

Carson

NAVAL AVIATION

NEWS

F8F-2 GRUMMAN BEARCAT SETS WORLD SPEED RECORD



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NAVAL AVIATION NEWS

Vice Admiral Thomas F. Connolly
Deputy Chief of Naval Operations (Air)

Rear Admiral G. E. Miller
Assistant Deputy Chief of Naval Operations (Air)

FEATURES

Roaring Racers of the Twenties 8

A perusal of early Naval Aviation participation in speed competitions reveals an interesting footnote regarding military appropriations and public opinion.

A World Beater 20

Flying a 24-year-old Grumman F8F-2, Darryl Greenamyer this summer set a new world speed record for piston engine, propeller-driven aircraft. With a 483.041-mph average, Greenamyer sometimes hit 510 mph on the 1.86 mile course.

Quiet Warrior 24

The National Aviation Club last month presented its Award for Achievement to Vice Admiral Thomas F. Connolly, DCNO(Air). NANews Associate Editor JOC James Johnston reports the event.

When the Sun Goes Down, the Pulse Rate Goes Up 34

JOC Paul E. Rothgeb, ComCarDiv One staff, interviews carrier pilots and doctors about the effects of night carrier operations.

THE STAFF

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LCdr. Paul Mullane Editor

Dorothy L. Bennefeld Managing Editor

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JOC James Johnston Associate Editors

Michael G. McDonell

Helen F. Collins Editorial Assistant

Cdr. Donald E. Maunder Contributing Editors

LCdr. Neil F. O'Connor

Harold Andrews Technical Advisor

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COVERS

The photo of Darryl G. Greenamyer's record-breaking F8F-2 on the front cover is used through the courtesy of Popular Mechanics. It was taken by Ralph L. Emerson of Van Nuys, Calif. JOC James Johnston photographed the T-38 Talon, above, at NATC Patuxent River. The NASA pictures on the back cover need no explanation.



ONE OF FIVE

The Navy's first T-38 Talon was delivered to the Test Pilot School, NATC Patuxent, Md., in October. Rear Admiral H. L. Miller, NATC commander, accepted the dual-seated, supersonic trainer, the first of five acquired by the school. The Northrop-built T-38's will be used to train Navy, Army, Air Force, civilian and Allied test pilots attending the school's eight month course. The Astronauts maintain flight readiness in Talons.

EDITOR'S CORNER

In the Bag. This summer saw the 50th anniversary of the first non-stop Trans-Atlantic Air Race, again sponsored by the London Daily Mail. Unlike the horsehide-clad aeronauts of air races of an earlier period, modern participants could travel in speed and comfort. Pilots no longer are carried over the intervening waters to their float planes on the shoulders of their ground crew or forced to wipe the engine oil from their goggles while peering around the petroleum covered windscreen of their open cockpits.

Nevertheless, Commander William D. Martin, stationed at NAS New York, was lured by the challenge of the race and \$12,000 in prize money and was determined to put some of the old thrill into the event. He entered in the category for the most meritorious, non-winning competitor showing originality and ingenuity of method.

Cdr. Martin, an amateur magician in his spare time, decided to use his sixth sense to navigate his way to and from a scheduled airliner, wearing a black hood over his head. This included finding his way down from the 86th floor of the Empire State Building, aboard a waiting motorcycle, then onto a helicopter for a short flight to JFK Airport. After the cross-ocean flight a similar sequence delivered him to the 33rd floor of the Post Office Tower in London.

The only mishap occurred during a trial run when Cdr. Martin's "brain waves" became disoriented between the motorcycle and the helicopter, and he stepped off the edge of the landing area and fell 15 feet into the Hudson River. However, with undampened spirits, he turned in a time of 7 hours, 20 minutes, 10.7 seconds in the smooth-running actual competition. Unfortunately, later in the week, the tailwinds picked up, and a one-legged man flying solo won the race in that category.



CDR. MARTIN dashes from the Empire State Building, beginning Trans-Atlantic race.

"FORTY-THREE YEARS is long enough, I'm going to take it easy for awhile." So said W. H. "Joe" Bush, on retiring as a technical representative of Curtiss-Wright Aeronautical Corporation at NAS Corpus Christi, Tex. Bush got his start in aviation when he joined the Navy in 1919. He served aboard USS Langley (CV-1), the Navy's first aircraft carrier, the seaplane tender USS Wright (AV-1) and Scouting Plane Squadron One. In 1923 he was the mechanic for the first U.S. Navy seaplane to win the Schneider Trophy Race, a Curtiss CR-3, a racy looking biplane with twin pontoons and a liquid-cooled Curtiss V-12 engine. The Navy plane, piloted by Lt. David Rittenhouse, not only won the race but set a new world record for seaplanes with a scorching 169.89 mph.

On leaving the Navy in 1926, Bush joined Wright Aeronautical where he continued to assist the Navy by working out some of the bugs in the early power plants which were used in many of the WW II aircraft. Later he served in field assignments with U.S. forces around the globe.

NA News is grateful to Mr. Bush for allowing us access to his many fine photographs of Navy racers which have been extremely useful in this month's feature article.

For the Birds. The term, bird farm, though somewhat depreciatory, took on a more literal meaning for two carriers recently. While cruising on Yankee Station, USS *Ranger* took aboard an owl which managed to land and descend to the hangar deck unnoticed before being captured by AMS2 Michael Williams. The new crew member was presented to Commander Clifford E. Thompson, commanding officer of the *Hooters* of RVAH-9, and enlisted as an airman apprentice. His only comment has been "peep."

USS *Wasp*, on station in the North Atlantic, intercepted its bird on the flight deck immediately following a perfect two-point landing. On inspection by his captors, the pigeon was found to be carrying a message from USS *Voge* (DE-1047), operating some 50 miles away, giving the ship's position and asking that the finder send his location. Captain S. M. Cooley, commanding officer of *Wasp*, obliged, adding that the bird could not be American because he lacked the stamina to make dry land and the good sense to properly use the arresting gear provided. The pigeon was last seen enjoying an exotic repast from the mess deck's trash and garbage detail.

A PLAYFUL PHANTOM PINK PAINTER caught the imagination of all hands at NAS Point Mugu when a formerly gray Cadillac was found—painted pink!

Security investigated the incident and discovered that the Cadillac was owned by Captain J. R. Foster, C. O. of Air Test and Evaluation Squadron Four.

The car formerly boasted a gray color with blue stars and a red tail, resembling an F-4. But not any longer. It's pink now, painted and plastered with white stars, and the Pinkertons are pantingly pursuing the playful painters. Doubtless, the *Tigers* of VX-4 would be receptive to further details.



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GRAMPAW PETTIBONE

Compound Emergency

The lieutenant was scheduled to give the lieutenant commander his annual NATOPS evaluation flight as aircraft commander in the S-2D *Tracker*. Owing to the nature of the mission, the briefing, preflight of the aircraft and cockpit checks were very thorough.

Receiving IFR clearance and departure instructions, they began their takeoff. Liftoff was at 105 knots. One to three seconds later, the pilot experienced a swerve to starboard and was immediately notified by the copilot that they had lost the right engine which was auto-feathering. Being primed for a possible NATOPS simulated engine failure, the pilot believed at first that he was facing a drill and, rather than abort his takeoff, retracted the landing gear and climbed out straight ahead.

The lieutenant inspected the engine for any sign of fire. Seeing none and noting that no fire warning light was on, he was authorized by the pilot to actuate the fuel dump switch. He then switched the UHF radio to tower fre-



quency and announced their intention to turn downwind for immediate landing. As he looked back at the engine, orange-yellow flames were suddenly seen coming from the bottom of the engine nacelle. He announced to the pilot that they were on fire only to discover that the ICS had failed. Shouting to the pilot above the noise, he se-

cured the fuel dump and activated the hydraulic, oil and fuel emergency cut-off switches.

Meanwhile the pilot, experiencing a smooth, increasing swerve to starboard, was having extreme difficulty maintaining directional control of the aircraft. With all available rudder applied, the ball was still fully out to the left. The aircraft would not turn to the left without a reduction in power on the good engine. At 400 feet and 105 knots, things became critical, but the pilot continued to nurse the aircraft toward the runway.

Approaching the 90° position, the landing gear handle was lowered, but the gear failed to come out of the wheel wells. The lieutenant commander immediately attempted to lower the gear, using the emergency system, with no success. When it became apparent that the wheels would not extend, he elected to execute a waveoff.

Shortly thereafter, the copilot was finally able to get the word to him that the starboard engine was in fact on fire. Because of the excessive noise and lack of an ICS, this was the first time that the pilot realized that he was confronted with an inflight fire.

Since it was now too late to land the plane on this approach, a turn downwind was initiated. They quickly decided to land on the next pass, regardless. The wide, easy turn was continued at low altitude with less than full power on the left engine. Throughout the approach, witnesses observed large portions of the aircraft falling from the starboard engine nacelle. The aircraft touched down on the centerline of the runway with the starboard engine feathered and with the port main mount up, the starboard one trailing. It skidded 1,900 feet and came to a halt 40 feet left of the centerline.

A Coast Guard helicopter which was in the traffic pattern practicing GCA's



followed the burning *Tracker* around the pattern. As soon as it halted on the runway, the pilot positioned his chopper in such a way that the down wash blew the flames away from the cockpit, allowing both pilots to exit through the overhead hatches without injury. Damage to the starboard engine nacelle and wing was classified as beyond repair.



Grampaw Pettibone says:

Egads, lads! My knees still feel a little weak after that'un. Quite a bit of luck saved the day for those two. (Another S-2 engine fire which has occurred since then was not so fortunate. The wing burned in two in flight.)

Not only did these guys lose the engine, they also had a fire, which caused not only a complete electrical failure but also a complete hydraulic failure. The rudder boost had been lost as well as the ability to secure the fuel, oil, hydraulic shut-offs. The only possible solution was to get on deck immediately or bail out. The key point is that the pilot at the controls didn't know about the fire soon enough to take the correct course of action. Maybe we should install a more positive means of communications. Think the gossport'll make a comeback?

Quick Exit

The *Skywarrior* was returning from a routine four-hour mission to a European air base with seven crewmen on board. Radar vectors were received to intercept GCA final approach course. Descent from their cruise altitude of 39,000 feet was made at 5 to 6,000 feet per minute with a short pause at 23,000 feet. The landing gear and flaps were lowered at 2,700 feet.

Shortly after the EA-3B started down the glide path, it began a rather rapid pitch up which quickly became completely uncontrollable. As the nose of the *Skywarrior* reached 30° up, the pilot ordered a bailout.

Although the crew was taken completely by surprise, execution of the command was initiated immediately. The navigator blew open the escape chute, and the five aft crewmen followed each other out like clockwork, encountering only minor difficulties.

The pilot meanwhile was able to roll the plane into a left wing-over and regained response to yoke pressure. He called, "Hold it" over the interphone, but the men had already unplugged



their headsets. He then grabbed the navigator by the arm who, in turn, tried unsuccessfully to restrain the last crewman from plunging out the hatch. The navigator returned to his seat while the pilot completed a pullout at about 800 feet above the ground.

Two of the bailed-out crew received minor injuries upon landing in trees 100 to 150 feet tall. The pilot and navigator landed their undamaged craft a few minutes later at the air base.



Grampaw Pettibone says:

Those aviators were really cookin' with gas — on the front burner. The only chance they had for survival in that bird, if it hadn't recovered, was to have done exactly as they did and as quickly as they did it. A tip o' the hat to a professional air crew.

A bucket o' mud to the maintenance crew and supervisory authority which let that *Skywarrior* be sent on a mission with improperly rigged wing slats, seized needle bearings and dirty slat tracks. A malfunction of the slats on the A-3 will do it every time. It could well be the cause of many unexplained losses of planes and crews.

