the Western Pacific opened in August 1955. The day after its arrival at Iwakuni, the T-tails began flying.

Within a week, VP-47 had won this plaudit from Commander Fleet Air Wing Six, the unit's operational Commander: CONGRATULATIONS X CLOSE SCRUTINY HAS DISCLOSED YOUR SQUADRON HAS MADE NONE OF THE ROUTINE BUSTS USUALLY MADE BY NEW UNITS IN THIS AREA X YOU ACT LIKE OLD HANDS IN THE BUSINESS X KEEP IT UP.

PEACETIME ASW training for a wartime job is somewhat dull. It involves a lot of looking for "the little man who is never there." But it is steady employment, and the seasons give it some variety.

In summer there is heat, the polar front, and an occasional itinerant typhoon. There are always sun shots, wind starts, loran fixes and radio bearings to take. For precise navigation is a prerequisite to the accurate positioning of sighted objects. It means sitting in a cockpit, in a turret, or an after-station look-out spot for 10 to



THE MARLIN FLIES ALONG AT A STURDY 150-PLUS KNOTS, BUT EVEN THEN GOES A BIT FASTER THAN MOST OF ITS PREDECESSORS

12 hours searching perhaps 50,000 square miles of water on every flight when the weather is good.

The radar and weather combination often breaks the monotony of a patrol. For example, the radar picks up an unidentified target and the weather forces the pilot to go below a 100-foot ceiling and, within a half mile, to see what it is. It's something of a shock when the target turns out to be a 300-foot rock not carried on the navigator's chart. The ability to miss the rock in the time and distance limit allowed by weather and circumstance is required of all pilots who expect to live to fly another day.

Landplane squadrons, as well as seaplane squadrons based at Iwakuni, are

required by the Wing Commander to fly a minimum of 750 hours per month. Two-thirds of these are expected to be tactical hours. VP-47 has been averaging well over 800 hours per month and is, according to squadron report, in the process of establishing a new utilization record for seaplanes in Japan. VP-4, the landplane squadron based at Iwakuni with VP-47, recently proved to be a tough competitor and beat out the seaplanes for best utilization of all patrol squadrons in the area with a higher hours-per-month record.

Tactical missions are the same for both squadrons, but seaplane crews have the added pleasure of doing a portion of their operating from a tender base. While flying from a seaplane

tender, simulated advanced base conditions are assumed. This means planes operate from a buoy, receive their fuel and maintenance requirements from the ship, and the crew lives aboard. This exhilarating and healthful existence enjoyed during ship-based operations is one reason few Big Boat crews prefer airplanes that land on runways.

During the time the VP-47 operated off the USS *Orca* at Iwakuni and at an advanced base, there was no drop in maintenance even though the squadron was operating a brand new model airplane. The Maintenance Officer, LCdr. E. W. Myers, of proud Dutch ancestry knows engines, especially aircraft engines. He was helping Mr. William Piper put his 40-hp noise-



PRESSURE FUELING PUTS IN 3000 GALLONS OF GAS IN SIX MINUTES



LCDR. MYERS AND 'TOMMY' THOMPSON LOOK OVER P5M-2 TOPSIDE

maker on the front of his famed Cub prior to WW II.

But with the war, Bud Myers joined the Navy. In this service, he has built up a reputation for preparedness. For example, he keeps a suitcase packed which contains a full set of uniforms, toilet articles, and other necessities sufficient to last him for a period of 60 days if he is suddenly ordered to some distant duty. No one has ever been able to prove that he maintains a hidden 60-day stock of fleet-critical maintenance items for P5M's, but VP-47 has an unusually good maintenance record. So far they have never had more than one ACOG airplane at a time.

Another reason for VP-47's good maintenance record is round and rollicking Technical Representative who works for Martin and VP-47, C. S. Thompson. Tommy is a "coveralls" representative, which is one way of saying he pulls his weight in the boat.

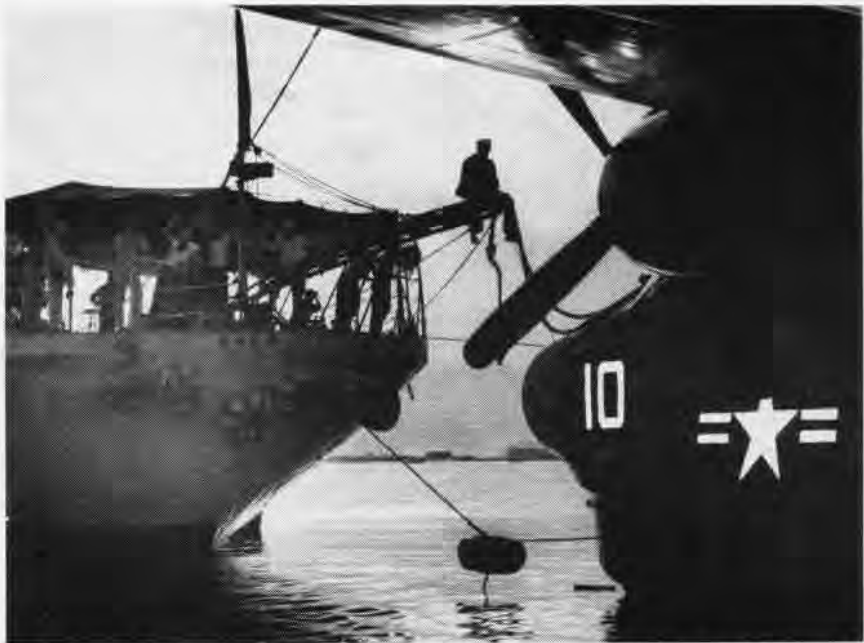
He has 20 years of seaplane background and has spent 14 of them with the Navy attached to some 28 Navy Martin seaplane squadrons.

An incident which occurred on November 11, 1955 reaffirms the safety features in seaplanes and the value of men like Myers and Thompson. Most of the squadron personnel were enjoying the holiday routine of Veterans' Day. Then just a few minutes after 1000, a priority message came in from one of the 47 aircraft: LOSING OIL PORT ENGINE X LANDING TO EFFECT REPAIRS X SEAS CALM. It didn't sound very urgent, and it wasn't. Nevertheless, that plane was landing a long, long way from home, and a considerable distance from anywhere. Their position was very near the middle of the Yellow Sea, 150 miles from the nearest land.

The duty force relaxed when the next message came in: LANDED WITHOUT INCIDENT X ESTIMATE OFF ONE HOUR. Although Air Sea Rescue was alerted, no one was really worried. Apparently the trouble would be repaired.

But the next message which came in around the appointed time for take-off shook up the troops a bit: OIL LEAK REPAIRED PORT ENGINE X STARBOARD PROPELLER STUCK IN REVERSE X ADVISE.

Cdr. Lawyer, the squadron commanding officer, Bud and Tommy were all in the duty office by this time.



THE MAN ON THE 'FLYING TRAPEZE' MAKES SURE LINES GET OVER WITHOUT DAMAGE

They began sending a stream of suggested fixes: REVERSE THE ELECTRICAL LEADS TO THE BLACK BOX . . . CHECK CIRCUIT BREAKERS . . . DISCONNECT THE REVERSING CIRCUIT . . . UNFEATHER . . . ad infinitum. But two hours later the plane was still down.

AIR SEA RESCUE aircraft were given the nod to take off; surface craft started out to make a rendezvous with the plane, and the aircraft was signalled to start the long taxi toward the nearest land 150 miles away. Unfortunately, the starboard engine was to the wind, which meant the port engine tended to swing the airplane into the wind and away from the landward heading. A wing-tip sea anchor would have to be streamed, and the slow boat would become a very slow vessel.

Then the "Golddust Twins" of the VP-47 maintenance section came up with one last possible answer to the problem. This was strictly conjecture, but there might be a long-shot chance that the oil in the prop dome, being hot, was resulting in relatively low pressure out of reverse. Now with the engine shut down and the plane taxiing on one for 45 minutes or so, the oil in the dome will cool off. If she is started up again, cold oil will give a bit more pressure, and presto, she'll come out of reverse upon actuation. Maybe! We'll tell them to start her up.

The message went out. Lt. E. H. Heezel, the downed PPC, re-started the engine, hit the unfeathering button, and the prop popped into normal. Next message from the airplane brought a somewhat sustained sigh of relief from all hands: AIRBORNE X CONTINUING PATROL.

Upon arrival of the plane back to base, the picture unfolded. A main oil line in the port engine had worked loose and begun streaming large quantities of oil. The crew could see the line and the loose connection. It would be simple to fix on the water. And it was obvious a few more minutes in the air would mean securing the engine. The seas were calm. So why not?

To keep the plane from taking any more bouncing than necessary on rough water, it is normal procedure to reverse the propellers for a quick stop. The landing was simple, but when they punched the button the starboard prop remained stubbornly in reverse. The port engine connection was tightened up in a few minutes, but the starboard prop remained facing backward.

The crew was very happy to get off at the end of the four hours on the muddy waters of the Yellow Sea. Despite the troubles encountered on the water, it proved one thing! There is a lot of seaplane runway in an ocean.

A Good One for R. Ripley Student Pilots Parallel Training

A Naval Academy graduate, 1st Lt. C. L. Phillips, and a Merchant Marine Academy graduate, Ltjg. R. B. Rutherford, have had almost parallel careers since reporting to NAS PENSACOLA for flight training.

After they entered flight training, Rutherford and Phillips have been roommates three times, have twice been assigned the same flight instructor, and several times have been assigned to the same training squadron. When attached to BTU-1, they completed their first solo on the same day and later completed their carrier qualification landings on the same day.

During carrier qualifications, their entire squadron made six for six land-



THEY HAD GUNNERY TRAINING AT BARIN

ings each — a remarkable feat for flight students. Both pilots have requested jet training at NAS MEMPHIS.

Gillette Leaves AirLant To Be First CO NAS Rota, Spain

Capt. N. C. Gillette, former operations officer at NAS NORFOLK, departed for a challenging new duty station recently. He will become the first commanding officer of the Navy's newest air station at Rota, Spain, near Cadiz.

Capt. Gillette is the "air member" of a Navy family which, at one time during WW II, had a member fighting under the sea, on the sea and in the air. His father, Commodore Norman Gillette (Ret.), was serving aboard a surface ship at the same time that a brother (now Cdr. R. C. Gillette with BUORD) was fighting the Pacific war in a submarine. It was during the

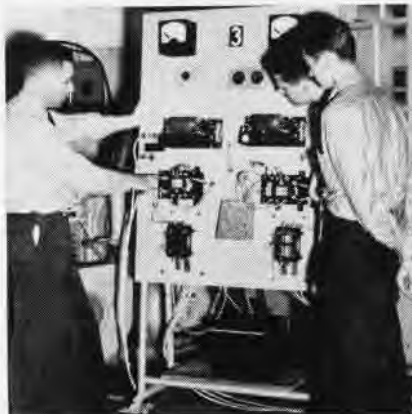
same period that Capt. Gillette was skipper of the famous "Black-Cat" Squadron flying the old PBY's.

He led a strike against Toko, Formosa, a Japanese Air Base, during WW II that earned him a DFC. Later, he added another DFC for the overall effort and accomplishments of his squadron when they sank a Japanese destroyer.

A Navy Unit Citation also adorns his tunic for leading his squadron in the destruction of about 95,000 tons on enemy shipping.