Well, You See, Sir. . .

The UH-1 *Iroquois* helicopter slipped in and landed almost unnoticed at the outlying airfield. The only person aboard was the young pilot who climbed out and hurried away

from the bird while it was still running. An instant later, the helicopter was observed approximately two feet off the ground and spinning rapidly, counterclockwise. The pilot ducked just in time to avoid being decapitated by the tail rotor as it passed over him. He quickly turned and began running around the machine in the same direction it was rotating. After about one revolution, the frantic airman managed to scramble aboard the right front doorway of the still twirling helo, standing with his feet on the floor and holding on to the top of the doorway with both hands.

Seconds later the bird descended to the ground still rotating. No damage was evident.

Five minutes later, the pilot stated, over the radio, that he knew what had happened and requested takeoff clearance. This was given and he immediately departed the area.



Grampaw Pettibone says:

Holy mackerel! Fetch me another aspirin tablet. The only thing which kept this hilarious story from being a tragedy is the fact that the guy got away with it. Wow! How close can you get?

Did you ever get out'a your car, not set the hand brake and have it start to roll down the street? Embarrassin', isn't it? One item would have prevented all this. **CHECKLIST!**



NAVAL AVIATION NEWS

Navy Helicopter Rescues Fifteen From a Disabled Tanker off Malta

The rescue of 15 people from a disabled Greek tanker off Malta was made possible by the skill and courage of the crew of a UH-2A *Seasprite*. On September 23 at 0930, Lt. J. D. Whelan, officer-in-charge of HC-4 Det. 48 on board the cruiser *Galveston*, received word that the Greek tanker *Angel Gabriel* had blown ashore in a storm and was breaking up in heavy seas. Helicopter assistance was needed to rescue the tanker's crew. The UH-2A crew left for Luga RAF Base where the helo had been parked for the duration of the ship's in-port period. After a preflight briefing, the helicopter flew to the scene of the wreck.

Several of the ship's crew could be seen, and the aircrewmembers signaled them to move aft.

AMS2 R. M. Sutton was lowered to the deck of the stricken ship to assist the people into the rescue sling. Hovering at approximately 100 feet above the ship, the helo ingested heavy spray into its engines. (The spray reached 50 feet above the helicopter.)

The *Seasprite* made two trips and on the second return trip to shore lost power on the approach. ADJ2 J. E. Meeker noticed the power loss and, seeing that the rescued personnel were not strapped in, flung himself on top of them in a "spread eagle" position in an effort to lessen the possibility of injury when the helo hit the ground. In what was described as "a perfect

auto-rotation" the helicopter landed just short of the landing area. The crew had rescued 15 persons, including a woman and child.

New Development in Intelligence JIFDATS Provides Instant Information

Military intelligence has made remarkable progress since the days of Paul Revere when a rider on a fast horse carried the news of enemy movements. Now U.S. armed forces are on the threshold of a significant technical advance in keeping tabs on enemy activity. NavAirSysCom has awarded Northrop Corporation, Palos Verdes, Calif., an engineering contract to develop a system which will make it possible for intelligence gathering aircraft to relay their information to a distant surface station with a minimal time delay.

The Navy is managing the program for all the services through its Joint Services In-Flight Data Transmission System (JIFDATS) office in the Naval Air Systems Command in Washington, D.C. JIFDATS will permit data collected by an aircraft to be processed in flight, transmitted and received at a distant ground station. Intelligence gathered by photographic, infra-red, laser camera and side-looking airborne radar will be transmitted day or night and in all types of weather. Information collected by radar, laser camera and infra-red sensor will be transmitted immediately.

Film exposed in the photographic camera will be developed within the aircraft and then scanned by a laser beam to generate a signal for transmission. The signals from all sensors will be converted to film images at the



THE FIRST A-6A Intruder ever to launch from and then return to an aircraft carrier at anchor is catapulted from the flight deck of USS *Saratoga* near the Greek island of Kefallinia in the Med. The historic "first" was made by Commander R. P. Bordone of VA-75.

surface station. This will make possible a quicker response against mobile and other targets of opportunity which often escape, at the present time, because of the time delay required to process intelligence and order a response after a reconnaissance aircraft has returned to its base. The value of this "instant intelligence" to a field commander can hardly be exaggerated.

Speed of transmission of photo images from film exposed in the photographic camera will depend upon the amount of detail required, ranging from about .5 inch to 1.5 inches of film per second processed and transmitted. A frame of exposed film can be developed in about 10 seconds.

The intelligence collecting aircraft will be able to transmit information 250 miles to a surface station or 500 miles via a relay aircraft with a minimum loss of quality.

Under the terms of the contract, Northrop is required to have a working laboratory system within a year and a working airborne system installed in an RF-4C within 18 months.

Lt. Col. Niesen Wins High Honor Is Named Marine Aviator of the Year

During the annual reunion of the First Marine Aviation Force Veterans' Association in San Francisco recently, Lieutenant Colonel Paul W. Niesen was named "Marine Aviator of the Year" and received the 1969 Alfred A. Cunningham Trophy. The trophy, named for the Marine Corps' first aviator and Naval Aviator No. 5, was awarded to Lt. Col. Niesen in recognition of his many contributions to Marine Aviation. He was instrumental in developing helicopter doctrine, tactics and techniques which enhanced the capability of the CH-46 *Sea Knight* while serving as commanding officer of HMS-161 in Quang Tri, Vietnam.

Lt. Col. Niesen earned the Silver Star when he rescued a reconnaissance team under attack by a numerically superior enemy and returned to the hostile landing zone leading an assault force of 16 helicopters.

Lt. Col. Niesen is currently assigned as Head, Air Assault Support Section at Headquarters, Marine Corps.

Point Mugu Gets Missile Trainer To Be Used with the F-14/Phoenix

The first *Phoenix* Missile System Trainer has been accepted by the Navy at the Pacific Missile Range, Point Mugu, Calif. Introducing a new dimension to Navy anti-air-warfare training, it was designed and built by the Hughes Aircraft Company, Culver City, Calif.

Phoenix is the advanced weapons control system being developed for use with the F-14A. It gives the Navy a tool for test, evaluation and deployment of the F-14A/*Phoenix* weapon system. In September, Hughes Aircraft began a 16-week training course in the use of the device.

Successful tests of *Phoenix* have been made at the Pacific Missile Range during the past several years. Twenty-one of the 26 planned R&D missiles have been fired in order to test every mode of the system.

Integration of the *Phoenix* system with the rest of the F-14A's avionics will be accomplished in a test program at the joint contractor/government System Integration Test Station.



GUESS WHAT? (SEE PAGE 26.)



RESPLENDENT in midnight blue, a small trim fighter came home to NAS North Island recently. The Ryan FR-1 Fireball, a late WW II aircraft, which is half-prop/half-jet, was returned to her original home, temporarily. The historic aircraft was presented to Captain Griffith P. Stokes, NAS C.O., by Colonel Owen Clarke, Director of the San Diego Aerospace Museum. The FR-1, which has been in storage at the Smithsonian Institution for over 20 years, will soon be put on exhibition at the San Diego Museum. The first squadron to be outfitted with the Fireballs was North Island-based VF-66, nicknamed the Firebirds, in March 1945.

ROARING RACERS

By Commander Ted Wilbur



NEWS LOOKS BACK

ON OCTOBER 9, 1919, the *Daily Aviation News Bulletin* began to follow the sporadic progress of the Marine Corps entry in the transcontinental Reliability and Endurance Test, the first of many subsequent competitions to be reported in the embryonic forebear of our present *News*:

Lt. Newman and Capt. Page left Mineola at 11:59-54, and have reached Buffalo. There were eleven contestants ahead of them.

OF THE TWENTIES



CR-3 PAINTING COURTESY THE AEROMODELLER

First Lieutenant G. B. Newman, and Captain A. H. Page had entered the two-way, coast-to-coast race in an Army furnished DH-4. They departed Long Island 35th in a field of 48 starters.

Oct. 11—Lt. Newman and Capt. Page left Buffalo at 8 o'clock. A terrific storm was encountered over the lake. They arrived at Cleveland at 11 o'clock with barely enough fuel to reach the field.

Oct. 12—The following telegram was received yesterday from the Marine Corps entrants in the transcontinental race: LEFT CLEVELAND IN STRONG GALE, BUT DECIDED

TO PUSH ON; FLEW THROUGH SEVERAL STORMS ALL THE WAY TO CHICAGO; LANDED ON BALL PARK AND BROKE SHOCK ABSORBER; ONLY ONE OF SIX LEAVING CLEVELAND THIS MORNING TO REACH CHICAGO; READY TO LEAVE IN MORNING.

Things went better for a few days and Lt. Newman had moved up to eighth place overall when:

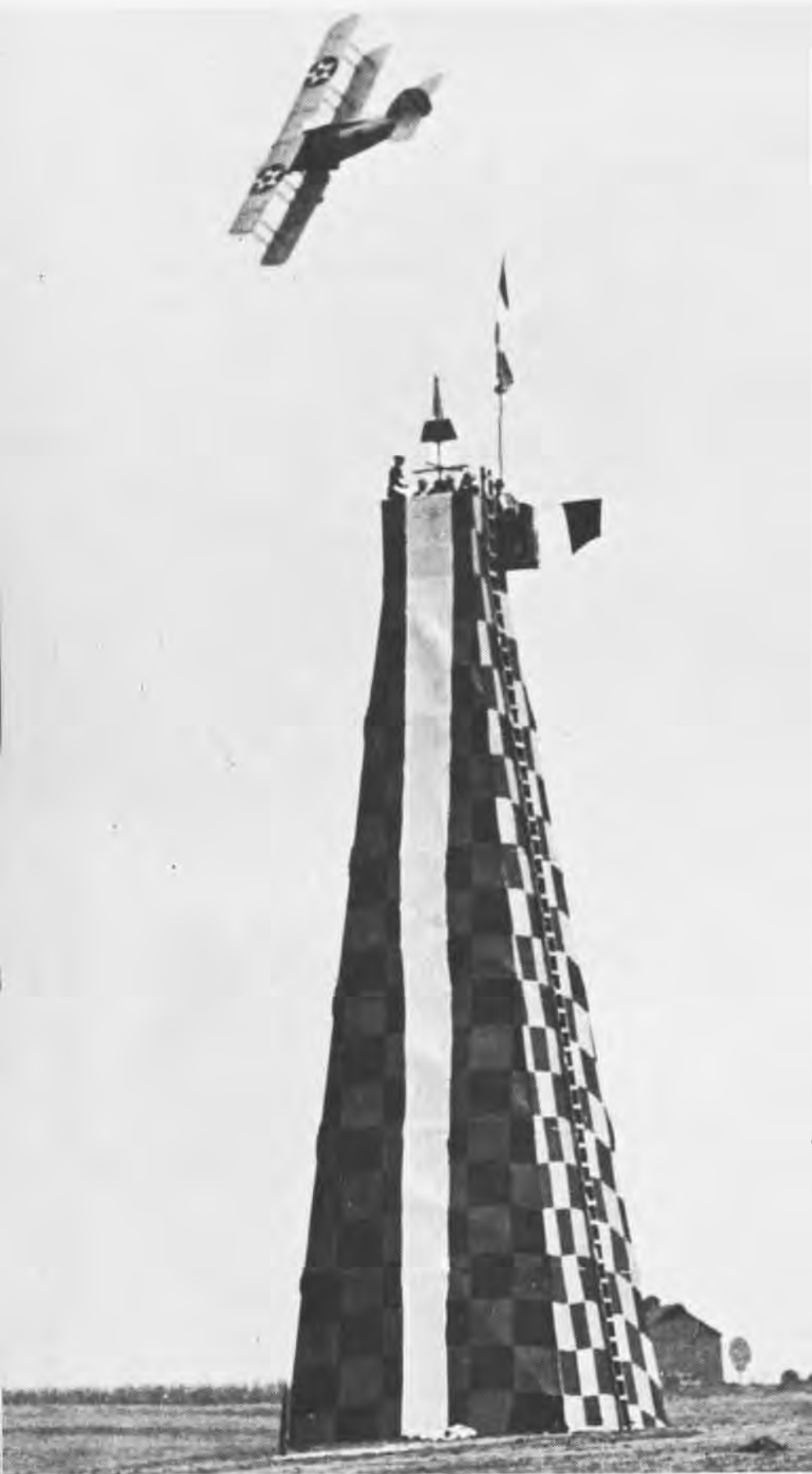
Oct. 16—Lt. Newman was forced to land ten miles from Salduro, Utah [a control station in the Great Salt Desert]. Mud and rain increased difficulties in getting out, but he expects to be on his way within the allotted time, two days.