The new air station, scheduled for commissioning in early 1957, will be manned by 100 officers, 2,000 enlisted.

FAETULANT's New Course Designed to Simplify 'Maze of Wires'



P2V D-C POWER SYSTEM MOCK-UP USED

In order that all aviation electrical personnel may understand the complexities of aircraft D-C (direct current) power circuits as a system rather than as individual components, a new course has been developed at FAETULANT Detachment Two, Jacksonville, under the command of LCdr. Eugene E. Allen.

Designated as D-C Power Systems, Course 508, the two-week training course shows how to reduce the maze of wiring making up a system to its basic simple circuits, and how to tackle a malfunction using normal available equipment.

Students have little trouble understanding individual components, such as relays, generators and other parts until they are connected in an aircraft electrical system. It is this difficulty the course endeavors to overcome through new approaches and small classes under experienced in-

structors in their specialized field.

Although not specifically designed to prepare men for rating exams, the course provides all required D-C information to pass examinations through AE2, and will greatly aid E-6 and E-7 personnel who have not attended a class "B" school.

Details for requesting this course are in ComAirLant Inst. 1540.1B.

A Freak AJ-2 Incident Nery Pilot Saves Plane and Crew

The prompt action, expert knowledge, fine airmanship and cool nerves of Lt. L. M. Millsap of VAH-7 recently saved the American taxpayer the price of an AJ-2 *Savage* and possibly the lives of his three crewmen.

The AJ-2, based at NAAS SANFORD,



ONLY THE AJ'S ENGINE NACELLE REMAINS

was returning home after a five-month tour of duty in the Mediterranean. Thirty miles offshore from Boston and at 10,000 feet, headed for Patuxent River, a sudden vibration was felt in the port engine. About seven seconds later, the engine tore itself loose and fell into the sea.

Despite the unbalanced condition of the aircraft and excessive yawing, Millsap, by judicious use of the jet engine and the remaining prop engine, maintained control of the plane and landed it at Logan Municipal Airport.

On the landing roll-out, the port tires blew and dragged the *Savage* to a stop on the airfield but no additional damage to the plane nor injury to the crew was experienced. VAH-7 is a unit of HATWing-1, commanded by Capt. J. T. Blackburn.

Other men aboard the *Savage* were Ltjg. J. B. Weigle, bombardier, N. W. Manos, AD1, Guy R. Garofalo, AD3.



THIS FURY, PILOTED BY CDR. HARNISH, WAS THE SECOND TO LAND ABOARD FORRESTAL

MEMORABLE DAY FOR A CVA

THE BIG CARRIER USS *Forrestal* (CVA-59) kicked off 1956 with a bang. Heading out to sea the early morning of 3 January, she accomplished a few "firsts" that were entered in her log book.

To open the day's events, Cdr. R. L. Werner, CATG-181, made approaches in his FJ-3 *Fury* and after three touch-and-go landings set the sleek jet down for the first operational arrested landing. Minutes later, his wingman, Cdr. W. M. Harnish, CO of VF-21, set his *Fury* down on the angled deck to log the second successful arrested landing.

Werner stepped down from his jet and was escorted to the cabin of the ship's CO, Capt. R. L. Johnson, to receive a cake and a scale model of his plane.

A short time later, the cat crew primed the ship's new steam catapults and launched Werner and Harnish from the bow of the ship to record the first operational launchings.

Cdrs. L. W. Squires, CO of VA-42, brought his AD-6 *Skyraider* aboard that same afternoon to tally another "first" for the *Forrestal*. His plane was the first prop-driven aircraft to be landed on her angled deck. Minutes later, he made a deck take-off to log that "first" also.

Flight operations were cancelled from noon of January 4 and through January 5 owing to strong winds and

heavy seas. The *Forrestal* withstood almost-gale winds and lashing seas when ground swells of from 20 to 25 feet high pounded her bow and whipped over the forward part of the ship.

The next day, Lt. L. S. Lamoureux, piloting an F3H *Banshee* landed aboard as did seven other F3H's. In all, the seven made 38 landing and catapult take-offs.

In a mock exercise, the *Forrestal* accomplished, without incident, her first refueling operation at sea when she passed fueling lines to the USS *Stormes*, her escort for the operations.

Although forced to hold up operations for two days, it was a busy week for the big ship and her crew. Eighty-six arrested landings were made by four types of aircraft—the *Fury*, *Skyraider*, *Banshee* and a lone TBM *Turkey*, delivering personnel to the carrier. All the planes, except the TBM, were from the *Forrestal's* air group now based ashore at NAS OCEANA.

Boxer Crew Has Big Heart Shipmate's Assist After Accident

Donald D. Quayles, FN, knows what it is to have friends. He should; for he considers the entire crew of the USS *Boxer* as special friends. He had an accident aboard ship a short time ago and every man came to his aid.

Quayles was severely injured in

October while working on the flight deck elevator and as a result of the accident, lost both legs and his right arm. The crew got together and started a drive to collect funds for him and when the last dollar was counted, the *Boxer* sailors had reached down in their sea-bags and came up with \$2000.00.

The *Boxer's* skipper, Capt. F. B. Miller, gave the money in check form to Quayles at the Naval Hospital in Yokosuka, while Donald's mother,



BOXER CREW PROVE TO BE REAL SHIPMATES

Mrs. Dan Quayles, looked on smilingly. She had been flown to Japan by the Navy to be with her son until he is sent to Oakland's Naval Hospital for further treatment and convalescence.

Mech Defies Superstition Ships Over in Novel Surroundings



CREECH ASKED FOR IT AND REALLY GOT IT

Jack D. Creech, AD2, of VJ-61, threw his rabbit foot out the window and defied bad luck to overtake him. His CO, LCdr. J. T. Glab cooperated by swearing him in for another six years at 1313 on Friday the 13th. The ceremony took place at 13,013 feet, aboard an AJ-2 *Savage*, with the Bureau Number of 130423 (adds up to 13), with the outside air temperature at minus 13 degrees Fahrenheit.

Bad luck like Creech's should happen to all of us. He collected \$1300 reenlistment bonus as a lucky result.

GET FIGHT FROM YOUR FIGHTER

JOE HOTSHOT checked his altitude, 25,000 feet, and scanned the sky. Off to the left he spotted the "rag-dragger" in a perfect position for a fast overhead run. Joe signalled his wingman for the break and wrapped his jet into a tight turn. A real hot pilot is Joe. He flipped out of the turn and looked for the target sleeve. Still in perfect position. But what had happened to his airspeed. Too slow, way too slow, was Joe. Yes, Joe is a red-hot pilot, but not yet a fighter pilot. He missed the target.

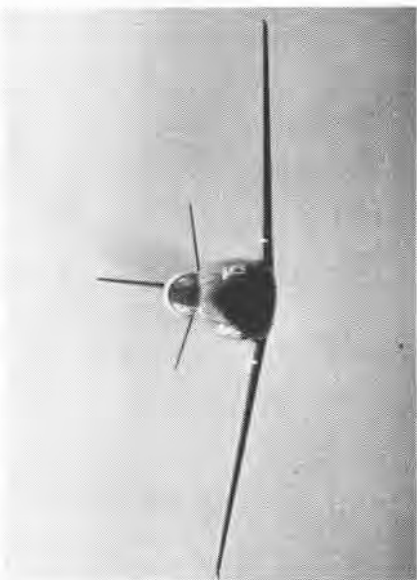
You fighter pilots, do you know that there is a minimum fighting speed for each jet fighter, a speed below which you should never fly in combat? This minimum tactical mach, which increases slightly with altitude, is the best turning speed. Do you know what it is for your fighter?

Perhaps you think that, in this day of one firing pass and a break away, turning performance is no longer important. On the contrary, a fighter must turn to intercept and to get into a firing position on its target. Up in the thin, high air where the air battles of today and the immediate tomorrow will be fought, or at least initiated, turning is a major maneuver and the radius of turn is measured in miles. Cutting down this radius and speeding up the rate of turn is imperative for getting around for a shot or to avoid being shot at.

Now obviously we can reef our plane around tight and either lose a lot of speed or altitude doing so, but let's say we have just sighted the enemy—or those characters from VF-umpty-ump at Cecil—and we don't want to throw any altitude away nor do we want to get all slowed up so we're wallowing along barely able to fly. What we have to make is a full-power level turn in which we do not drop below the *best turning speed*.

What is the best turning speed for a fighter? It is the speed which in a stabilized full-power level turn will give us the highest rate of turn and which will also give us, if not the smallest radius of turn, at least something close to it. A "stabilized" turn

By LCdr. R. K. Awtrey



means not gaining or losing speed.

At NATC PATUXENT RIVER, the Service Test Division, in its tactical evaluation of fighters undergoing acceptance trials, conducts radius of turn tests. The results are included in the Service Test reports to the Board of Inspection and Survey. The information in these reports can be furnished to the interested squadrons by the force commanders.

All right, suppose we have obtained the information pertaining to the plane you fly. How do we use this magic figure for the best turning speed? If we were in a situation where we wanted to realize the best level turning performance, we would reef our fighter around tight in a turn until the speed dropped to near the predetermined indication; then we would reduce the "G" to that which the airplane can pull without further loss of speed. Increasing back stick, again would, of course, momentarily improve our turning performance but at a sacrifice in speed which we would have a hard time regaining up here, particularly in a turn. If a tighter turn must be had, altitude should be traded rather than allow the speed to drop below the best turning speed.

It is important to add here that, when turning performance is not spe-

cifically desired, generally speaking the higher the speed the better; we can always lose speed by tightening the initial part of the turn and this extra speed we sacrifice is not wasted—it is kinetic energy being used to turn the airplane. Extra altitude is another good source of energy for turning.

The level-flight radius-of-turn curves of two fighter models often cross at some mach number. As a result, one of the fighters may have the superior level turning performance only in a speed range where it does not actually realize anywhere near its best rate of turn. However, the best turning speed is still valid as a minimum fighting speed. In a turn under GCI control where the "bogy" is not yet sighted or in the initial stages of combat, say where the enemy is sighted at approximately the same altitude and not in a pursuit curve on us, we would want to make a turn that will give us the most turn for the least expenditure of kinetic and potential energy (speed and altitude). This would be the level turn at the best turning speed.

IN THE SAME situation, the enemy, if he sees us, would also want to make the most efficient-type turn. This best level rate-of-turn speed is in the neighborhood of the best potential-energy climb speed for the particular altitude rather than the best total-energy climb speed.

If the enemy is in a pursuit curve on us or we sight a "bandit" well below us, the conservation of energy becomes secondary to bending it around in a hurry. In the resulting diving turn our rate and radius are no longer limited by the excess thrust available but by the "G", the buffet boundary, or the structural limit of the airplane.

Usually, when one airplane is in a situation where it is advantageous to swap altitude for turning performance, the opposing airplane is also. Here then, where the two fighters are pitted together in the same maximum effort turn, it is vital that we get in the speed range where we have the most advantage or the least disadvantage.

Utilize those NATC Service Test reports. Become a FIGHTER pilot.



A BABY POLAR bear, caught by members of the staff at the ice floe station, has its portrait painted on nose of Coach transport.