Oct. 17—Lt. Newman has his plane out of the mud and partly repaired. He expects to arrive in Salduro today and continue the trip to San Francisco.

Oct. 21—Lt. Newman arrived in San Francisco around noon.

Lt. Newman's flying time was 31 hours. Of the 26 aircraft arriving at San Francisco, his was 23rd. Of the 15 planes starting back to New York, seven arrived. Of the 54 accidents that occurred, seven resulted in fatalities to one or more of the occupants. Both Lt. Newman and Capt. Page were destined to die of injuries sustained in airplane crashes: Lt. Newman as a test pilot and Capt. Page at the National Air Races.

CONTINUED



RACING in the early days of powered flight had a far more functional purpose than pure public and pilot stimulation. High-speed flying was not merely a spectacular affair; the design and construction of the machine provided a mission for some of the best brains in the world of science and aviation: to find solutions to problems of future aeronautical development.

The 1912 international seaplane races at Monaco served to focus attention on a type of aircraft which could use the sea as a base of operations. From this early competition, which demonstrated the technical inferiority of waterborne planes to their land-based contemporaries, evolved the Schneider Trophy Races — international speed contests for seaplanes, the first of which took place in 1913.

Of all aeronautical competitions, the Schneider Trophy was undoubtedly the most enthralling of its time. The pursuit of speed had a peculiar fascination and the Schneider was regarded as the blue riband of the air. Rich in precepts and technical improvements, the Trophy responded handsomely to the wish of its founder, Jacques Schneider: a source of friendly rivalry between nations, a cause for heroism and sacrifice.

With hindsight, the true value of that remarkable series of competitions is apparent. Lessons learned from the speed contests of the Twenties were applied to the fighter designs of the Thirties and combat aircraft of WW II.

Noted Naval aircraft designer and constructor Dr. Jerome C. Hunsaker recalled that after the end of the first World War he proposed, as a means to stimulate high-speed fighter design, that the Bureau of Aeronautics try to bring the Schneider Trophy to America.

LT. G. B. HALL, USMC, in Vought UO-1 turns pylon at Lambert Field, St. Louis, in 1923 Liberty Engine Builder's Race. Lt. Hall placed fourth in the popular event.



MB-7



18-T



CR-1



BR-1



NW-1



NW-2



F2W



XF6C-6

EARLY NAVY RACERS

MB-7, ungainly Thomas-Morse racer, powered by 330-hp Wright H-3 engines, was USMC entry in 1922 Pulitzer.

18-T Curtiss "Wasp" triplane was WW I design powered by engines up to 450 hp, raced in both land and seaplane configurations, competed in Pulitzer, Curtiss Marine and Liberty Engine Builders Trophy Race.

CR-1 clean 400-hp Curtiss biplane was forerunner of line of successful high-speed designs, shown here with Lt. Harold Brow at 1922 Pulitzer race in Detroit.

BR-1 "Bee-Line" monoplane built by Aerial Engineering Corp. was flown in 1922 Pulitzer.

NW-1 Navy-Wright "Mystery" ship was sesquiplane mounting 650-hp Wright T-2 engine.

NW-2 was rebuilt NW-1, crashed during trials for 1923 Schneider Trophy Race.

F2W was prepared for abortive 1924 Schneider Race, could not compete with faster Curtiss planes in 1925.

XF6C-6 700-hp Curtiss "Hawk" was fast, powerful craft in which Capt. Page lost his life in 1930 National Air Races. Page was well in lead for Thompson Trophy when apparently overcome by carbon monoxide.

"Then we did take it from the British at Cowes (1923) with a radical design of plane and engine which profoundly modified future progress. At Baltimore (1925), we won again; and later the Italians took it only to lose it to the British. The original Trophy challenger made for the Navy by Curtiss introduced the thin wing, surface radiator and a small-displacement liquid-cooled engine of high revolutions. This plane and engine became the basis for later fighter designs, although the U.S. dropped out of international competition.

"However," continued Dr. Hunsaker, "the British were awakened.

They took the Curtiss D-12 engine to England, which stimulated Rolls-Royce to redesign their engine. The work culminated in the Merlin engine. The U. S. Navy Schneider Trophy airplane was the legitimate grandparent of the *Spitfire* and its Merlin engine."

To a post-World War I public, resistant to the seemingly dubious proposition of spending large sums of money necessary for the expensive pursuit of aircraft development, racing provided a means of satisfying both the sporting-blooded citizen and the visionary engineer. Financiers, newspaper publishers and wealthy individuals added welcome monetary and

prestigious inducements to the participants, but it was apparent that successful competition and the distinctive status of *winning* could only be achieved through government organization and backing. As for the pilots themselves, the desire to be *first* was sufficient.

Up through the mid-Twenties, U.S. Navy racing planes and pilots were prominent in major trophy competitions. Newspaperman Ralph Pulitzer sponsored a series of races which were inaugurated at Mitchel Field in November 1920. In a mixed bag which included such diverse types as the DH-4, a Thomas-Morse MB-3, Italian

BLAZING A TRAIL OF RACING SUCCESSES
UP THROUGH THE MID-TWENTIES
AMERICA MOVED TO THE FOREFRONT
OF HIGH-SPEED AIRCRAFT DEVELOPMENT.
THEN, IN 1925, GOVERNMENT SUPPORT VANISHED

SVA's, a French Morane-Saulnier, the British SE-5 and the American Verville-Packard, the U.S. Navy entry, a Vought VE-7, placed fifth overall but was first in its class. The next year civilian pilot Bert Acosta flew a Navy Curtiss R-1 to first place. In 1922, Curtiss racers swept the field and, in 1923, Navy planes and pilots took the first four places in the Pulitzer events and first and second in the Schneider Trophy Race.

In November of that year, Navy Lieutenants Alford J. Williams and Harold J. Brow took turns raising the world speed record. With diving starts from altitude, they flew their Curtiss racers over a 3-kilometer course at Mitchel Field until, on complaint of the base commander, the Secretary of War called a halt to the dangerous duel.

Lack of challengers to the Navy machines for the 1924 Schneider Race cancelled the contest, but they were back in force the following year. The Curtiss planes won both the Pulitzer and Schneider in 1925.

Then suddenly, government support was withdrawn. The Pulitzer vanished and 1926 saw the last of the Curtiss racers in the Schneider event. Valiant efforts by Lt. Williams to personally carry the flag with the Kirkham plane in 1927 and with the Mercury racer in 1929 met with bitter failure. The tide had turned and the international arena was left to the French, English and Italians.

Lt. Harold Brow and Ltjg. Alford Williams with R2C at 1923 St. Louis Pulitzer Race. Note flush wing radiators. At right, Williams starts takeoff run, placed first in event, Brow came in second.





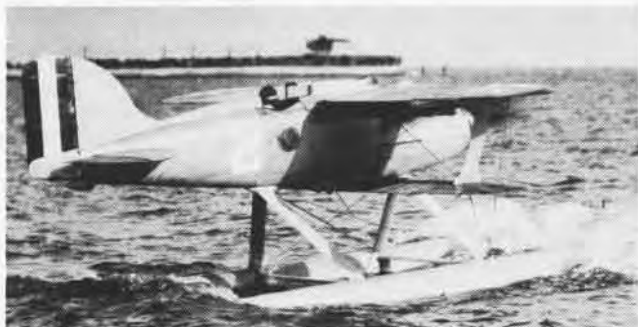
T4M turns pylon at NAS Anacostia, D.C.



Lt. Irvine and CR-3 raced in England.



Curtiss R3C-4, above, is readied for 1926 Schneider Trophy Race at Hampton Roads, Va. Lt. George Cuddihy, pilot, raced the year before in Baltimore Schneider, right. Well-flown victory went to Italian team in 1926, the final year of Navy participation in the international speed contest.



Sailor observes T3M from vantage point.

THE HEROIC EFFORTS OF ONE MAN, OPERATING ALMOST SINGLE-HANDEDLY, WERE INSUFFICIENT TO COMPETE WITH THE RESOURCES OF NATIONS. BUT LT. AL WILLIAMS TRIED.



KIRKHAM-WILLIAMS racer, above, was privately sponsored 1927 venture of Al Williams in effort to win permanent possession of the Schneider Trophy for America. Built by Kirkham Products on Long Island, the plane, originally configured as a seaplane, was powered by 24-cylinder Packard X engine developing 1,250 hp.

Craft was not ready in time for Schneider, was flown as land-plane to unofficial speed record of 322 mph. Mercury racer, opposite page, was 1929 effort of Williams to keep the U.S. in the running. The monoplane was built at the Naval Aircraft Factory, Philadelphia; overweight, reportedly flew only one time.

Williams' "Mercury" on the move . . .



. . . spray problems



. . . another bent propeller



BY EARLY 1931, the Navy Department was under fire. Well publicized foreign racing achievements, coupled with the lack of an American entry in the upcoming Schneider, nurtured an attitude probably best exemplified by a letter to the Assistant Secretary of the Navy for Aeronautics, David S. Ingalls, from Representative Fiorella H. La Guardia of New York. La Guardia, an aviator in World War I and eventually one of New York City's most dynamic mayors, was characteristically direct in his questions about the state of aeronautic affairs.

Ingalls, who also happened to be the Navy's first ace (*NA News*, September '68) was equally forthright in his reply.

Q. Can you inform me why it is that the governments of England, France and Italy have developed higher speed seaplanes than we have been able to?

Ingalls noted a false premise: That the government had made a recent serious and earnest effort to compete with the high-speed seaplanes of those countries. Not true. When the government, particularly through the Navy, had competed, it won the Schneider Cup Race. But since 1925, the Navy Department had found it impossible to continue in any kind of a racing program with the appropriations at hand. Under a mandate of Congress to complete and maintain a five-year program of building up and maintaining 1,000

airplanes and two large airships, it had been necessary to limit experimental costs. High-speed plane development was estimated at \$220,000.

Q. I would like to be informed also why it is that with the millions we have appropriated we have not one ship fit or capable to enter in the International Schneider Cup.

No funds had been appropriated for the construction of a Schneider Race entry. The millions appropriated had been devoted to development of a naval aerial fighting force second to no other in the world. Ingalls quoted a statement made by England's Lord Beatty the year before:

The Navy [English] today is the most up-to-date and efficient navy in the world, except in one respect, and that is in its air equipment. The air wing of the U.S. Navy, owing to the single control exercised over the U.S. Navy, is far ahead of our Fleet Air Arm. They carry out exercises on a scale quite impossible in our fleet. Cooperation between their ship-borne and shore-based aircraft has reached a high state of efficiency; with us it is non-existent. (Statement made April 30, 1930.)

It was the Assistant Secretary's firm conviction that important though the development of high-speed seaplanes might be, it was not as important as providing the fighting air force as prescribed by Congress.