SOVIET POLAR OPERATIONS IN THE ARCTIC



TRANSPORT PILOTS who fly in cargo on their flights to the ice floe stations, find warmth and comfort in the dome-shaped tents near the parking area. Coach transports with some of their loads are shown here on the parking ramp.



TRUCKS ARE USED for long distance over-land routes since dog sleds cannot compete with motorized transport travelling on the snow and ice roads of Dickson island (off the Arctic coast of USSR). Material is being unloaded from Coach transports as aircraft is re-fueled.



OCEANOGRAPHER and pilot are looking over the route of a scheduled helicopter flight.



BACKGROUND to men washing in snow are two Coaches, a Colt biplane and a Cab (DC-3).



ARCTIC pioneer and expedition CO, Ilya Pavlovich Mozuruk, stands near a Bull aircraft.



UNLOADING VALUABLE cargo for Arctic outposts is carried out in the little village of tents. The helicopter is a Hound; out farther Cab transports taxi to landing strip after discharging cargoes.



ARKHANGELSK—first stop in flight to North. "Polar Aviation" is painted on plane's nose.



OCEANOGRAPHER and meteorologist are checking on effect of extreme cold on rubber boat.



AEROLOGIST is important member of expedition. Here he checks radiosonde before release.



A RADIOMAN relaxes with a magazine after coming off watch. Note his heavy clothing.



A RADIOSONDE yields valuable information in bad weather and during long polar nights.



AEROLOGIST regularly makes careful recordings of significant Arctic weather data.

ARTICLES have been published by the Soviets regarding special expeditions and glorifying their achievements. The sequence of photographs in these pages depicts the life and operations on various polar floating ice stations. These are identified as SP-1, SP-2, etc., and manned by

the Soviets who are doing cold weather research.

It is clear from these photographs that the Soviets have learned to work and play in polar areas. These pictures also indicate to some degree the success Soviet scientists have achieved in their efforts to conquer the cold world of ice.



HELICOPTERS seem to have become as popular with the Soviet as they are proving to be in other parts of the world. The Hound helicopter

transports cargo which is picked up and taken elsewhere by a small GAZ 69 truck. Helicopter and truck make a good transport team.



CONSTANT USE of aircraft speeds the accomplishment of an Arctic mission. After arriving at drifting ice station SP-3, transport air-

craft are checked up in their parking areas. To the left is a Coach (IL-12) while the one at the right is a Cab (DC-3) airplane.

More recently special mention has been made in the press of accomplishments during 1954 and 1955. It is interesting to note how large a role aircraft have played and how much they have accomplished in a shorter time than would otherwise have been possible. Noteworthy is the shuttle

of aircraft and helicopters between ice floes.

Their expeditions have helped Soviet scientists to accumulate a fund of practical knowledge in Arctic operations. To paraphrase a Soviet news release, they say, "We have not only planted our flag at the North Pole, we have settled there."



'THERE IS no tastier tea than that which comes from the samovar,' say three members sharing their breakfast at ice station SP-3.



RADIO ROOM at SP-3 connects various members of the expedition with their home. Soviet radio amateurs try to contact polar expedition.

NAVY EVALUATES THE FIREBEE



NAVY JD-1 WITH FIREBEE SLUNG UNDER WING, REVS UP FOR TAKE-OFF AND LAUNCHING

THE NAVY is evaluating the *Firebee* as a target drone. This means that guided missileers, air-to-air and anti-aircraft gunners will be getting a new high speed target to shoot at, if the tests prove successful.

Built by Ryan Aeronautical Company of San Diego, the *Firebee* is air-launched and remotely controlled from a ground station. It travels at a speed in excess of 500 knots.

After being launched from a "mother" plane at 15,000 feet, the target drone will fly for 30 minutes at a speed of 500 knots up to an altitude of 30,000 feet. Its rate of climb at sea level is 8,500 fpm.

Upon the termination of its flight, the *Firebee* can be recovered by a two-stage parachute system which operates automatically or by command. This recovery for repeated use, coupled with its low initial cost, makes the pilotless *Firebee* far more economical than piloted aircraft converted to drone operations.

Weighing just under a ton, the *Firebee* is 17 feet, three inches long; five feet, 10 inches high and has a wing span of 11 feet, two inches. It is powered by a J-44 turbojet engine, which produces 1,000 pounds static thrust at sea level.

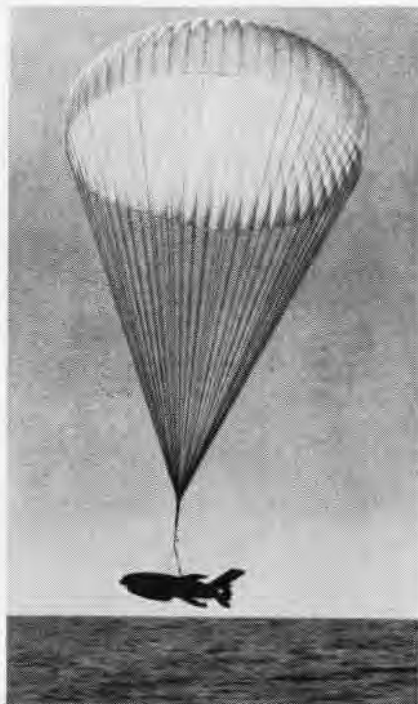
A standard radio controlling unit is utilized for remote control of the jet drone. This unit is aided by radar tracking information. Reflectors which are sensitive to radar have been incorporated in the *Firebee* to give gun crews an image on their radars similar to that

which is reflected by larger aircraft.

Employing standard control equipment, the jet target drone can be flown out of the sight of its controllers with precision. Its use as a target permits unrestricted angles of approach and fire, thereby offering realistic missile and gunnery training to air and ground crews.

The Army Ordnance version of the *Firebee* is the XM21; the Air Force version of this jet is the Q-2A.

The *Firebee* has undergone a long



FIREBEES ARE RETRIEVED BY PARACHUTE

period of development and testing. Flight tests of the Navy version, KDA-1, are presently being conducted by BUAER at the Naval Air Material Test Center located at Pt. Mugu, Cal.

VA-85 Trains Four Weeks Over 1300 Flight Hours in 15 Days

During VA-85's four-week period at Boca Chica Field, Cdr. C. H. Jaep's *Sandblasters* flew 1300 hours in 15 days of operational training. Training included long-range navigation, field carrier landing practice and high altitude dive bombing.

Pilots had 90% of their aircraft, AD-6 *Skyraiders*, available for flight each day. The Maintenance Department headed by LCdr. G. O. Baldock had a regular night check crew that had each plane ready to go the following morning.

An attack squadron with atomic weapons capability, VA-85 operates under Commander Carrier Air Group Eight, based at NAS OCEANA, VA.



FRIENDLY JAPANESE children of Amami-O-Shima gather around RAdm T. B. Williamson, CTF-72, for gifts of candy. The Admiral and his flagship, the USS *Salisbury Sound*, were there for a visit with Ryukyuan Command.

Marines Honor Gen. Smith FMFPac Moves to New Island Home

The Fleet Marine Force, Pacific, has moved into its new Hawaiian home at Camp H. M. Smith. The new installation, named in honor of Gen. H. M. Smith (Ret.), will be the new headquarters for LGen. W. O. Brice, (ComFMFPAC) who ramrods the huge combat air-ground force.

The new camp was named in honor of Gen. Smith in recognition of his long and continued efforts to establish the powerful air-ground force. He could not attend the dedication.

Swedish AF Gets Lansens All-Weather Jets Join Defenses

Sweden had added the 700 mph A-32 Lansen jet to its arsenal of defense. The two-seat, radar-equipped version makes it possible for the Royal Swedish Air Force to operate under all weather conditions and at night.

Powered by an Avon turbojet with afterburner, the Lansen will replace the twin-engined Saab B-18B's and the T-18B's now in service with the Blekinge wing. This wing will be the



THE A-32'S COME OFF PRODUCTION LINE

first to receive the new jet aircraft.

In the other attack squadrons, the Lansen will replace the Saab A-29's and the A-28 *Vampires*.

With fixed armament of four 20-mm cannon, the A-32 can also carry a heavy bomb load or rockets.

Money Donated to Home VR-8 Foregoes Party for Children

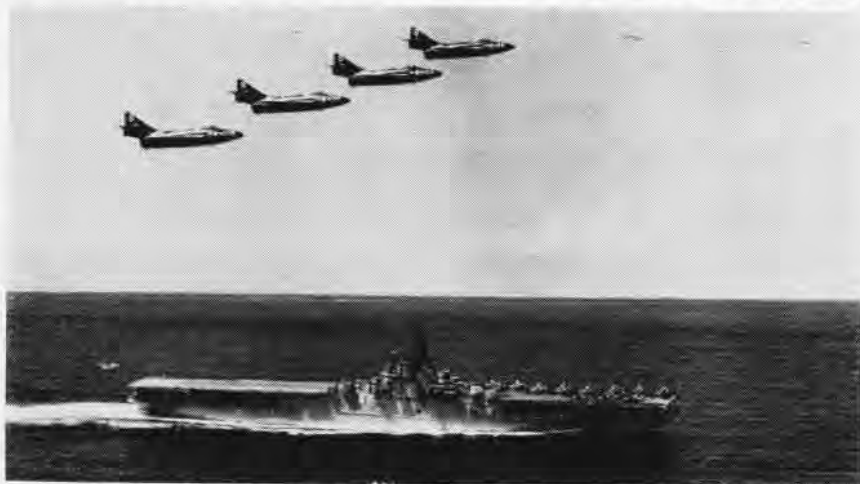
The men of VR-8 did not have a Christmas party in December. Instead, they voted to donate the cost—\$500—to the School for Retarded Children at Pearl Harbor.

C. B. Turner, ADC, presented the check to Mrs. H. E. Noland, treasurer and chief coordinator for the school, at a ceremony in front of the Ad building at Hickman AFB. Mrs. Noland is the wife of a VR-8 hospital corpsman.

The school is for backward children, one to eleven years old, of servicemen stationed at Hickman, Barber's Point and Fort Shafter. It has one teacher who is also a registered nurse.

The school is financed by contributions from military clubs and other organizations, as well as PTA's and military churches located in Hawaii.

PERSONNEL SAFETY ON A CVA



SWEPTWING COUGARS OF CAG-5 ADDED TO THE SHIP'S IMPRESSIVE SAFETY RECORD

THE USS PHILIPPINE SEA was praised recently for its outstanding aviation safety program which dates back 17 months and involves two deployments to the Far East and Fleet operations out of San Diego.

The *Philippine Sea* served as the flagship of RAdm. Ira E. Hobbs, ComCarDiv-3, during its latest tour. He praised the diligence with which all hands prosecuted an alert, vital accident program which had obviously paid off.

VAdm. H. M. Martin, ComAirPac, in speaking of this achievement, said "This record is indicative of a high sense of responsibility on the part of officers and key petty officers for the safety of personnel in their charge and is indicative of excellent training in preventative personnel safety measures."

Capt. H. L. Ray assumed command of the big carrier in August 1954 at Manila. The embarked air group, CAG-5, flew sorties in two task force operations before returning to the states in November 1954 without loss of life or injury to personnel.

After the usual leave period at San Diego, the carrier commenced operations out of that port in January 1955. Deployment involved training under ComTraComPac, one combined Fleet operation and the carrier qualification and build-up of Air Task Group-Two. Her safety record remained unmarred.

The *Philippine Sea's* fifth Far East tour of duty, which ended recently,

was one of the most successful peacetime carrier deployments ever achieved, for the *Philippine Sea* kept the personnel safety program operating in high gear without a single significant injury. During the middle of her fifth tour Capt. E. L. Farrington relieved Capt. Ray as CO. Capt. Farrington continued the aggressive safety campaign during subsequent operations.

Pilots of ATG-2, skippered by Cdr. P. M. "Pablo" Paul, flew 9,181 hours without a single pilot injury and raised the total number of arrested landing on the *Phil Sea* to over 72,000. This put the ship in second standing in the Pacific Fleet for the greatest number of such recoveries.

Air Task Group-Two consisted of VF-143, commanded by Cdr. D. "Flash" Gordon; VF-123, skippered by Cdr. J. P. Fox; and VA-55, headed by Cdr. J. T. Dowler.

VC-61's Detachment Item, with LCdr. Walt Zimbeck as O-in-C, received high praise for their outstanding performance during the WestPac deployment. The detachment flew over 500 hours in three aircraft, made 255 landings and maintained 95% aircraft availability. Zimbeck was ably assisted by Lt. Cliff Bord and Ltjg. Joe Rutzler.

VC-11's Detachment Item and VC-35's Detachment Item also contributed to the success of the ship's safety program. LCdr. J. H. Herb was O-in-C of the VC-11 detachment; Lt. T. L. Munns headed the VC-35 detachment.

Weekend Warrior NEWS



THREE MEMBERS of the survival team brew coffee in 17° below zero temperature. They are (left to right) Ternest, Scott, and Asfour.



LT. JOHN PAGE (l), O-in-C of the survival teams, and Jasper Scott, SN, were two of 27 Reservists who spent ten days learning survival.

Weekenders in Survival Training

The mountainous wilds of northern Washington are now as familiar to a hardy group from NAS SPOKANE as their own backyard. The group, two Naval Reserve officers and 25 Reserve enlisted men, recently returned from a 10-day survival training trek into that area.

There were four camp sites:—one base camp and three survival camps with approximately six or seven men in each. Each group made its own camp site, trapped small game, and shot birds for food.

Each team was sent to a different point in the LeClerc Creek area of Pend Orville County. They kept in touch with each other and received orders by means of two-way radios.

Daily an airplane from NAS SPOKANE flew over the area. The base camp would relay word to the plane where each individual group was camped. The plane would then proceed to a point far from each camp and make a simulated re-supply drop. The location of the simulated drop was then radioed to base camp which, in turn, notified the men where the drop had been made. The problem was to mark the spot on their map, determine the shortest distance to the

drop area, then proceed and return as quickly as possible.

In a simulated "locating downed aircraft" drill, the officers spotted colored tarpaulins in the wooded areas. An airplane would then fly over, determine the location of the "downed" plane and direct the survival group to the spot. Each time such a group was dispatched to the scene of the "crash", time and techniques of approach were noted and later evaluated.

During the ten-day expedition the men were taught topography, map reading, marksmanship, and special survival techniques. Temperatures during that time varied from 15 degrees above to 17 degrees below zero.

BARTU's Commissioned

Two new Bureau of Aeronautics Reserve Training Units have been commissioned. BARTU-921 joined the ranks of the St. Louis Reserve units and BARTU-861 was commissioned at Richmond, Va.

At NAS ST. LOUIS, Capt. C. L. Miller, air station CO, read the orders officially recognizing BARTU-921, while at Richmond, Capt. W. E. Fowler, CO NARTU, did the honors, then turned the reins over to Cdr. H. C. Hastings, who assumed command of that unit.

Cdr. C. R. Wood, a McDonnell test pilot will head the St. Louis unit.

The BARTU's consist of specially qualified Naval Reserve Officers who have an aviation or industrial production background.

NAS Dallas Unit Honored

FASRon-701, based at NAS DALLAS, won the Reserve Officers Association Unit Citation recently for the second consecutive year. The citation was awarded the unit for its 100% membership in the ROA. Its name will be added to the National Honor Roll of ROA.

The award was presented by Cdr. D. Jordan, Assistant Wing Commander, Air Wing Staff 70, and was accepted by Cdr. D. P. Hill, FASRon-701 CO.

Husband-Wife Team at Moffett

Many Reservists report for their annual two weeks' training duty every year but the husband and wife team, who recently completed two weeks with VR-3 at NAS MOFFETT FIELD, are probably the most unusual.

LCdr. Leo Andrian and his wife Jane (Lt.) are both aerial navigators. He's employed in sales promotion and she teaches school at Richmond, Calif.

VF-692 Wins CNO Safety Award

If you are around Columbus, Ohio, and see a man walking around like a pouter pigeon—strutting proudly—ten to one he's a member of VF-692. His strutting is justified for his unit was recently presented CNO's Aviation Safety Award.

The award is symbolic of an outstanding safety record which was compiled in competition with aircraft squadrons throughout the Naval Establishment, both Regular and Reserve.

Capt. L. C. Simpler, C/S CNARESTRA, made the presentation to Lt. Cdr. D. B. Carmichael, squadron CO, in the presence of the entire unit. Carmichael in turn praised the efforts



A SMILING Carmichael accepted the coveted trophy from Capt. Simpler as unit watched.

er to view the local Navy-Marine airmen and to hear a speech delivered by Alabama's Senator Lister Hill.

A precision drill team, made up of Weekenders, gave a snappy performance in close order drills.

Reserve Review at NAS St. Louis

More than 1,500 Naval and Marine Reservists turned out in force recently at NAS St. Louis for their Annual Military Inspection. The flag bedecked hangar at Lambert Field served as the Inspection/Review area while a huge number of guests sat on the sidelines.

RAdm. D. V. Gallery, CNARESTRA, and BGen. A. F. Binney, CMART, led the inspecting party. Capt. C. L. Miller, air station CO, assisted.



NAS BIRMINGHAM displayed what they claim is the world's largest American flag, 77 by 150 feet with a weight of some 500 pounds.



THIS GAILY flag bedecked hangar at Lambert Field served as the inspection area for St. Louis Reservists at their recent Military Review.

of his Aviation Safety Officer, Lt. R. L. Koenig, who managed to promote a high-time safety program without curtailment of aggressive fighter squadron tactics.

The squadron is composed of 26 officers and 98 enlisted men, most of whom live in the Columbus area.

Hundreds See Inspection

Folks in the Birmingham area are still talking about the Weekenders' latest Annual Military Inspection at NAS BIRMINGHAM. One of the most colorful military events of its kind in the state, the inspection was attended by air station personnel and Weekend Warriors who turned out in dress uniform and stand smartly at attention for the reviewing party.

Over 1,500 guests defied foul weath-



A PORPOISE leaps out of the water for a bite to eat as a NARTU copier hovers overhead.

Seaquarium Hosts Navy Men

Miami's famous Seaquarium played host to Navy men recently when it held an afternoon show for them. The two-million-dollar aquarium provided views of undersea life through its glass viewing ports.

Memphis Commissions VP-792

NARTU MEMPHIS has a new unit in its growing command. VP-792 joined other squadrons there recently when it was placed in commission at the direction of CNO. Cdr. R. D. Hutchins, NARTU CO, officiated.

Squadron allowance calls for 23 officers and 80 enlisted men. A small percentage of Reserve officers and men were transferred from VP-791 and other Air Reserve squadrons at the air station to form the unit nucleus.



LT. GREER, ANITA Eckberg and Gan pose with Gan's children, who made their movie debut during the filming of movie, *Blood Alley*.



WHILE GAN was on location near San Francisco, he became a father to another prospective actor when his wife gave birth to a son.

A Rare Combination

Weekend Warriors come from many walks of life. NAS OAKLAND has one that is as versatile at acting as he is at his Reserve duties as a chief photographer. He's Chester Gan, a member of Air Wing Staff 87, who runs his own photo studio in nearby San Francisco.

During the filming of "Blood Alley," Chief Gan held down a featured role in the production, doubled as an assistant director, casting director and interpreter for the several hundred Chinese used in the film.

A former full time movie actor, Gan quit the profession to join the Navy in 1942. Since his release from active duty, Gan has kept in touch by being a member of the organized reserves at NAS OAKLAND. He attends drills one weekend a month and goes on cruise two weeks each year. To date, Gan has a perfect attendance record.

During the filming of the movie,



TWELVE MAYORS from Southern California cities pose before one of NARTU's airships.

Gan's "Weekend boss," Jim Hourigan, PHC, and Lt. Bob Greer, helicopter training officer at the air station, visited Gan on location to snap pictures of him in front of the camera, instead of behind it.

NARTU in Vet's Day Parade

NARTU JACKSONVILLE'S Veteran's Day Parade float attracted a lot of attention with a pretty jet jockey "a cowgirl," who saddled up a jet engine and rode the entire distance without falling off.

Santa Ana Orientates Mayors

NARTU SANTA ANA played host to 12 mayors from cities in Southern California recently. This group, the first in a projected series of visits by groups of civic leaders and organizations from communities in Southern California, toured the station as part of a civilian orientation program.

Capt. A. L. McCubbin, welcomed the group aboard and Ltjg. Wenzel



VF-741'S ENTRY in Jacksonville's Veteran's Day Parade was a pretty girl riding a "jet."

gave the mayors a talk concerning the various training programs of the Navy, such as NavCad, AOC and the Organized Reserve.

The group attended movies depicting the various phases of LTA operations and its mission as an ASW aircraft. Immediately after the films were shown, the mayors were treated to an airship flight over the bay area.

Gallery Lauds Reservist

Airman Arnold D. Castren, a 20-year old Weekender at NAS NIAGARA, was lauded by RAdm. D. V. Gallery, CNARESTRA, recently for "a shining example of devotion to duty."

Castren was given an unscheduled standing ovation from high ranking Naval officials and a personal salute by Adm. Gallery, for his determination to attend NAS NIAGARA'S sixth annual inspection with a broken ankle.

The young airman attended the inspection on crutches and received full drill credit for his attendance. He's a member of Air Wing Staff 85.



RADM. GALLERY led the standing ovation that honored airman Castren for devotion to duty.

LET'S LOOK AT THE RECORD

VF-192 Officers Make USN 100% Who Applied are Selected

VF-192 has established a record of which they are proud. Recently four junior officers applied for a Regular Navy commission from their Reserve status. All four were selected.

The four officers, Ltjgs. Milton W. Moore, Jr.; Donald M. Herrriott, Freddie J. Thweatt, and Louis F. Milani, are former NavCads. Each spent a year on active duty before requesting transfer to the Regular Navy.

10,000 Flight Hours in 1955 VS-21 at NAAS Brown Field Scores

A record of 10,000 aircraft flight hours for 1955 was established the end of December by VS-21 based at NAAS BROWN FIELD, Chula Vista, Calif.

The Grumman S2F that chalked up the record was piloted by the squadron skipper, Cdr. Alonzo H. Wellman. The co-pilot was LCdr. D. W. Monson.

This new mark is a record number of hours for antisubmarine squadrons in Pacific Fleet Air Force. Since there are two pilots in the twin-engine plane averaging 500 hours each, the 20,000 pilot hour may top all other carrier type squadrons in total pilot flight time this year.