Q. What has happened to American Aviation since 1925?

Ingalls pointed out that, generally speaking, aviation had been developed and maintained to a greater extent in America than abroad. The military forces were well organized, equipped and manned: small perhaps, but at least affording an excellent groundwork which could readily be enlarged and strengthened in the event of war. Commercially, aviation had gone ahead until it surpassed that of other countries. The fact that foreigners had produced a few racing planes capable of higher speeds than domestic models was no more conclusive of our general aviation situation than the fact that the British had built and driven an automobile at a speed far greater than that of American cars was indicative of the general automobile industry in America.

Q. I would also like to know if the Navy has now a plane of sufficient speed to enter the next Schneider Race.

There was no such plane.

Q. If not, is the Department able to obtain such a ship if appropriations are made immediately available?

There would not be sufficient time to produce an adequate machine for the next Schneider Cup Race. The Navy had been out of racing for five years; construction of a craft capable of competitive speed would require development of both plane and engine almost from the ground up, a matter of many months.

'Leadership can be lost by stopping . . .

IN 1931, the British permanently won the Schneider Cup Trophy which, according to the rules, would go to the first three-time victor out of five consecutive tries. It is interesting to note that the United States could have qualified for permanent possession, had it desired, in 1925. Lt. David Rittenhouse won in 1923 in a Curtiss CR-3. In 1924, American entries were unchallenged. The United States won again the next year, but in true sporting fashion declared the 1924 event "no contest." The situation was parallel in 1931 when the British found themselves alone on the course. They elected to declare a "win" and added it to their previous two. Had they not, the future development of high-speed seaplanes might have been even more provocative, especially in the light of forthcoming Italian concepts.

The British situation prior to the 1931 race was similar in another way. Great Britain, too, felt that the cost of further participation had become prohibitive. The need for national economy was such that the British government did not feel justified in meeting the cost of defending the Trophy further. The circumstances are obscure to us now, but only through the generosity of a private individual was preparation of suitable British aircraft made possible.

Dame Fanny Lucy Houston, described as a philanthropist and eccentric, whose third husband had bequeathed to her four-fifths of a sizeable fortune, guaranteed the personal expenditure of 100,000 pounds to insure that the Supermarines flew. This patriotic action enabled Great Britain to go into the 1931 contest with a fully representative team to uphold British prestige. It is regrettable that Lady Houston had no American counterpart.

The early races had served their purpose. Perhaps Navy withdrawal

from official competition was a keen disappointment to many — especially men like Al Williams who felt compelled to continue on his own — but the lessons had been learned. They were best summarized by Commander Paul E. Garber in 1946, writing in respect to the Schneider Cup.*

"The Schneider Trophy contests exerted a powerful stimulus to high-speed seaplane design and were an important influence on military types. The effect on the first world war was hardly felt because hostilities opened before any outstanding type had been developed, but for the period between the two wars, the effect on design trends was marked. The Curtiss racers influenced military designs for at least a decade.

"Engineers eagerly watched the efforts of rivals, not only to take advantage of promising developments in construction of their own racers but also to incorporate advanced ideas into their warplanes. Great secrecy was maintained, up to the day of the race, to guard the features which were counted on to give supremacy. Probably one of the subtle reasons for the discontinuance of the contests was to bring to a close these opportunities for revealing a nation's most prized military secrets to its potential enemies, who were even then girding their loins for the expected encounter. In this connection, it is significant that Germany and Russia did not enter these contests, where engineers with their slide rules were almost as prominent as the timers with their stopwatches. The reason given out officially, not only by the United States when it retired from this competition, but also by England when the resumption of the contests was proposed, was that the expense of preparing these highly specialized

craft caused a serious inroad into the funds allocated for military planes and reduced the numbers of service craft which could be manufactured for the annual quotas.

"Looking back on the individual efforts of the competing nations, there are several striking and significant facts apparent. From the viewpoint of U.S. Naval Aviation, our outstanding accomplishment was in 1923 when we demonstrated the great superiority of the racers which had been developed in the Pulitzer contests. Other nations eagerly adopted from them such features as the wing radiators, powerful engines, metal propellers, high-speed airfoils and elimination of parasitic resistance. Much of our leadership at that period could be attributed to the impetus of our war efforts. Subsequently we saw to our chagrin that we could not rest on our oars and, although the Curtiss racer type maintained its leadership through 1924 and 1925, it was surpassed in 1926 by the Italians who had eagerly copied the best features not only of our planes but also those of the British. Everyone admired the patriotic effort of Lt. Williams who tried to keep our nation in the running in 1927 but who, by his heroic failure, demonstrated that one man, operating almost single-handedly, could not compete with the resources of nations.

"The French efforts were persistent but unavailing; their forced landings were often due to last minute hard luck which, of itself, could perhaps be traced to failure to pay strict attention to little details. This emphasizes the truth that success comes only when all possible sources of fault are eliminated.

"The Italians were doggedly unceasing in their wish to acquire the Trophy, and, particularly toward the close, brought out designs which were ingenious and radical, often embodying features whose merit later was ac-

* Dr. Garber is now Historian Emeritus of the National Air and Space Museum, Smithsonian Institution.

for in that period others more

progressive will overtake us.'

knowledge. Their winning of the world speed record in 1934 can be attributed to the background of skill in design and construction which they had acquired through their Schneider entries.

"The final series of wins by England, resulting in permanent possession of the Trophy, was the logical result of her determination and planning. This was manifest not only in the constant improvement of her planes and engines but also in the establishment of a school in which her racing pilots were perfected in the many details of stamina and skill which must be mastered in order to fly high-speed craft. The dividends were not limited to retention of the Trophy; but just as Wellington had said a century before that the battle of Waterloo had been won on the playing fields of Eton, so could England attribute the excellence of her fighting planes in World War II to the basic design work of the Schneider entries.

"The lessons to be learned are of permanent value: leadership can be lost by stopping, even momentarily, to admire what has been done, for in that period, others, more progressive, will overtake us. Lost ground cannot be regained by last minute sporadic efforts. The inherent excellence of wings and engine can be frustrated by careless assembly and the failure of a loose bolt or a faulty wire. Success comes as the logical result of steady scientific progress."

Thus, while the glamor, color and adventure of the early Navy racers may now represent to some only a fond memory of an exciting past, the same underlying stimulations of the Pulitzer, Schneider, Curtiss-Marine and other Trophy competitions may yet be found today in an examination of our current motivations. Whether in reminiscence of the Schneider events or in consideration of the manned space program, Dr. Garber's summary offers equal validity.



Lady Houston, whose generous gift of 100,000 pounds to the Royal Aero Club made British victory in the Schneider possible.



Supermarine S-6B



Bold Italian concepts found form in such unorthodox designs as the 1929 Piaggio P7, top, a combination boat and aircraft. Small rear propeller provided sufficient thrust for hydrofoil-finned fuselage nose to rise clear of water as 1,000 hp was applied to front propeller. Aircraft never flew. Macchi MC-72, below, attained 440 mph in October 1934 for world speed record.

CONTINUED

Small Aviation

NEWS LOOKS BACK ON EARLY RACERS

Wright F2W-2, a promising contender for the 1924 Schneider, was seaplane conversion of 1923 Pulitzer land-based racer. It crashed while undergoing tests.



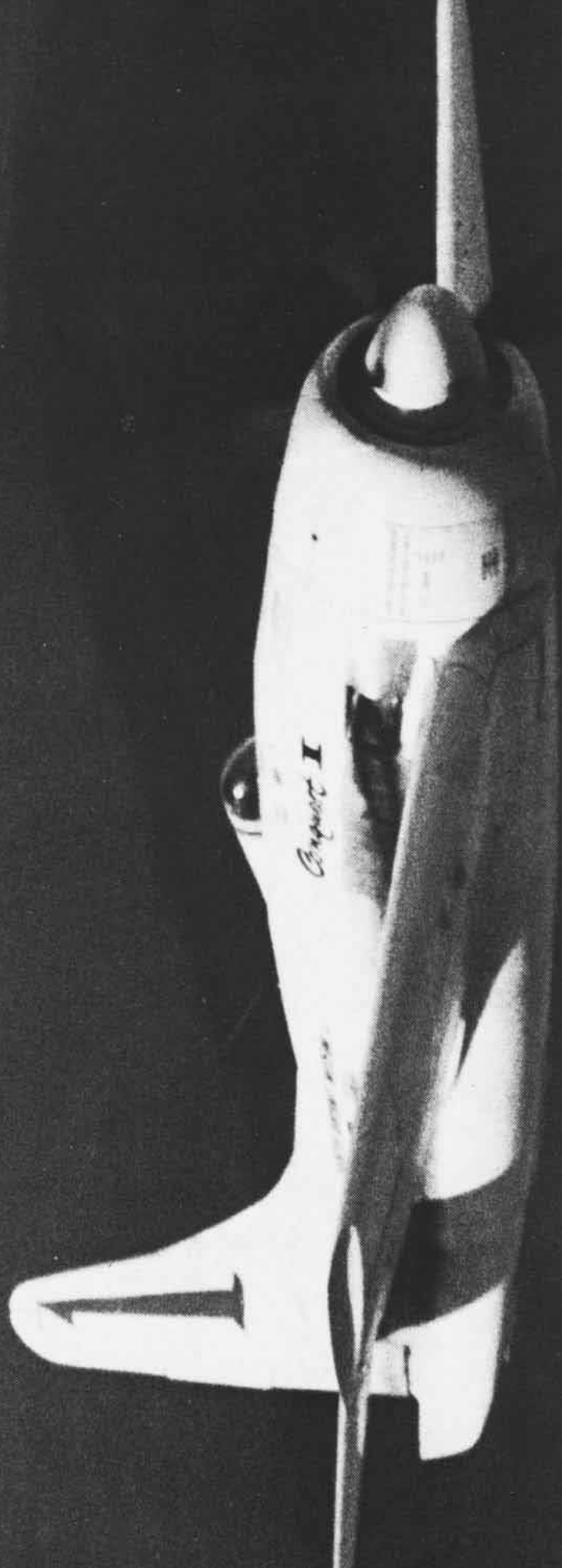


Lt. Harold Brow, above, with classic CR-2 of 1922 Pulitzer Race. On opposite page, Lt. Al Williams taxis the Mercury into the twilight of American Schneider ambitions. Frustration and controversy surrounded the 1929 effort after which Williams resigned from the service and the privately financed \$140,000 seaplane was purchased by the Navy Department for one dollar.



Curtiss R3C-2 flown by Lt. Ralph Ofstie, above, was one of two Navy entries in 1925 Schneider at Bay Shore Park, Md. The R3C-2's were powered by 565 hp. Curtiss V-1400 engines. Both Navy planes dropped out of the race prior to the finish, but Army Lt. Jimmy Doolittle went on to win (setting four new records in his R3C 2). It was the last American victory in international speed competition. England eventually won the trophy outright.

AND NOW...





A NEW AMERICAN RACING VICTORY

Shattering the 100-degree desert air on August 16, 1969, Darryl Greenamyer's modified Grumman F8F-2 Bearcat established a new world's speed record for piston-engined aircraft at an average of 483.041 mph. The ex-Navy fighter easily exceeded the 30-year-old absolute mark of 469.22 mph set by a German plane in April 1939 and the 1947 American record of 412.002 which was set by Jacqueline Cochran in a P-51 Mustang. Greenamyer, who had worked at smashing both records for more than five years, was clocked at speeds as high as 510 mph. Then, in September, he took the glossy white machine out for one final race before the Cat's retirement. Shown above, he thunders over the course at Reno as he wins the National Air Races for the fifth consecutive year, setting yet another world's record. At an average speed of 412.321 mph during the closed pylon race, he surpassed the 1947 mark of Captain Cook Cleland's 397.07 mph F2G Corsair.