More than 2,400 accident-free carrier landings were made, and VS-21 claims that it is the only S2F squad-



WELLMAN AFTER 10,000TH FLIGHT HOUR

ron in the Navy to qualify all of its pilots in both day and night carrier landings while amassing the record number of flight hours.

VMF Gets New FJ-3 Fury Jet Aircraft will Fly with MAG-32

VMF-122 recently became the first Marine Corps fighter squadron to be equipped with this sleek new *Fury*. The first three jets were picked up at North American's Columbus plant recently by pilots from the squadron. Col. S. W. Trachta, CO of MAG-32,



COL. TRACHTA (2ND, LEFT) ACCEPTS PLANE

VMF-122's parent unit, was on hand to see them fly away.

Accepting delivery for the squadron were LCol. L. N. Kelso, CO, Maj. R. C. Holiday and Capt. L. R. Van Deusen.

VMF-122 was the first Marine Corps fighter unit to be outfitted with the FJ-2 *Fury*, just over two years ago. The squadron recently returned from a Mediterranean deployment where they flew the *Fury* in that area.

100 Hours Logged in Month VA-85 XO Flies High Time in AD-6

LCdr. C. W. Fritz, XO of VA-85, has emerged as the squadron's "Gloryus No. 1 High Time" for logging 100 hours flight time during November. The name was adopted by the squadron as a moniker for the pilot with the highest total flight time for each month.

His flight time consisted mainly of



FRITZ WON OUT OVER STIFF COMPETITION

long range navigational flight and field carrier landing practice.

The squadron, commanded by Cdr. C. H. Waep III, flies the AD-6 *Skyraider*. It recently returned from operational deployment at NAS KEY WEST after flying a total of 1300 hours in less than a month. VA-85 operates as a unit of CVG-9 at NAS OCEANA.

NAAS Wins Safety Laurels CNABT Praises Whiting's BTU-1N

NAAS WHITING FIELD'S BTU-1N has done it again. For compiling an accident rate of less than one for each 10,000 hours of flight operations, the unit has been awarded a safety plaque by Capt. J. P. Monroe, Chief, Naval Air Basic Training Command.

The plaque, presented for "the greatest progress in aviation safety of any unit within NABTC during the past six months," was accepted by Capt. J. J. Lynch, Whiting Field CO and Cdr. L. I. DeLatour, O-in-C of the North Field flight unit.

BTU-1N logged over 70,000 flight hours while making 250,000 landings.

Aviation Safety in HTU-1 Unit Wins CNABT's Monthly Award

HTU-1 has been presented CNABT's monthly Safety Award and the coveted Accident-Free Commendation for the month of November 1955.

The first award was given after the unit logged an impressive 2,630 accident free hours. The Aviation Safety Award is presented each month to the unit in the Basic Training Command showing the greatest safety improvement percentage over the unit's previous monthly record.

The Accident-Free Commendation is presented whenever any unit attains that sought-for goal, "No Accidents!"

QUONSET PILOT HAS DUAL CAREER

ONE OF THE distinctions of Cdr. Walter P. Robinson of NAS QUONSET POINT is that he wears, at the age of 35, both the wings of the Naval Aviator and the dolphins of the submariner. He was graduated from the Naval Academy in 1938.

At the close of WW II, he applied



CDR. ROBINSON FLIES S2F SUB-KILLER

for flight training, and in 1947 he entered the aviation cadet program at Pensacola, Florida. He received his Naval Aviator wings the following year.

Since then, Robinson has served mostly with *anti*-submarine aviation squadrons. Robinson is now executive officer of VS-39 which flies the rather unsightly but very effective, carrier-based S2F sub-killer airplane.

Robinson thinks submarine duty is "more interesting" in time of war. However, the same is true of aviation duty in peacetime.

"In submarine operation," he says, "everyone is your enemy . . . ships, mines, aircraft, torpedo craft . . . everybody!"

Once, near the Philippines, he had the hair-raising experience of having a Japanese destroyer drag its underwater searching chain along the entire length of his sub's hull—escaping undetected!

Cdr. Robinson served during WW II with the USS S-32, the *Capitaine* and the *Gunnel*, which sank a total of nine enemy ships, damaging two.

His total of over 4000 hours in submarines is twice that which he has spent piloting naval aircraft. However, his aviation duty has not been without its share of breathtaking experiences.

He had a near-miss over snow-swept Labrador in 1949. With iced wings



ROBINSON (LEFT) STUDIES FLIGHT PLAN

and one of his two engines lost, he survived a wheels-up landing, "belly-flopping" his P2V-3 to a halt.

"Interesting work," this flying!

Well qualified to speak on the subject, Robinson feels that the submarine still has a decided advantage in undersea warfare for, although the capability to destroy subs has improved considerably since WW II, difficulties in detecting them remain numerous.

An average of "2000 flight hours were expended by Allied planes for each Axis sub sunk during WW II," Robinson noted.

Now that Robinson is "on the other side of the fence"—detecting the vessels of the deep he once manned—he is anxiously awaiting the day his flight hours detecting subs will exceed his hours spent underwater.

Just one thing may stand in his way . . .

When and if inter-stellar space travel come about, Cdr. Robinson will, no doubt, find streaking through time-less space to Venus or Mars much more "interesting" and challenging work.



SEVEN T-28B trainers await pilots to fly them south to warmer climates. These planes represent the largest delivery of the new trainer to NAS Pensacola from North American's Columbus Plant. Pilots from VR-31 flew the little yellow planes south where they will replace the old SNJ Texan.

Squadron Cars Get Check Skipper Inaugurates Safety Check

Personnel of Marine Air Control Squadron Six, MAW-2, were given a better chance for safe travel during the holidays.

Upon the suggestion of LCol. H. Gomes, squadron skipper, three qualified mechanics of the unit's motor transport section checked the squadron members' personal automobiles for defects which might lead to accidents or unnecessary delay enroute. The safety check-up was carried out the first part of December.

Car owner response was excellent. Cars were checked for defective brakes, steering, lights, wind-shield wipers and horns.

The project was administered without the use of Marine Corps time, equipment or funds. The mechanics, TSgt. J. C. Lewis, Sgt. E. L. Parks and Private V. M. Suarez, donated their talents and spare time to the enterprise.

This check-up supplemented the annual check of all private cars aboard Marine Corps Air Station, Cherry Pt.

New Cessna Liaison Plane Can be Used for Gunfire Spotting

A new observation and reconnaissance aircraft, the Cessna OE-2, recently joined the Fleet. As a replacement for the OE-1, it will be used by Marine observation squadrons for general observation, reconnaissance, artillery, naval gunfire spotting, wire laying and utility para-drops.

Innovations in the OE-2 include a more powerful supercharged engine, constant speed prop, armor protection, as well as self-sealing fuel tanks.



NAVY R4D ON ARAJUNO AIRSTRIP AFTER ESCORTING ARMY HELICOPTER FROM SHELL MERA

UNVEILING FIVE SAVAGE MURDERS

THE TRAGEDY of five missionaries who lost their lives at the hands of wild Auca Indians in jungles of Ecuador which reads like a chapter from an adventure-thriller novel was revealed by a combined Army, Navy and Air Force team.

On 11 January, two Air Force C-47's arrived at Guayaquil. One was grounded because of an oil leak, and the other took off for the interior base at Shell Mera. Twenty minutes later, it returned with one engine inoperative.

By salvaging an oil cooler from the second plane to repair the first, the expedition was able to proceed in a short time. An R4D belonging to the U.S. Naval Mission to Ecuador, carrying Army personnel, their equipment and tools and helicopter fuel, led the C-47, carrying a helicopter, over the mountainous terrain to Shell Mera. Lt. H. T. White and W. J. Fletcher, ACC/AP, the R4D pilots, saved valuable time through their knowledge of the area.

The next day, after briefing by on-the-scene commander, AF Capt. DeWitt, operations began. In company with civilian airline aircraft, the C-47 flew the first sortie to investigate several canoes reported to be south of the incident site, and then the C-47 returned to Panama.

Left on the scene were the Navy's R4D, one Army and one Air Force helicopter. The Naval Mission plane and the Army H-13 took off for a narrow landing strip, hacked out of

the jungle, at Arajuno. After the H-13 was refueled, the two aircraft proceeded to the site of the killings, the R4D acting as cover and communications relay station for the chopper. Four bodies were found during this sortie, none identified. They returned to Shell Mera, with a servicing stop at Arajuno.

Upon arrival at Shell Mera, the R4D crew found that word had just been received of a new arrival expected any moment at Arajuno. Mrs. Edward McCully, wife of one of the slain missionaries, was about to give birth to a baby. Back over 50 miles of dense jungle went the plane and brought her to Shell Mera.

During the next two days, numerous flights were made between the incident site, Arajuno, Shell Mera, and side jaunts to Guayaquil for fuel. Food, tools, helicopter crews, correspondents and photographers were transported to and from the site. The four bodies were identified and buried, and the



AN AUCA LANCE LIKE THE MURDER WEAPONS

fifth victim was identified by several Quichua Indians who had taken some personal effects from the body. One item, a wrist watch, was positively identified by the widow.

One of the last missions flown was the sad task of flying the widows of the slain missionaries into the scene. On 14 January, rescue operations were officially terminated, and all personnel, equipment and supplies were withdrawn from the advanced base.

HRS Saves Marine Pilot Cristman Bails Out of Skyraider

Marine 2nd Lt. David E. Cristman of VMC-1, stationed at MCAS Kaneohe, bailed out of a crippled AD-5N at night and in 20 minutes was safely inside an HRS helicopter from a sister squadron, HMR-161.

Cristman left his *Skyraider* at 3,000 feet when the engine started to run rough and lose power. He hit the drink about 300 yards off Makapu Beach, inflated his liferaft and awaited rescue in total darkness.

Three helicopters and some crash boats were dispatched to the scene. The 'chopper that spotted him after he fired a flare was flown by 2nd Lt. N. J. Bengtson, co-pilot was 2nd Lt. J. J. Tucker.

The helicopter was directed to the scene by helicrewman Sgt. Bruce Dunn, who maneuvered the sling within reach of Cristman as the HRS hovered 10 feet above the water. The rescue came off smoothly.

Uninjured and suffering only from exposure and bruises, Cristman was flown to Kaneohe for a checkup.



TO COMPLETE his "unified command", Capt. H. E. Irons, CO of NAS Hutchinson, swears his youngest son, Richard, into the Naval Reserve as an SR. The Captain's other two sons, Hayes E. and Robert A. are Army and Air Force career men now on active duty.

TARGET RANGE GETS A FACE LIFTING



AIRCREWMEN tie down tires that will be used as markers by the ground crew at isolated Kahoolawe Island which lies south of Maui Island.



LOW-FLYING R4D makes first of four passes over the 4,000-foot strip to discharge cargo. Old tires mark centerline of target drop area.



A NEWLY PAINTED centerline means that pilots practicing gunnery and bombing runs will again have a clearly defined target area.



L. M. O'HARA and J. A. Neal apply yellow paint to one of the markers. After their work was done, the men had special liberty on Maui.

GUNNERY and bombing exercises at the Navy's range on lonely Kahoolawe Island in the Hawaiian chain were hampered because pilots couldn't see the targets.

To remedy the situation, NAS BARBER'S POINT and FAS-Ron-117 sent 12 men, led by Lt. W. R. O'Connell, to the island to repaint, repair and refurbish every target. The men were ferried out to the island by eight Marine Helicopters from HMR-161 after a bomb disposal squad, headed by Lt. W. N. Leighton, cleared the island of all unexploded ordnance. At one point, the terrain was so heavily loaded with unexploded 25-pound fragmentation bombs, the helicopters couldn't land.

An R4D from Barber's Point with LCdr. D. J. Leshar at the controls, flew in at between five and 15 feet for ferry drops of old tires and oil drums. These articles were used to re-mark the 4,000 foot center line of the air strip so high altitude bombers could find their mark. Operation "Old Paint" went off without a single hitch of any kind.



REFURBISHING the target range took the crew four days. Lt. O'Connell praised the men: "This is the hardest working crew I have ever seen."

VP-47 Men Give to School Japanese Kids Benefit from Gift

The officers and men of VP-47 donated 176,000 yen (\$489) in late December to the schools at Iwakuni City, near NAS IWAKUNI. The money will be used to assist elementary and junior high school students.

Children representing six Iwakuni schools, the deputy mayor, the superintendent of public schools and an English interpreter watched as VP-47's



LAWYER'S GIFT REPRESENTS CONTRIBUTION

CO, Cdr. J. W. Lawyer, presented the contribution in the name of VP-47.

Needy families of children may request assistance from an Educational Fund Steering Committee through their local public welfare members.

More than 16,000 students are enrolled in public schools at Iwakuni.

Instrument Test Panel Device Constructed by HRS-162 Men

The commanding officer and members of Marine Helicopter Transport Squadron 162 are enthusiastic over an electrical instrument test panel built by two corporals in the unit. Robert A. Ferguson and James P. Miller did the work in their spare time at NAF OPPAMA, Japan.

At a cost of \$45.00, the men developed a test panel to service the Sikorsky HRS-3. The system is used to check circuits and test instruments, including the G-2 compass, gyro-horizon, turn and bank indicator, inverter, engine/rotor tachometer generators as well as the carburetor air temperature gage, landing and running lights, etc.

The system was designed to overcome the difficulties squadron electricians were having in tracking down discrepancies in the HRS-3 instruments.



TWO S2F'S FROM VS-26 AIDED IN LOCATION OF THE WRECKAGE OF P6M SKYMASTER

TWO S2F'S GIVEN NEW TASK

NAVY INGENUITY, and the reliable S2F's chalked up another score when a couple of the Grumman sub-killer planes were made to serve in a new role, that of "wreckage detector" planes.

For wearisome days, Navy salvage ships and divers had worked to locate the wreckage of the Navy P6M *Seamaster* after it crashed in December near Patuxent River, Md. The wide dispersal area of the wreck, coupled with the fact that pieces often were buried deep in mud, made it difficult to salvage the aircraft.

It was absolutely necessary, however, that the maximum amount of the plane be salvaged for study in an effort to determine the cause of the crash.

Then Cdr. B. G. Kroger, Force Development Coordinator for Commander, Service Forces, Atlantic Fleet, requested the assistance of submarine hunting planes, the S2F's. Knowing the capabilities of the Magnetic Airborne Detector, MAD gear, carried by these planes, Cdr. Kroger reasoned that the gear could detect metal wreckage by the same procedure used in detecting submarines.

Two VS-26 S2F's, Norfolk based, piloted by Ltjgs. Lawrence C. Atkin and Toxey H. Califf were dispatched to the area.

Flying a criss-cross pattern, the powerful little snub-nosed planes combed the area already established as the general crash vicinity. Each time they registered a contact, they

dropped a smoke flare and radioed the position to the waiting salvage ships, the USS *Harkness*, USS *Hoist* and USS *Preserver*.

The assistance given by the S2F's was so satisfactory that their use has been recommended on future searches where the crash area is not definitely known. The belief has been voiced that the use of the Magnetic Detection devices carried by these versatile planes may aid greatly in centralizing such a search area, thus eliminating the loss of much time and effort at the outset of salvage operations and speeding up the work.

Record Set by Navy Pilot Elder Flew a P-51 Aboard Carrier

A carrier pilot has made 600 accident-free arrested carrier landings by "treating each landing as if it were my first." The pilot, Cdr. R. M. Elder, ComAirPac's air group training officer, recently made his 600th landing on the USS *Shangri-La* off the coast of San Diego.

He amassed this total while landing on 26 different carriers, including the British carrier HMS *Victorious*. He has logged over 3,900 flight hours in 17 types of planes, ridden out over 2,000 cat shots and recorded over 3,000 arrested landings, including those made on land while serving with various development programs.

He also holds the distinction of being the only Naval aviator to land a P-51 plane aboard an aircraft carrier.

TROPICAL LAB AT PATUXENT

IT MAY BE hard to believe, but 65 miles from the near freezing temperatures of Washington, D. C., men are sweating in a hot and humid tropical climate.

The temperature there hovers around 90 degrees Fahrenheit, and the humidity stays close to 100%.

To reach this South Pacific outpost, you must travel to the southern Maryland community of Lexington Park, just outside the main gate of the U.S. Naval Air Test Center, Patuxent River, Md. Then you must drive onto the station and make your way to the Electronics Test area. There, in the shadow of a huge hangar you will find a long quonset-shaped building. Over the entrance hangs a sign which reads "Tropical Chamber." This is your destination.

Within the Tropical Chamber is a large stainless steel vault 40 feet in length and 20 feet wide. Navy technicians create an artificial climate inside this vault comparable to the climate on the island of Samoa.

Their purpose is to provide an atmosphere for testing all Naval aircraft electrical and electronic equipment under weather conditions characteristic of the South Pacific. At one time or another, nearly every Navy plane operates in the South Pacific. Tests include exposure to fungus growth, the most frequent cause of equipment failure in that part of the world.

If any device does not function after the tests, the Tropical Chamber returns it to the company which made it. The company modifies it, removing the



GALLAGHER PREPARES THE FUNGUS MIXTURE

cause of failure. Also, regardless of the project's results, chamber technicians send a report to the Navy's Bureau of Aeronautics.

The man in charge of the Tropical Chamber since 1948 is Mr. Tom Gallagher, a Physical Science Aide. He describes the interior of the chamber—"It's hot and moldy in there."

It usually requires 30 days for Mr. Gallagher and his one-man staff to complete a project in this "hot and moldy" chamber. When a piece of equipment arrives, their first step is to plug it into a current source to find out if it works.

If it does, they prepare the chamber, turning the knobs and pushing the buttons which release the heat and steam to create the artificial Samoan weather conditions.

They place the equipment in the chamber and spray every exposed surface with one of five fungus solutions. Each solution contains reproductive bodies, called spores, of one of the molds or mildews which often grow on equipment of aircraft operating in tropical climates. In the past, these spores grew uncontrollably, clutching at even the smallest part and reducing costly instruments to crumbled masses.

Even now, despite the protective paints, which have curbed much of the fungus growth, when Mr. Gallagher removes a generator from the chamber, he sometimes finds that fungus has clustered so thickly around the commutator shaft that it will not turn. (The commutator shaft rotates the north and south poles through a mag-

netic field to generate electricity.)

However, fungus grows most frequently on one or all of three places: exposed surfaces where dust collects (the dust serves as food for the fungus); over fingerprint marks on tube shields; and on receivers and transmitters.

The final test before the completion of the project is a second operation of the equipment to determine if it still works despite the fungus growth, the high humidity and the blistering temperatures.

A veneered cabinet in the chamber offers stark evidence of the damaging effects of continuous high humidity. The cabinet houses some of the instruments necessary to the chamber's operation. After two years in near 100% humidity, the veneer has warped to look like grandmother's washboard.

Although the Tropical Chamber is an oddity in the way of test facilities, it, nevertheless, fulfills a necessary function in guaranteeing Naval aviators and flight crews that the planes they fly are furnished with equipment which will continue to function in tropical climates.

Just Seven Years to CPO Rice Attains a Whitehat's Dream

There is no limit to what a man can achieve in this man's Navy if he has the spunk and get-up-and-go to better himself. One of the best examples of Navy opportunities was demonstrated recently at NAS MOFFETT FIELD when an AT1, Lloyd A. Rice, was advanced to ATC after just seven years in the Navy.

The 26-year old Rice donned a new chief's uniform with only one hashmark, a rarity since the days of WW II. His formula for success: intense effort, knowledge of his job, and the best of breaks in time computation of advancement dates.

Before reporting to NAS MOFFETT FIELD, Rice served with CVG-4, VC-4 and attended Class A and B Aviation Electronics School at NAS MEMPHIS.



FUNGUS IS PUT IN THE HUMIDITY CABINET

IFR-IQ?

What mandatory reporting point has been recently added to the jet instrument approach procedure?

Answer on Page 40

Ladies Meet 'The Lady' Yorktown is Host to Crew's Wives

Following a precedent set by the USS *Kearsarge* and *Valley Forge*, the USS *Yorktown* recently played host to 361 wives of the ship's officers and crew.

The ladies came aboard the famous "Fighting Lady" at NAS ALAMEDA with their husbands. Much to the de-



OH, FOR AN LSO AS PRETTY AS THIS ONE

light of all concerned, they found the ways of the "other lady" in the husbands' lives not altogether unfamiliar. They cautiously scaled steel ladders, peeked curiously into the galleys, and caught a glimpse of how their men live aboard the floating airport.

Some of the girls complained of seasickness but the 50-mile round trip outside the Golden Gate more than compensated for this slight discomfort.

The carrier, commanded by Capt. Emmet O'Beirne, climaxed the nine-hour affair with jet operations, gunnery drill, tours and a steak dinner.

VA-55 Sets Pacific Record Unit Logs 1,000 Cruise Landings

Ltjg. Harwood Hargrove recently landed an AD *Skyraider* on the flight deck of the USS *Philippine Sea* to record the 1000th arrested landing logged by VA-55 during their current cruise. About the same time, Ltjg. Roy Morrison of VF-123 made the ship's 71,000th landing in a Grumman F9F-2 *Panther*.

Morrison's landing puts the *PhilSea* in second place for the greatest number of arrested landings on Essex-class CVA's. The Pacific Fleet's USS *Boxer* holds first place. The USS *Monterey* has logged over 100,000 landings for the Fleet record.

The *Phil Sea* has completed her fifth Far East cruise since the outbreak of the Korean War. Capt. E. L. Farrington is in command of the ship.

JET SCHOOL FOR SENIOR PILOTS



CAPT. R. J. STROH GETS JET CHECK OUT

A TIME-HONORED adage expresses a sentiment to the effect that you can't teach old dogs new tricks. But the Jet Transitional Training Unit, located at NAS OLATHE, doesn't subscribe to this. Furthermore, members of the Unit are proving the fallacy of the maxim, almost every week.

The Navy realized, at the beginning of the "jet age," that grave problems would be faced by pilots at squadron level as they abruptly left familiar propeller planes and began operating jet driven aircraft, many of which are in the supersonic class. The solution to these problems is being sought through the jet transitional training given pilots newly assigned to jet squadrons. (NANews, April 1955, "Supersonic Check-Out.")

But what about the senior pilots, carrier division chiefs of staff, and captain of ships to which jet squadrons are attached? These officers, nurtured and trained in prop planes for most of their Navy careers, also face problems brought into being by the characteristics, performance, and requirements of the "Mach busting" planes that are reaching the Fleet in great numbers.