Continued

A WORLD BEATER

Greenamyer accepts the accolades of his crew after winning the 1969 Reno National Air Races.

Below, the "Bearcat" as it appeared breaking the world's speed record for piston-engined aircraft.
—Photos by Ralph Emerson



On April 26, 1939, a young Luftwaffe test pilot named Fritz Wendel stepped into the Messerschmitt Me. 209V1 and proceeded to establish a new world's speed record for propeller-driven airplanes. Flying the volatile 4,000-pound racer back and forth over the three-kilometer course at less than 300 feet, Wendel achieved 469.22 mph, a speed made more incredible by the fact that for over 30 years no one seemed able to officially beat it. In spite of the significantly improved performance of piston-engined fighters during the course of World War II, Germany's 1939 record remained the ultimate statistic on the international ledger.

Perhaps the postwar emphasis on jet aircraft dampened enthusiasm which might otherwise have been channelled towards surpassing Wendel's achievement. Over the years, a few private individuals harbored notions of upsetting the title, but it was eventually discovered that this was no easy proposition. Whereas the German record was the result of an all-out governmental effort culminating in the design and construction of a new and unique aircraft, the money and man-

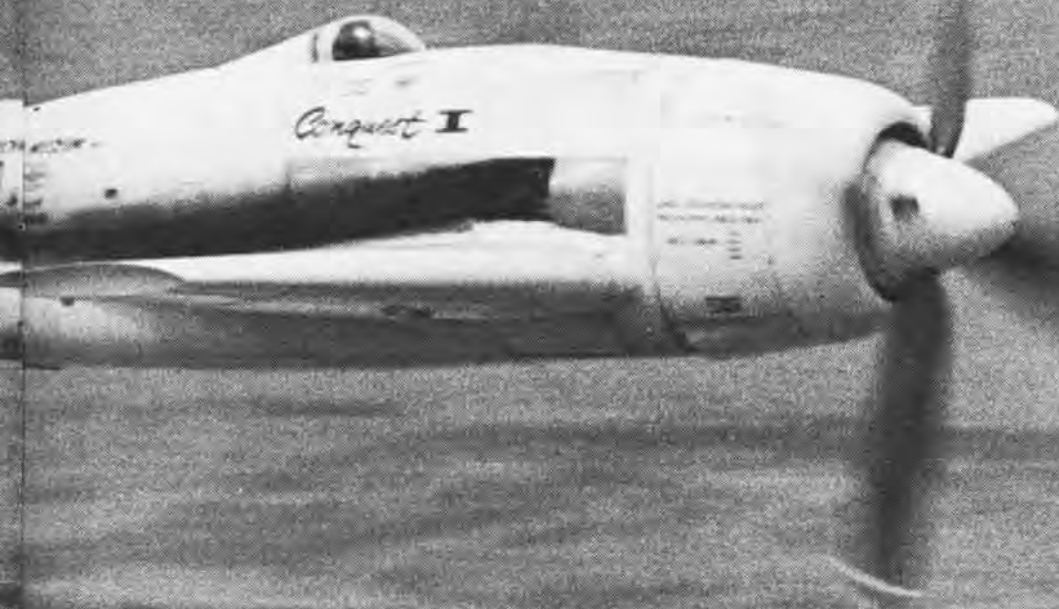
power required for an adequate challenge along similar lines was now prohibitive, if not unwanted, from a corporate standpoint. If anyone wanted to bring the honor back to America, the only chance lay in modifying an existing prop fighter. This was tried — with little success.

Then Mr. Darryl G. Greenamyer bought a *Bearcat* and took a long hard look at it.

Greenamyer, a Lockheed test pilot at Edwards AFB, had acquired an ex-VF-62 F8F-2 (BuNo 121646), one of the last of the production Grumman *Bearcats*. After a few weight-saving modifications, Greenamyer placed fourth in the 1964 Reno National Air Races, his *Cat's* first time out in serious competition. Then he really went to work. With the help of a handful of friends, most of them Lockheed employees, Greenamyer had the Navy fighter's wingspan reduced to 28 feet and fitted with special low-drag wing tips. The hydraulic system was removed and the flaps sealed off. A tiny *Cosmic Wind* bubble canopy was installed over the cockpit which was now lined with heat-reducing fiberglass. The wing root oil coolers

were replaced by a liquid submergence system behind the pilot's seat. A 13½-foot A-1 *Skyraider* propeller, capped with a P-51 *Mustang* spinner, was fastened to an AJ *Savage* reduction gearbox mounted on the Pratt & Whitney R-2800-34W engine, from which, among other things, the original three-stage, high-altitude supercharger had been amputated. Special fuels were examined, some rated over 180 octane. With water injection (ADI) the horsepower could now exceed 3,100. Drag reducing skin filler was applied wherever necessary. The plane was





JIM LARSEN

painted with white epoxy and Greenamymer was ready to roll.

In 1965 the *Cat* was back at Reno and from then on, never placed less than first in the National Air Races. The world's record attempt, however, was met with a series of frustrations and failures compounded by the constant need for more money. On one occasion the P&W seized and had to be replaced. When considering that a stock R-2800 can cost about \$10,000, Greenamymer's problems become more apparent. Fortunately, he had friends, but it was not until the summer of this

year that everything seemed right.

On August 16, the shiny white *Cat*, now named *Conquest I* and sporting an American flag on her vertical fin, was wheeled into position on a runway at Edwards AFB. The day was hot enough to thin the air to Greenamymer's liking, and he took off on his mission with a feeling of confidence. Keeping the nose high to provide ground clearance for the huge propeller, he blew up the gear on the one-shot nitrogen system (gravity would bring it down for landing) and quickly accelerated out to position for the first run. Within a few minutes, he established, to the satisfaction of the FAI official timers, an average speed of 483.041 mph, flashing over the 1.86 mile course in four passes.

Later, Greenamymer chalked up his fifth consecutive Reno win and the *Cat* was retired to a museum.

Well, now that Greenamymer is "top cat," we see that someone is out to do him in. Being prepared for an assault on the new record is — what else? — another *Bearcat*. Only this one has an R-3350 (from a *Skyraider*) under the cowl, driving a DC-7 propeller. Its name? The *Able Cat*, of course.

AL CHUTE



Comparison of the "new" and the "old" shows some of the obvious refinements Greenamymer made to the wartime Grumman design. Though now less agile and far more uncomfortable, the 24-year-old "Bearcat" brought home the bacon.



The plane to beat, opposite page, was the diminutive 1939 German racer erroneously referred to as the Me. 109R. It was touted as a version of the Luftwaffe's first-line fighter and the scheme succeeded in startling the aviation world. Actually it was a special design of 1,400 hp and suited only to its propaganda mission. Other models such as the Me. 209V3, above, lacked features necessary for the fighter role.

QUIET WARRIOR



JOC JAMES JOHNSTON

Vice Admiral Thomas F. Connolly, Deputy Chief of Naval Operations (Air), last month received the National Aviation Club Award for Achievement in ceremonies at the club's Washington, D.C., headquarters.

The prestigious award is selectively presented by the NAC, a non-profit organization of individuals affiliated with aerospace and aviation. Admiral Connolly is the third naval officer to receive the award since its establishment in 1956. Admiral Arthur W. Radford was honored in May 1956 and Vice Admiral William S. Rayborn in February 1961.

Among other recipients of the award are: General James H. Doolittle, Captain Edward V. Rickenbacker, General Curtis M. LeMay, actor Jimmy Stewart (an Air Force Reserve general officer), Milton Caniff (creator of the "Steve Canyon" syndicated cartoon strip), Senator Barry Goldwater and Astronauts Frank Borman and Edward White II.

There is no schedule for NAC award presentations. Rather, they are given whenever the committee finds a nominee who meets the criteria.

NAC President, George J. McTigue, presented the award "...in recogni-

'Nothing in the world can take the place of persistence.'

tion of Admiral Connolly's contribution to Naval Aviation progress." NAC awards chairman, William V. Henzey, said the Admiral has achieved a place of unparalleled distinction in Naval Aviation.

"To the breadth of his talents and expertise, Admiral Connolly has contributed significantly to national aviation and space progress and to the safety of aviation in general," Henzey said.

Authorities in aviation circles hold Admiral Connolly as one of the country's most dynamic and resourceful Naval Aviators — one who has applied his talents toward a career devoted to the national aviation interest. Navy officials have regarded his experience in aviation engineering, aerospace development and flight safety as immeasurable tools in the operational effectiveness of Naval Air Power.

Accepting the award, Admiral Connolly quoted from President Calvin Coolidge when he said: "Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful business men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan 'press on' has solved and always will solve the problems of the human race."

Following the philosophy that "nothing succeeds like persistence" throughout his career, Admiral Connolly has not always done what was popular, but what he thought was correct — a characteristic which has contributed to the wide respect he has gained in aviation and government circles.

His multi-faceted career began in 1929 when he was appointed to the Naval Academy while attending UCLA. As a midshipman, he was a

member of the U.S. Olympic Gymnastic Team in 1932 and was awarded the Society of Cincinnati Sword for Excellence in modern languages. Upon graduation he was nominated for a Rhodes Scholarship.

He served two years aboard the cruiser USS *Cincinnati* before beginning flight training at NAS Pensacola. He was designated a Naval Aviator July 22, 1936. Since that time, he has flown 39 different aircraft types, including the F-111A and F-111B, thus becoming the only flag rank officer to fly both the Navy and Air Force versions of the controversial jet.

Admiral Connolly, therefore, was well prepared — both academically and professionally — to present a realistic evaluation of the F-111B. Determined to arrive at a solution to the need for a "fighter of the 1970's," he took every opportunity to implement the Navy's requirements and to include them in the F-111B program. As it developed, he was forthright in his appraisal of its virtues, but he also pinpointed the problems contingent upon its acceptance. As the constraints of the project multiplied, he sought alternatives and encouraged proposals which would produce a fighter capable of close-in combat and, at the same time, accommodate the Navy's need for a stand-off missile interceptor aircraft.

While stationed at NATC Patuxent River, Md., Admiral Connolly was instrumental in establishing the Navy's Test Pilot School which now trains military, civilian and Allied test pilots, many of whom have become astronauts.

His work at the test center culminated in the book, "Airplane Aerodynamics," a practical approach to aerodynamic design, which he co-authored. Now in its fourth edition, it is a standard text in more than 70 universities.

Admiral Connolly's determination to develop a space program sensitive to Navy requirements resulted in significant additions to national security. His work on Project *Transit* gave the United States its first operational navigational satellite system. At a crucial time in the development and planning of the Pacific Missile Range, the Admiral assumed responsibility for the Navy effort in support of that vast undertaking.

As chairman of the Ad Hoc Committee on Astronautics, he prepared the complete and definitive study, "The Navy in the Space Age," which is a pertinent evaluation of man's latest step toward his destiny.

Admiral Connolly wears the Distinguished Flying Cross with two Gold Stars; the Air Medal with two Gold Stars; and the Legion of Merit with one Gold Star.

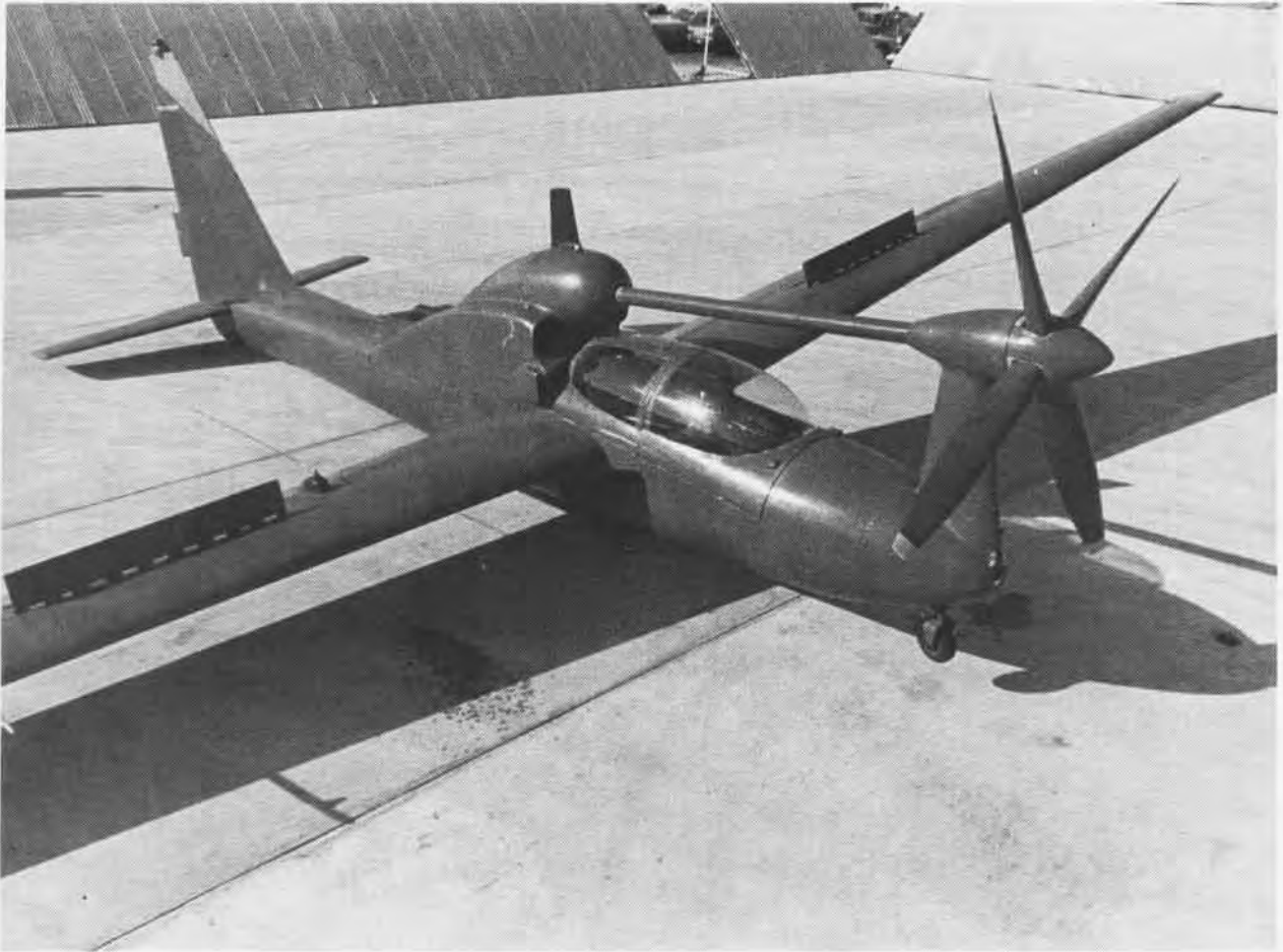
His first DFC came, when as commanding officer of VP-13, he led the first echelon of patrol bombers in a low-level night attack against Japanese forces on Wake Island. The citation reads in part: "Commander Connolly led his unit through intense anti-aircraft fire in pressing home a bold strafing and bombing strike at mast-head height against the strongly fortified Japanese base."

Admiral Connolly, known as a doer and a "man of action," has repeatedly put his career and reputation on the line to pursue what he believed to be right for the Nation.

During his three years as DCNO (Air), more new airplanes/weapons/equipments have been introduced into the fleet than in any other period.

In the face of constant pressures which accompany his position of tremendous responsibility, Vice Admiral Thomas F. Connolly has simply followed his life-long convictions.

"Nothing succeeds like persistence."



Spook

This is a QT-2PC II. Two of them recently arrived at the Naval Test Pilot School, NATC Patuxent River, Md., so the Navy could make a study of their overall flying qualities. The QT-2PC is a Lockheed-modified Schweitzer SGS 2-32 sailplane with a 100-hp. Continental reciprocating engine. Since the Test Pilot School now uses gliders in its basic curriculum, it was the most logical organization to evaluate the quiet airplane.





VAdm. Connolly displays Tailhooker of the Year Award. VF-154 won the "Fatha" award, right. The trophy, established by VF-121 last year, is rotated annually to the outstanding F-4 squadron. VF-121 determines the winner based on submitted scores.



Tailhookers Convene in Las Vegas

More than 2,000 Naval Aviators converged on Las Vegas, Nev., this year for the 13th Annual Tailhook Reunion. They shared marquee billing at the International Hotel, Vegas' newest, with Bill Cosby and Lionel Hampton.

Admiral John J. Hyland, CinCPacFlt, who presided over last year's reunion, received a standing ovation when he was introduced.

Vice Admiral Thomas F. Connolly, DCNO(Air), was named "Tailhooker of the Year," and presented the gold-plated, plaque-mounted tailhook.

This was the last year for "200 Missions Over the North" trophies, and the line-up of veteran combat pilots was impressive — more than 34 of the 75 who received awards were present.

Air Test and Evaluation Squadron Four won the Tail Hook Trophy for perfect attendance at the reunion.

Photographs by JO3 John Cherry



VX-4 pilots are happy with winning the Tail Hook Trophy for attendance. Admiral John J. Hyland, below.



IWO TRANSPORTS MA

As you stand at the head of Pier 2N and watch through a driving rain, two tugs and a pair of "pusher boats" nudge the amphibious assault ship USS *Iwo Jima* toward her berth.

It's monsoon season in Da Nang and you're one of hundreds of U.S. Marines standing at the Naval Support Activity's deep water piers getting soaked to the skin. You, and most of your buddies, couldn't care less about the rain. Every foot *Iwo Jima* moves closer to the pier is one foot closer home.

You're part of a group of 119 officers and 1,682 enlisted men scheduled to load aboard LPH-2 for a trip to San Diego, Calif., as a result of President Nixon's decision to cut the number of American troops in the Republic of Vietnam by an additional 35,000.

Iwo Jima is one of the Seventh Fleet's amphibious ships designated to bring those men back to the continental United States. Some 33 vehicles and 212 short tons of cargo will have

to be onloaded at the same time the troops are moved aboard. It is going to be a hectic, nerve-wracking and very wet job.

The LPH arrived in Da Nang harbor after spending days dodging Typhoon *Flossie*, an angry tropical storm that managed to scrap earlier plans for a stop in Okinawa. Now, *Iwo* will have to make the homeward trip via Okinawa so elements of Marines already embarked can be offloaded.

Even so, most of the Marines on the pier and the men of *Iwo Jima* will be returning home earlier than expected—so there are few complaints about the weather or stopovers as the Navy men prepare to trundle Marines and their gear aboard.

And it really doesn't matter that the LPH is the first ship of her kind to tie up at Da Nang's deep water piers in the past 19 months.

And it doesn't matter much, either, that the task—getting many of the Marines from their former commands

in the northernmost area of the Republic of Vietnam to the pier—has been accomplished in four days.

All that matters is getting the ship moored and overcoming last-minute headaches, like a brow that won't quite reach from ship to pier.

Before the loading starts, the quiet on the LPH's hangar deck is deceptive. Yesterday that hangar deck was jammed full of logistic supplies and ammunition but they were removed while the ship was still anchored in Da Nang harbor.

On the quarterdeck where the troops will come aboard are coffee containers and cups. A TV crew that went aboard the ship earlier is still setting up its equipment.

Navy men are getting ready for the onslaught. Cranes and the ship's starboard aircraft elevator, where the vehicles and cargo will be loaded, are manned. Working parties are in place.

On the pier, personnel assigned to Naval Support Activity's Freight



WET, WAITING AND HAPPY Third Marine Division Leathernecks get the signal to board from *Iwo's* officer of the deck, above. Undaunted by the weather, the Marines display their feelings on being first group to leave Vietnam after the pullout announcement.



By JOC John D. Burlage
Photographs by Lennox D. McLendon

RINES FROM VIETNAM

Terminal Division clear cargo and carriers from the area; today the pier belongs exclusively to *Iwo Jima*.

The Marines continue to wait in the rain. One of them is MSgt. Jonathan R. Haines. He's personnel chief of the First Marine Division in Da Nang.

"We've been working from six in the morning until past midnight for four days getting 850 of these Marines from the First MarDiv together to meet this ship," he says. "We're not set up to billet troops and we've had to put them wherever we could since they began arriving, in warehouses or any open space that's available.

"But they haven't minded. Their morale has been outstanding."

When you're a Marine standing in the rain, or an LPH sailor getting soaked, however, you're not thinking too much about your morale. You begin to notice the little things, anything to get your mind off the fact that you are very wet and getting wetter. You notice the network cam-

eramen, of course, as their tarpaulin-covered cameras record the event you're part of.

At 0845 you notice the first vehicle going aboard *Iwo* — a tired, well-worn Jeep — and the sudden spurt of activity as the cargo onload begins in earnest. Late in the afternoon, with the completion of the entire troop and cargo embarkation waiting only the arrival of some 300 troops held up at their staging area by the rain, Commander John L. Smeltzer, mobile landing team coordinator, said, "This operation was rapidly planned and smoothly executed. The effort that was expended in staging the Marine equipment contributed much to the success of the onload."

As you continue to wait your turn to board the LPH, you're not concerned about the overall success of the mission. You do notice that the first number played by the Marine band, brought to the pier for a ceremony that never comes off, is "Anchors

Aweigh" — followed quickly by the "Marine Hymn."

You notice a stream of Navy officers and enlisted men coming down the brow between attempts to get it permanently stabilized. They range from the ship's skipper, Captain Martin M. Casey, to commissarymen bringing more coffee for you to drink and a postal clerk trying to get 5,000 pounds of mail off before *Iwo Jima* pulls out.

Then, finally, you notice that the Marines are starting to go aboard.

The rain has slackened ever so slightly but, by the time it has lessened, the wind kicks up and the downpour begins again.

Just about the time you're beginning to wonder if you'll be washed away before you can make your way up that brow, a Navy officer appears at its head, hurls an epithet at the sky and motions for your unit to move aboard the ship.

You are on your way.





SELECTED AIR RESERVE

Atlanta Survival Drill

VP-67B2 and NAIRU-B1 along with personnel from NAS Atlanta held a water survival exercise recently during which over 25 officers and men of the *Neptune* flight crews were dragged, dunked and hoisted from the water by helicopters in a series of practical demonstrations. The flight crews learned how to survive a crash at sea and the correct method of using all the survival devices that are a part of their flight gear. This was the first such exercise carried out under actual water rescue conditions.

Aircrews from VP-67B2, commanded by Commander Jack L. Oglesbee, were briefed at the air station before boarding a bus to Lake Allatoona. GySgt. Lawrence Clogston, assigned to the NAS parachute loft, discussed the use of the Mae West life vest and its equipment and demonstrated the proper way to release from a parachute harness upon hitting the water. He also explained how to operate the seven-man life raft, how to right a cap-



DURING Atlanta survival drill, these were the scenes as flight crewmembers capsized a seven-man life raft and were rescued from Lake Allatoona by helicopter.

sized raft, how to use flares shot from a pencil-type hand launcher and how to use day and night smoke signals. To simulate actual parachute drag conditions, Weekend Warriors, wearing parachute harnesses and life vests, were dragged through the water by boats. After they released themselves from the harnesses, they capsized a seven-man raft, righted it and boarded properly.