To give these officers an indoctrination into what they might expect from the swept and delta wing aircraft under their command, and in turn, what these supersonic flying machines will require from the men who pilot them, a senior officers' jet indoctrination course was established in 1955 as a part of the Jet Transitional Training Unit (JTTU) at Olathe.

This "Flying School" for ships' captains and carrier division chiefs of staff offers an intensive one week's jet indoctrination course. Instruction is given in the operational capabilities and limitations of jet aircraft, and demonstrations of tactics, gunnery and carrier operations are simulated.

In addition to Capt. Roy L. Johnson, CO of the USS *Forrestal* (NANews, Feb. 1956) and Capt. Robert J. Stroh, prospective commanding officer of the USS *Saratoga*, other captains who have qualified as jet jockies are: Capt. J. L. Westhofen, CO of the USS *Oriskany*, Capt. J. D. Black, skipper of the USS *Hancock*, Capt. W. E. Gallaher whose ship is the USS *Princeton*; Capt. C. W. Lord, CO of the USS *Sbangri-La*; Capt. J. D. Blicht, Naval Deputy, Eastern Air Defense Command, Capt. J. G. Sliney, Inspector General, Chief of Naval Air Training, and Capt. W. E. Larned, from District Operations, United Air Lines.

● VP-26 has won the Atlantic Fleet's Battle Efficiency "E" for the second consecutive year. RAdm. R. M. Hughes, ComFAirWingslant made the award at NAS Brunswick, Me.

● First landing on the USS *Forrestal's* flight deck was accomplished by LCdr. J. E. Johnson of HTU-1's Detachment 1 when he flew VAdm. F. W. McMahon, ComAirLant, to visit the ship.



THE FIRST de Havilland Comet II for service with the RAF Transport Command is flight-tested before delivery. Squadron No. 216 will be fully equipped with the jet-powered transport by mid-1957. Power plants for the Comet II are four Rolls-Royce Avon 117 engines of 7,300 lbs. thrust each.



CAMERA CAPERS make you look twice at this photograph taken by Lt. Lewis E. Newbry of VC-62, Det. 34, when he was taking shots along the coast of Spain near Gibraltar of Air Group Six's Banshees. The unusual attitude of the aircraft occurred when the K-17 21-inch camera happened to be rotated from the left oblique to the right oblique position in the F2H-2P, and there was the incredible coincidence of a double exposure in the automatic camera. A simultaneous coincidence took place in the overlapping portions of the backgrounds over the water.

Skyray Fighter Is Praised By BAR Assistant After Check Hop

LCdr. J. A. Nelson, BAR's F4D project officer at the Douglas El Segundo plant, checked out in the *Skyray* recently and returned smiling. He had nothing but praise for the swift new fighter.

"Excellent performance and handling characteristics" and, "a fine airplane, easy to handle," were some of the laurels heaped on the delta-wing jet by Nelson.

The *Skyray*, holder of the official world's three kilometer closed circuit course, was readied for flight by a Douglas crew under the direction of



NELSON SURELY LIKED F4D PERFORMANCE

W. H. Gage of the F4D Field and Flight Operations Section.

Other BAR EL SEGUNDO officers to check out in the speedy fighter were LCdr. G. P. Milton, Engineering, LCdr. W. E. Kurtz, AD-5/6 project officer and Lt. J. A. Carmack, Flight Test. The *Skyray* is powered by a single J-57 engine with an afterburner.

"Rockair" Tests at NAS Banshee Launches Rocket to 90,000

Plane launched rockets have been incorporated to gather information for ONR's upper atmosphere research. Recently an F2H *Banshee* carried a rocket to an altitude of 30,000 feet, then launched it vertically. The rocket was fired near NAAS CHINCOTEAGUE and gained an altitude of 90,000 feet.

The new rocket method, called "Rockair," will provide a practical and inexpensive method of research observations at high altitudes. During the initial test, only cosmic ray studies were made.

Scientists believe that much useful information, such as ambient air temperatures, air densities, and ozone concentrations, can be obtained by using this relatively new method.

Ex-Guerilla with VMR-253 Risked Death on War Torn Luzon

A former member of the 121st Infantry Division, United States Free Forces, Philippines, who fought valiantly throughout WW II in that area, now a member of VMR-253, wears the Marine uniform proudly. He's Sgt. F. P. Castanedo, a navigator with the transport outfit flying runs from NAS IWAKUNI.

Castanedo took to the hills to avoid capture by the Japanese at the outbreak of WW II when he was 15 years old. As a volunteer member of U.S. guerilla forces, he performed many dangerous missions, and attained the position of company commander with his division at 19.

He joined the Marines in 1952 while living on Guam and integrated into the Regulars six months after he enlisted. His decorations include the Philippine Presidential Unit Citation, Distinguished Unit Badge with oak leaf cluster and the Philippine Independence Medal. These are not seen on the tunics of many Marines.

Castanedo became a U.S. citizen last year, nearly 13 years after he first risked his life to save American comrades in the Philippines.

A-like Bombs Triggered Special Devices Center Makes Tests

Four "atom bombs" on Long Island were exploded recently without any radioactive fall-out or other harmful effects. In fact, the bombs weren't atomic at all.

The bombs used by the Special Devices Center of the Office of Naval Research are composed of 20 pounds of plastic explosives and 70 pounds of thermite (iron and magnesium).

They are self-destructive, so that no fall-out of metal particles endangers observers or ground personnel. They will be used in fleet training to simulate A-bomb attacks.

The bombs were dropped from a light plane at a 3,000-foot altitude and triggered to explode at 1,000 feet. The resulting white flash or fireball was 40 feet in diameter, and the smoke cloud spread to a diameter of 300 feet, small by atomic standards.

The cohesive quality of the dark brown smoke cloud kept it together in a circular shape for several hours and gave it a realistic atomic effect.

Marine Gazette Makes Claim First to Bail Out Over Mach 1.0

The January issue of the *Marine Corps Gazette* carries a complete and comprehensive description of a Marine flyer's narrow escape when he bailed out of an FJ-2 *Fury* above Mach 1.0, clothed in ordinary flight gear. The Gazette claims that Second Lieutenant Winston Goller of VMF-334 is the first pilot ever to do this and survive.

A year ago, Goller, one of a three-plane flight from Guantanamo Bay to Cherry Point, stepped into that gray cold, death-dealing world of anoxia, ejected at slightly above the speed of sound and lived to tell about it.

Goller does not recall what happened after he snapped the face curtain that blasted him into a supersonic wind, but he was able to relate to the author, 1st Lt. F. L. Bailey, the sensations after consciousness returned.

Gollers' injuries were superficial. His thigh was sore where the leg strap of his parachute had scraped against it. Bailey commented, "His actions had been spontaneous and abrupt. But just as the dope addict pays for his superficial enervations with a later lapse of depression, so Goller paid for the powerful stimulus which had saved his life." He refers to the utter exhaustion Goller experienced after regaining consciousness and realizing how close he had been to the end of his life.



GRUMMAN'S LATEST addition to its famous Corsair line is this F9F-8P. Designed as a replacement for the F9F-6P, this instrumented model has been undergoing tests and evaluations at NATC Patuxent River. VC-61 and VC-62 are grooming pilots in preparation for receiving the new plane.

Marines to the Rescue Youths Saved by Helicopter Pilots

Marine Corps pilots from Cherry Point added another accomplishment to the long list of helicopter assists with an unusual, and unexpected, rescue.

Marine Capt. James B. Seaman and 2nd Lt. Peter M. Samares of VMR-262, were on a routine mission ferrying an HRS helicopter from MCAF NEW RIVER, N. C. to NAS JACKSONVILLE. Proceeding down the coastline, the pilots spotted a distress signal, "HELP," written in the sand. A closer look revealed two people waving a yellow cloth on the South side of Ossabaw Sound, south of Savannah, Georgia.

The helicopter landed, picked up two boys, 15 and 16 years old, who were stranded after the tide took their

boat out to sea. The boys, Ted Turner and Lee Thompson of Savannah, had spent an uneasy night waiting for rescue. Capt. Seaman reported. "The boys didn't say much, but they were certainly happy to see us."

The boys were taken to a small town five miles north of the pick-up point, and the helicopter continued on to complete its ferry mission.

Navy Aviation Career Ends Henderson Was Enlisted Pilot 211

An ex-enlisted pilot, who has flown nearly every type plane from PM-1's to the sleek jet aircraft of today's Navy, has retired after 25 years association with Naval Aviation and 27 years Naval service. He's Cdr. F. J. Henderson, formerly of VR-1 at NAS PATUXENT RIVER.

Completing flight training at NAS PENSACOLA in 1931, he was designated Aviation Enlisted Pilot number 211 as a seaman first class. His first duty assignment as a pilot was with VP-2 at NAS COCO SOLO where he flew the old 84-knot PM-1 Martin patrol plane.

He was promoted to CPO in 1937, CWO in May 1942, Ensign in June 1942 and achieved the rank of Commander in 1954. Henderson will retire to his family home near Turtle, Okla.

ZW-1 Commissioned at NAS Squadron Will Fly AEW Missions

Cdr. L. J. Mack assumed command of newly commissioned Airship Airborne Early Warning Squadron One at NAS LAKEHURST recently. The new squadron was welcomed aboard by Capt. K. M. Krieger, CO NAS Lakehurst.

The unit will fly the Goodyear ZPG-2W and operate from Lakehurst.



A ZSG-3 RIGID airship from NAS Oakland is carefully moved into the huge blimp hangar at NAS Moffett Field by a ground handling crew composed of men from the air station and NAS Oakland. The airship, in for repairs, is the first blimp to be serviced at Moffett Field in nine years.

WINGLESS FUSELAGE FOR FUTURE

WHAT MAY PROVE to be the wingless wonder of the air was recently described by Dr. Alexander M. Lippisch at a meeting of the Washington section of the Institute of Aeronautical sciences. This German-born aeronautical scientist and aircraft designer, noted for his early work on jet-propelled and delta wing aircraft, has developed an aircraft without wings which he calls the *Aerodyne*.

The *Aerodyne* is a flying body lifted



AIRCRAFT MODEL HOVERS IN DEMONSTRATION

and propelled by an internal lift-inducing propulsion system. Dr. Lippisch developed it as an answer to the problem of flight in the future where ability to hover for take-off and landing is required without the limitations of range and speed, common to the helicopter and related aircraft.

In the *Aerodyne*, air is sucked in through an opening in the top and expelled by high speed fans past a set of louvres in the belly of the aircraft. When these louvres are tilted backwards the craft moves forward. When the louvres are tilted forwards, it goes backwards. For hovering, the louvres are wide open.

Lippisch points out that since heat generated on the wings of a conventional aircraft at supersonic speeds causes drag, the wingless fuselage may be the forerunner of the jet planes of the future. Lippisch believes that the use of the modern gas turbine engine in combination with his new system will create an aircraft which can be used as well for an airliner as for



GAS TURBINE ENGINE TO POWER AERODYNE

various military high speed aircraft.

One of the top military designers for Germany in WW II, Dr. Lippisch is credited with the development of the delta wing and Germany's ME-163 rocket plane. He came to this country after the war and is now working for the Collins Aeronautical Research Laboratory in Cedar Rapids, Iowa. There he is driving small electric models of the wingless fuselage by remote control in the company hangar.