Climax to the air/sea rescue exercises was the helicopter pickup. About 500 yards from shore, boat crews dropped four crewmen at 75-yard intervals. Each man, wearing a flight helmet and inflated Mae West over his flight suit, ignited a smoke signal and swam into position for a horsecollar help pickup. Hovering at 40-50 feet above the water, each helicopter dropped a horsecollar life line to the man below. The crewmember grabbed the collar, slipped it around and under his arms, and was slowly reeled up and pulled inside to safety. Two UH-34D *Seahorses* from HMM-765 alternated pickups while NAIRU boats remained on station.



VP-4G4 Aids Downed Marine

Commander Norman Howery and his VP-4G4 *Neptune* crew, NARTU Alameda, recently aided in rescue operations for a Marine pilot whose *Crusader* crashed near Zuni, Ariz. The P-2 was on a routine training mission to NAS Olathe when a message was received that contact had been lost with two Marines F-8's who were near the P-2's positions.

Cdr. Howery reported that he had sufficient fuel to begin a search and proceeded to the last known position of the missing aircraft. Then the Reserve crew began a square search and on the third leg spotted a mirror flashing below. A radio message to civil authorities brought a ground rescue party. However, the P-2 crew's job did not end there. The rescue vehicles had no radio contact with the aircraft, so rescue operations were directed from the *Neptune* through a Zuni radio station.

The P-2 also led the ground party toward the downed pilot until it ran low on fuel.

The downed Marine was soon rescued. The other missing F-8 had effected a re-light and continued to its destination.

Devotion to Duty

AG2 Mickey Gang attached to NARDiv-T1 at NAS Seattle has shown true devotion to duty and to the Naval Air Reserve program. Gang, a resident of Calgary, Alberta, Canada, commutes to his airlift pickup point in Spokane, Wash., at his own expense each month. The cost is not only the amount of the round trip fare, but also one and a half days of travel time. If unfavorable weather conditions cause cancellation of the airlift, PO Gang sacrifices more time. He must wait until Monday afternoon for a return flight, which gets him home late that evening.

Award for Captain Schram

The National Meritorious Service Award was posthumously conferred on Captain Dick Schram, USNR, at the 16th National Conference of the Naval Reserve Association held in San

CNAResTra 'Air Barons'

LCdr. Gary Farris, VA program manager at NAS Glenview, and five Selected Air Reserve pilots from that station recently formed the CNAResTra *Air Barons*, a flight demonstration team. The six, flying the A-4 Skyhawk, demonstrate weapons delivery, inflight refueling and the high and low speed abilities of their aircraft. The 25-minute demonstration, which includes various tactical maneuvers, is aimed at acquainting the public with Naval Aviation.

During their short span of activity as a Navy demonstration team, the *Air Barons* have appeared at numerous airshows including Reading, Pa., Memphis, Tenn., Norfolk, Va., and Quonset Point, R.I. The other team members are Commanders Terry Denton and Jim Mahoney, Lieutenant Commanders Dan MacIntyre and Ken Schulze, and Lt. Phil Lockard.



Diego in October. Capt. Schram was killed June 4, 1969, when the light plane in which he performed his "Flying Professor" act crashed at Carl

Spaatz Airport, Reading, Pa. The accident occurred after the control stick separated from its socket during low-altitude aerobatic flight.



LCDR. JACK RICHARDSON attached to VS-28A2, NARTU Washington, is still in command of his four sons in a naval environment. Midshipman First Class Jack, Jr., USNA Annapolis, left, CT1 James, NAS North Island, and the twins, ADJ2 Jerry and ADJ3 John, both at NAS Patuxent River, were all home together and decided to pay Dad a visit during his weekend drill.

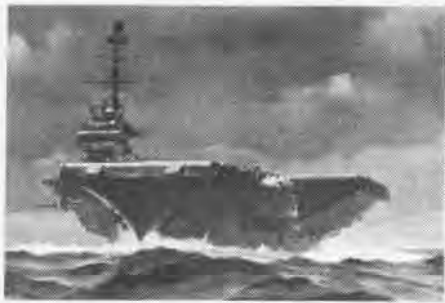


DURING ceremonies at NARTU Norfolk, ADJ3 Warren is congratulated by Capt. Bell.

Extra Effort Rewarded

At NARTU Norfolk, ambition and extra effort paid off for PO Charlie L. Warren when he received a special commendation and his certificate of advancement to ADJ3 from Captain J. H. Bell, C. O.

Warren enlisted in the 2X6 program in November 1967. In March 1968, he was advanced to AA and that summer to AN. By drilling on at least two, and more often three, weekends each month for 21 months, he was able to fulfill all training requirements for advancement without formal "A" school attendance.



at Sea with the Carriers

PACIFIC FLEET

Constellation (CVA-64)

While on station in the Tonkin Gulf, *Constellation* recently tallied her 98,000th arrested landing. Flying an A-7A *Corsair II*, Ltjg. Hugh Lacey, VA-27, made the historic landing when he was "trapped" after returning from a bombing mission over South Vietnam.

A different "landing" was made when the newly elected commander of the American Legion, J. Milton Patrick, was welcomed aboard *Constellation* by her C.O., Captain John S. Christiansen.

Mr. Patrick came aboard as part of a 15-day orientation visit on a fact-finding tour of military bases and units in the Far East for President Nixon. While on board, the elder Patrick was reunited with his son, Pfc. David Patrick, who took a leave of absence from his Vietnam-based outfit.

Kitty Hawk (CVA-36)

It is anticipated that an additional 800,000 production man-hours will be contributed by the crew of *Kitty Hawk* this year during her overhaul at the Puget Sound Naval Shipyard, Bremerton, Wash.

Utilizing the Ships Force Overhaul Management System, the first systemized management effort on the Pacific Coast to be employed for a carrier overhaul, it is estimated that 30 percent of the ship's work force will be involved in the effort.

Ticonderoga (CVS-14)

During a flight deck ceremony on board *Tico* while she was moored at the Long Beach Naval Shipyard, Captain William H. McLaughlin relieved Captain R. E. Fowler as commanding officer. Captain Fowler, who took command of *Ticonderoga* in December 1968 has been assigned as chief of staff, ComNavAirPac. Captain

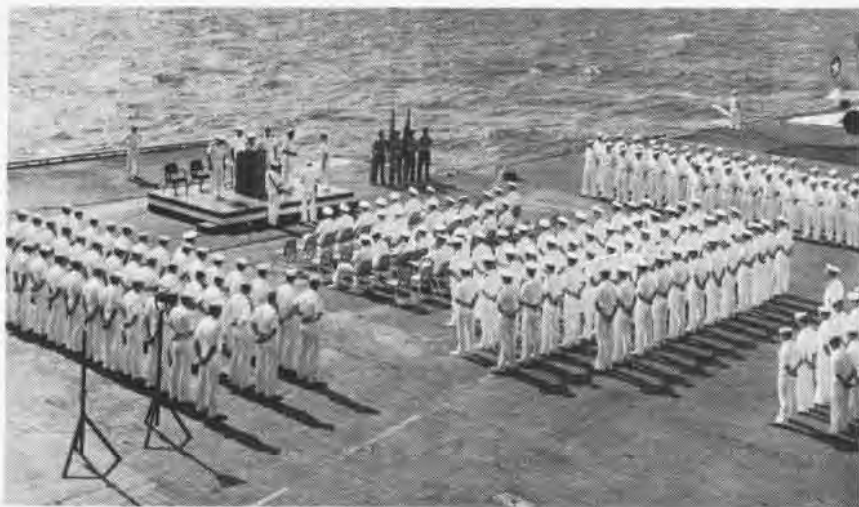
McLaughlin came to *Tico* from command of USS *Vermilion* (LKA-107).

ATLANTIC FLEET

Boxer (LPH-4)

Boxer, making a westerly track toward Guantanamo, Cuba, on a hot Sunday afternoon, was enjoying holiday routine. Suddenly, someone spotted something in the water. Several people caught sight of the object, barely visible, floating ahead of the ship in its path. The object aroused natural speculation about what it might be. As it came closer, figures became discernable and the sailors began shouting to three children, clinging to an inner tube. They passed only feet away from the port side.

Following a sharp left turn, *Boxer* came abreast the inner tube and a rescue boat was lowered. The children resisted rescue attempts, fearing that



ACTRESS-SINGER Ann-Margret pauses for a cup of tea during a break in the filming of a TV special on board USS *Hornet* and evokes an admiring glance from a crewmember, left. In a mass ceremony aboard USS *Bon Homme Richard* in the Gulf of Tonkin, above, 63 officers and men were presented awards ranging from the DFC to the Navy's Strike-Flight Air Medal.

they would be tortured. They finally accepted a rod extended by a crewman.

A girl and two boys, ages 13, 11 and 9, respectively, were brought aboard and rushed to sick bay. They were treated by the ship's doctors, and questioned by a Spanish-speaking interpreter, the ship's dentist.

Through a curtain of hysterics, the children managed to tell the story of their miraculous odyssey. The girl, though obviously terrified and weak from her ordeal, was the most coherent.

With their father, mother, sister and three other men, they were attempting to escape from Cuba in a small boat. After several days, the boat continued to ship water and was on the verge of sinking when, the group decided they would take turns being towed on a string of inner tubes that had been brought along as life rafts. They took turns riding on the inner tubes, leaving only two or three in the boat at any given time.

When Cuban patrol boats were seen, the three men panicked. They took over the boat, threw the remaining members of the family overboard and sped away. After floating in the shark-infested waters of the Caribbean for an undetermined amount of time, the father lost consciousness and drowned. When a sister lost her grip and went under, the mother swam off



CUBAN CHILDREN pose for camera shortly after being rescued by the crew of *Boxer*.

to rescue her. Neither returned. Only the three children remained.

Based on the children's physical condition, doctors estimated that they had been on the raft for two days. When they were brought aboard, they were weak from malnutrition and complained that they had drunk sea water the day before and had been violently ill.

When *Boxer* anchored at Guantanamo Bay, the children were rushed to the base hospital. After several days of convalescence, they were given a new wardrobe, watches and a plane ride to Miami where they were adopted by relatives.

Boxer personnel, wishing to make the children's start in the United States as happy as possible, have established a \$1,800 trust fund for them.

Wasp (CVS-18)

Qualifying student Naval Aviators is a far cry from ASW operations, as members of *Wasp* recently found out when they substituted for the training carrier, *Lexington*. Five student naval aviators flying the TA-4J were the first to carrier qualify in the newest *Skyhawk*, which is replacing the F-9 *Cougar* — first introduced to the fleet in the early 1950's.

During a recent Navy League cruise on board *Wasp*, two Navy nurses from Pensacola Naval Hospital came aboard to take care of possible emergencies arising among women guests. Fortunately, no guests were in need of medical treatment, but there was a sudden outbreak of aching backs in the sick bay. The two young nurses obliged by giving the patients back rubs.

Yorktown (CVS-10)

While participating in the NATO exercise *Peace Keeper*, *Yorktown* waved aboard a Canadian S-2 *Tracker*. The aircraft was diverted to CVS-10 when it was unable to land on the Canadian ASW aircraft carrier, HMCS *Bonaventure*.

Bonaventure and *Yorktown* were part of a carrier group operating with a NATO task force in the Atlantic.

TA-4J RECEIVES A WAVE-OFF DURING FIRST STUDENT CARRIER QUALIFICATIONS USING NAVY'S NEWEST JET



At Sea with the Carriers



WHEN THE SUN GOES DOWN THE PULSE RATE GOES UP

By JOC P. E. Rothgeb

Photograph by

PH2 W. R. Curtsinger

LCdr. Holt and Ltjg. Hanes are A-4 *Skyhawk* pilots with VA-94, homeported at NAS Lemoore and currently deployed aboard USS *Bon Homme Richard*. JOC Rothgeb, ComCarDivOne staff, interviewed them just prior to a night launch in Vietnam.