The special research program which Dr. Lippisch is conducting is supported by a contract with the Air Branch of the Office of Naval Research.

AirPac Lauds Fighter Unit VF-72 Wins Second Safety Award

For flying 997 flight hours without an aircraft accident, VF-72 has been awarded ComAirPac's coveted Quarterly Aviation Safety Award for the second consecutive quarter. The first award was given after the squadron logged 845 hours of accident-free time.

The presentation of the award was made to squadron CO, Cdr. C. F. Naumann by Cdr. C. A. Iarrobino, CAG-7, at ceremonies conducted on board the USS *Hornet*.

In placing laurels at the feet of VF-72's squadron members, VAdm. H. M. Martin, ComAirPac, said "This achievement indicates the employment of sound maintenance practices, effective training procedures and a high degree of air discipline."

Pilots Hit 10,000 Hours High Time Logged by VR-22 Flyers

Two veteran transport pilots presently attached to VR-22 at NAS NORFOLK have reached that pinnacle of success—10,000 accident-free flight hours. They are LCDrs. Davis B. Penn and L. V. Dennis.

Penn, a native of New Orleans, has been on active duty as a Reservist for 14 years. Many of his hours were accumulated while flying the Korean airlift in 1950.

Dennis flew the Berlin and Korean airlifts to log a vast number of his hours. He's a former member of VR-5, VP-3 and old VB-103.

Penn reported to VR-22 in January 1954; Dennis arrived in August 1953. Both are former members of Acceptance Transfer and Training Unit.

VP-8 Arrives at Quonset Flew Neptunes in Jopeter Rescue

The skipper of VP-8, Cdr. T. G. Doyle, brought the last four of his squadron P2V-5F *Neptunes* home to NAS QUONSET POINT recently and was greeted on arrival by Capt. W. A. Moffett, ComAirWing-2. The four patrol bombers were the final segment of the unit's 12 aircraft, eight of which arrived at Quonset before Christmas.

VP-8 flew ice reconnaissance and anti-submarine missions from Argentina, Newfoundland, and had two advance-base detachments at Thule and Frobisher, Greenland, during their six-month deployment.

Flight crews related two dramatic rescue flights made by the squadron over the frozen wastes of the Arctic region under hazardous flying conditions.

On September 2, Lt. E. M. Dassler and his crew were instrumental in saving the crew of the Norwegian ship, *Jopeter* (NANews, December '55).

On September 24, just three weeks later, Lt. C. W. Huffman and his crew spotted several Air Force men who were stranded on a floating section of an ice island called T-3. The *Neptune* circled the island for hours, then Huffman and his crew led a ski-equipped C-47 to the rescue of the marooned airmen.

At the time of these two rescue flights, Cdr. L. R. Burnett was CO.



THIS YSD IS EQUIPPED TO SALVAGE AIRCRAFT AND LAY MINES

CRASH BOAT GETS AWAY HALF A MINUTE AFTER ALARM SOUNDS

MISSION: RESCUING DOWNED PILOTS

PRIMARY REASON for existence of the Operations Boat Division at Naval Air Stations located adjacent to water is that of saving the life of any and all pilots forced down into the water.

Secondary mission consists of salvaging the aircraft crashed in the water.

NAS NORFOLK Operations Boat Division has additional duties in the maintenance of the 15 seadrome lights in Willoughby Bay that warn of the location of the Breezy Point seadrome. These warning lights must be lighted at dusk and turned off every morning—this is a conservation measure.

Led by LCdr. F. C. Sochor, this Division of 69 men—six of whom are chief petty officers—is operational 24 hours a day, seven days a week. In addition to the day-time duties, the division mans a stake-out boat at night. This keeps a constant check on the seadrome lights, acts as a safety observer, and keeps unauthorized boats from wandering into the seaplane landing area.

Equipped with three 63-foot coastal crash boats, one 40-foot aviation rescue boat, one YSD salvage boat, and two 30-foot rearming boats, the Boat Division is a fast moving outfit. In an emergency a crash boat is manned and leaves the slip within an average time of 30 seconds.

The boats are sent out in stages: first, a crash boat; second, a standby for doctors and additional equipment; and last, the YSD salvage boat

equipped with a crane for lifting up to 15 tons, and powerful underwater lights which are used to aid divers in their salvage operations. The crash and rescue boats are equipped with two-way radios to provide constant communication and to advise when additional divers or medical attention is needed.

The Boat Division at Norfolk Naval Air Station has an area of responsibility that has a 15-mile radius. Whenever the need arises, however, this range is extended.

For diving operations, the division is equipped with both deep and shallow water diving gear. Though normally the dives do not exceed 60 feet, the choice of shallow or deep water dress depends on the water temperature rather than the depth.

For behind-the-scenes maintenance,



FREQUENT PRACTICE KEEPS DIVERS EXPERT

the Boat Division is a rather sufficient entity. Overhaul and repair of the engines in the small boats is made in the engine repair section. Engines are inspected periodically as well as given a morning run-up that checks on the readiness of the crash boats every day. The Boat House carpenter shop provides repairs for the boats' woodwork, and handles the necessary welding for such things as the construction of dollies for the smaller boats. All parts both mechanical and electrical are supplied by the Parts Department, while the Bosuns Locker provides stowage for all lines, lifesaving equipment, and extra equipment for the boats as well as takes care of wire splicing and canvas working.

The Electrical Shop services and maintains spares for the seadrome lights. It repairs starters, generators, electric motors and batteries, and does the daily checking of the crash boats' electrical systems.

All these are unexciting, daily chores. But they all add up to an outfit that is on its toes in accomplishing its assigned missions.

It's mighty comforting to pilots to know that if anything *should* happen on take-off or landing at Norfolk, on that outside chance, and they should have to go into the water, there would be a fast-moving crew from the Boat Division out, in a matter of seconds, to save them and to recover their plane. This close-to-the-sea NAS Boat Division provides maximum rescue service.

LETTERS

SIRS:

. . . I regret to say the October 1955 copy of NANews has not turned up here. September, November and December yes, but no October—and I am told you ran a five-page article on aircraft recognition in that one, too. I wonder, if it is not too much trouble, whether you could send us a further copy of this issue?

I would like to say at this juncture how much we enjoy your publication over here, not least because you seem to be the only one "putting across" recognition on your side of the Atlantic.

CHARLES SARGUANT, *Editor*
Joint Services Recognition
Journal

AIR MINISTRY, LONDON

SIRS:

Reference letter from T. G. Giles, VP-56, and your comments in the January 1956 NANews regarding VP "E" awards for 1955. Apparently we goofed or the proverbial ball was bobbed. This info was passed on to you.

Cdr. James F. Rumford received our SECOND CONSECUTIVE AirLant "E" from RAdm. F. M. Hughes, ComFairWingsLant at ceremonies aboard NAS BRUNSWICK, Maine last fall.

LT. JACK M. STEVENS

SIRS:

Thank you very much for adding our name to the distribution list for Naval Aviation News. Our first copy has arrived, and all personnel are unanimous in the feeling that it is a fine publication. We will look forward to receiving it each month.

WM. A. TRIPPET, Col., USAF
USAF Coordinating Staff
Ottawa, Ont., Canada



HELICOPTER transports of HMR-261 and HMR-262 line the starboard side of the *Siboney* before D-Day assault during PHIBEX '55.

IFR-IQ?

According to OPNAV ATC Procedures Section, the answer is: "All Jet Pilots, when executing an instrument approach, are required to report to ATC over approach fix, upon reaching the minimum penetration altitude depicted on the appropriate JAL chart in USAF/USN Jet Pilot's Handbook."

Ref: RadFacs dated 9 Jan 1956, P 208.

SIRS:

I unwrap each monthly issue of NANews with keen anticipation of the excellent photos of aircraft and the well-written articles. I will confess, though, that the abbreviations used send me into a graveyard spiral. My excuse for that is that I spent WW II in the US Army Air Forces.

My hobby to a great extent is aircraft recognition. The article "Recognition" in the October 1955 issue was above par, in my estimation.

Keep up the good NEWS and I vote for more recognition material.

C. ROGER CRIPLIVER

Fort Worth, Tex.

New Course at Lakehurst Study Deals in Ice Reconnaissance

An unusual training course was recently inaugurated at NATTU LAKEHURST. Designated as Ice Observers Course, Class C, the new school will train aerographer's mates third class and above for duty in ice reconnaissance.

Students are taught to identify land and sea ice according to type, size, concentration, age, thickness and relief, and to record these characteristics. In addition, the trainees are taught to construct and interpret coded and plain language ice messages and to prepare ice distribution and related material for briefings in support of surface or aerial operations.

Since the ice observer may be called upon to make detailed measurements of ice or sea water characteristics, he is introduced to the equipment and procedures for such measurements during the five-week course. The first class consisted of 13 men, who will be assigned to Argentia and Kodiak Island.

CONTENTS

Corpus Christi	1
Greenwich Bay	12
VP-47	14
Forrestal Flight Ops	18
Fighter Operations	19
Soviet Arctic Operations	20
Firebee	24
Philippine Sea	25
Reserves	26
Target Range	32
S2F's New Job	33
Jet School for Seniors	35
Wingless Fuselage	38
Norfolk Boat Division	39

● THE COVER

Navy's new F8U Crusader now in production at Chance Vought.

● PICTURE

Pictures used in VP-47 story on pp. 14-16 were taken by Ltjg. Dave Shaw and Photographer's Mate, 2nd class, F. L. Flitter.

● 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 STAFF

Cdr. Bart J. Slattery, Jr.
Head, Aviation Periodicals Office

LCdr. William A. Kinsley
Editor

Izetta Winter Robb
Managing Editor

Lt. Moriece Gleason
H. C. Varner, JOC
Associate Editors

Cdr. Andrew W. Bright
Contributing Editor

Jan C. Burns
Editorial Assistant

James M. Springer
Art Director

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

NAVAL AVIATION

Published monthly by Chief of Naval Operations and Bureau of Aeronautics to disseminate safety, training, maintenance, and technical data. Address communications to Naval Aviation News, Op-05A5, Navy Department, Washington 25, D. C. Office located in room 5E573 Pentagon Building. Phones are extensions 73685 and 73515. Op-05A5 also publishes quarterly Naval Aviation Confidential Bulletin.



SQUADRON INSIGNIA

A number of NANews readers, who described themselves as Naval Aviators of 'WW II vintage,' have written requests that we print insignia of some of the famous squadrons which are still on 'active duty.' Because we wish to serve our readers well, we comply herewith. Squadrons should take note, however, that the insignia appearing below do not comply with present OpNav Instructions pertaining to the subject. OpNav Instruction 5030.4A issued in December 1955, gives the latest, official word. The insignia shown here were worn proudly by the 'Red Rippers,' 'Grim Reapers,' 'Iron Angels,' and 'Fighting 153.'



VF-11



VF-10



VF-14



VF-153



NAVAL AVIATION
NEWS

Over famed Waikiki Beach skims this Neptune P2V-5F, with jet pods suspended from its wings. Follow your Naval Air Force around the world through your personal copy of NANews. Two dollars will buy twelve issues of exciting, interesting stories and features, illustrated with on-the-spot photos. Send check or money order to:

**Superintendent of Documents
Government Printing Office
Washington 25, D. C.**