You don't know whether you are flying or not," LCdr. Ben F. Holt, Jr., said.

The veteran Vietnam jet pilot was talking quietly in Ready Room Three aboard USS *Bon Homme Richard* (CVA-31) in the Gulf of Tonkin. He and his wingman, Ltjg. Ray E. Hanes, were preparing for another night combat mission.

Naval Aviators fly because they love to. That is probably why they accept the danger of being catapulted from a carrier deck at night and the return to the same deck at about 150 mph.

"Carrier operations at night offer a private terror for every man. As you gain experience you learn to cope with it, but you never get completely used to it," Hanes said.

In 1966 Navy flight surgeons collected data from carrier pilots flying combat missions on Yankee Station. They made some startling discoveries: A jet pilot's pulse rate and respiration increased more during night carrier landings than they did when he was over enemy territory and under fire.

Captain John M. Tierney, chief of staff to Commander Carrier Division One, attributes this to the extra concentration.

"Call it professional pride, call it anything you want, there are many things that make a pilot want to get aboard on the first pass," he said. "It isn't fear, you've been too finely trained. It is the desire to do a job extremely well just as in any other profession."

The captain spoke with authority. He was Commander Air Wing 19 and one of the pilots wired during the Yankee Station research.

Pilots are not alone in their planes, however. Landing signal officers, also experienced carrier pilots, "ride" beside them, via radio, on every landing. The LSO knows each pilot in the air wing, and he knows how each will react to most circumstances. If a pilot is too slow in the glide path, the LSO can tell how much power he will add.

Being catapulted is not any more comforting. Holt referred to the lack of the visual references that are available in daylight.

"Because of the force applied during the power stroke of the catapult and the natural lag of pressure gauges in the cockpit during launch, there is a fraction of a second when you don't know whether you're airborne or not," he said. "You know you've properly trimmed everything, and the aircraft is in the proper attitude for flight at the end of the catapult stroke but, until you feel that airplane begin to climb through the seat of your pants, you just don't know."

Safety is a fact of Naval Aviation. The aircraft are visually checked by plane captains, quality control inspectors, pilots and the catapult officer. Extra care is subconsciously taken during night operations. The pilot briefing is an exercise in quiet confidence. Takeoff load, rendezvous, radio frequencies and the trip home are all discussed.

Every precaution is taken, but in the final analysis, it is man and machine alone, with the LSO as a guardian angel, that will determine whether or not the Air Boss says, "404 on deck, recovery complete."



fitted with a flight helmet, torso harness and oxygen equipment. Then he had a short wait until the aircraft was on the line and ready for takeoff. The anxiety of a first jet flight was temporarily set aside while Heflin positioned himself in the rear seat of the TA-4F as he listened intently to final instructions from the plane captains.

Within ten minutes, Heflin, with Lt. J. J. Van Liere at the stick, was airborne for his first military jet ride. Lt. Van Liere explained the controls and turned the plane over to Heflin for a few moments.

"I really enjoyed flying that jet," Heflin said later. "I wasn't too sure of myself at first, but there is nothing in the world like flying a jet."

The 45-minute flight took Heflin down to Kitty Hawk, N. C., then over the Dismal Swamp where Van Liere practiced low-level flying at 500 feet. They were joined by another TA-4F for some formation flying and then returned to Oceana.

After touchdown Heflin said, "I want to go back up again. I wish we could stay a week and fly every day."

There will be other days for Heflin and the other midshipmen who decide on careers in Naval Aviation. After graduation, the future is unlimited.

Heflin is cast in the mold of a Navy pilot. "I want a career in Naval Aviation," he says. "I want to become the best in my field."

Heflin is typical of the men who received the aviation orientation at Oceana. Their training, which included lectures and tours of squadron spaces, was another step in the complete program offered by the Academy.

"We were on submarines for a week, and I thought that was the going thing," Heflin said, "but I think these past two days have swayed a lot of people."

But then, who wouldn't be swayed by a 500-mph ride in a Navy jet, or faster for those who flew in F-4's.



UNDER the watchful eyes of two plane captains, Midshipman William N. Heflin, Jr., attends to last minute details in the rear seat of a TF-4J trainer. PRAN Frank Emeterio, above, of the VA-43 para-loft crew, chuckles as Midshipman Heflin learns that the chin strap must be unbuckled before the helmet is removed after flight.

Three days may seem insignificant to a Naval Academy Midshipman when he compares them to his grueling four years of study. And three days before classes reconvene would hardly seem important. When his future military career is involved, however, three days become extremely important.

Approximately 250 midshipmen 2/c visited NAS Oceana late last summer for indoctrination programs aimed at familiarizing them with Naval Aviation in general and jet aircraft specifically. Four groups of 60-80 midshipmen completed the orientation program.

This was the first summer program at Oceana in which the midshipmen flew in jets. Formerly the indoctrination included flights in propeller-driven planes.

The groups were subdivided and assigned to VF-101, a Phantom squadron; VA-42, which flies Intruders; and VA-43, a TA-4F Skyhawk squadron.

Midshipman William N. Heflin, Jr., a native of the Tidewater area, spent a typical day with VA-43.

After an early morning briefing, aimed at a 1000 takeoff, Heflin was

By JOSN Charles W. Nason

'... There is Nothing in the World Like Flying a (Navy) Jet.'



ON PATROL

with the Fleet Air Wings

VP-44 PPC's Return to Pensacola

Three patrol plane commanders from VP-44, NAS Patuxent River, Md., recently paid a return visit to the basic prop training squadrons where they previously had been instructors.

Lieutenants Mike Theodore, Glen Collins and Gary Krewson, all former Selected Retention of Graduates flight instructors, visited VT's 2 and 3 at NAAS Whiting Field, Fla.

They briefed instructors and prospective Naval Aviators about patrol aviation and the expanding field of antisubmarine warfare. They covered the advancement of prospective patrol aviation pilots from advanced multi-engine and navigation training in Corpus Christi, Texas, to the tactical and environmental training offered at fleet airborne electronics training units in Norfolk, Va., and San Diego, Calif., and the opportunity for diversification that exists within a patrol squadron. The possibilities of becoming a patrol plane commander were personified in the three VP-44 pilots who, just one year after joining their first fleet squadron, have achieved the designation of PPC.

VP-30 Trains Norwegian Aircrews

VP-30 recently completed a 12-month, P-3 ground and flight training program for enlisted maintenance personnel and seven aircrews of the Royal Norwegian Air Force's (RNoAF) Squadron 333. The Norwegian training was accomplished concurrent with VP-30's. The ground and flight syllabus was conducted by VP-30 and the maintenance training department at NAS Patuxent River. Aircrew personnel received ASW instruction at FAETULant, NAS Norfolk, Va., and on-the-job training with VP-30.

Squadron 333 is receiving P-3B's to carry out its mission of surface sur-

veillance and ASW responsibility in the North Atlantic and Norwegian Sea.

Captain John Rudshagen, RNoAF, was assigned to VP-30 as liaison and training officer.

NAS Atsugi Hosts VP-17 Detachment

VP-17 has established a temporary detachment at NAS Atsugi, Japan, while the runway at MCAS Iwakuni is being repaired. VP-17 relieved VP-40 as the Fleet Air Wing Six ready alert squadron.

For the past six years, the squadron has been flying Market Time patrols in Southeast Asia six months out of each year. It was cited for catching the first North Vietnamese trawlers infiltrating into South Vietnam in over a year.

The unit recently changed its homeport from Whidbey Island, Wash., to Barber's Point, Hawaii, and transitioned to the P-3. Previously, squadron personnel flew the PB-4Y *Privateer*

and the Lockheed P-2 *Neptune*

This deployment marks VP-17's seventh visit to Japan—its first with the P-3.

VP-31 Begins Ordnance Crew Course

VP-31, NAS Moffett Field, has organized an ordnance aircrew training branch to provide seven weeks' instruction to P-3 ordnancemen as part of the new replacement patrol crew training syllabus. The course is the first of its kind on the West Coast.

In the first three weeks, students study aerial photography and conventional weapons loading. Among the weapons with which the ordnancemen become familiar are eight types of mines, three bombs and the five-inch, folding fin aircraft rocket. During the following four-week flight phase the student is taught to handle ordnance equipment and ASW stores such as smoke markers and sonobuoys.



AT PATUXENT RIVER while he was still trying to accept the fact that the \$10,000 VRB was all his, AWC Kent H. Gunn, VP-49, was notified that he had been advanced to AWCS.

Subject	Issue	Page	Subject	Issue	Page	Subject	Issue	Page
NATO command established, new	Feb	2	VA(1)-4 (commissioned)	Apr	38	Test pilot report (cats and traps)	Jan	22
NATTC Glynco (efficiency trophy)	Oct	4	VF-121 (<i>Blue Ears</i>)	Aug	26	Tin can flattop	Nov	18
Naval air stations			VMA(AW)-332 (safety record)	Mar	37	Training		
Atsugi (open house)	Oct	30	VRC-50, COD	May	3	A-7A (2F84)	Jan	8
Barber's Point (training unit)	Sep	7	NUC	Oct	4	Early primary flight training	Apr	19
Brunswick	Nov	26	VS-30 (waterspout study)	Aug	38	Enlisted men	Mar	6
Cubi Point (Vietnam role)	Jan	16	VS 41 (<i>Bronco</i>)	Sep	26	Midshipmen	Dec	36
Goliad, NALF (commissioned)	May	3	VT-1 (safety record)	Aug	40	NATTC Memphis	Feb	19
Miramar (airrops record)	Sep	6	VT-4 (new landing training device)	Mar	37	New landing device	Mar	37
Patuxent (air show)	Oct	28	VT-6 (safety record)	Apr	3	Trademen	Jan	10
Pensacola (Griffith Hall)	Mar	3	VT-9 (safety record)	Jul	2	Training devices		
Willow Grove (1969 NATS)	Sep	38	VT-21 (TA-4J)	Sep	18	A 7A training syllabus	Jan	8
NavAirSysCom gets new C.O.	Apr	2	VT-25 (top jet award '69)	Oct	6	Barber's Point	Sep	7
Naval Air Training Command (safety record)	Oct	7	VT-27			Fleet training requirements	Jul	6
Naval Aviation review of 1968	Feb	6	Safety record	Mar	37	Link trainer 2F84	Jan	6
Naval Enlisted Aviation Training	Mar	6	Top prop award '69	Oct	6	Trademen	Jan	10
Naval Test Pilot School	Sep	7	VW-1 (safety record)	Oct	4	Trans-Atlantic flight, first	May	6
NC-4			VX-8 (designated VXN-8)	Mar	3	TV for pilots	Aug	36
Ceremony on the Mall	Jul	12	VXN-8 (Project <i>Magnet</i>)	Apr	18	Weapon limitations	Aug	18
Flight	May	6	MCCRTG-10 (commissioned)	Mar	3	Weathergram		
Flight, SecNav notice	Jan	3	Steichen	Nov	6	Clouds	Jun	38
Markings	May	C3	Survival studies at Patuxent River	Jul	23	Jet stream	Apr	38
On the Mall	Jun	3, 20				Sky killer	Sep	4
Restoration	May	32				Temperature	Nov	34
Officer program, DNG	Jan	3				Tornadoes	Aug	38
Omega stations planned	Jan	19				U.S. climatology	Feb	38
1,000 arrested landings (Flatley)	Jun	3				Weather reporting	Jan	38
1,000 Aviators	Feb	14				X-15 goes to Smithsonian	Jun	38
Operation <i>Deep Freeze</i>								
First flight of '69	Jan	38						
JO2's first flight to Antarctica	Feb	36						
'69 ends	Apr	2						
Ordnancemen become shutterbugs	Feb	31						

T - Z

Tailhook reunion . . . July . . . 3, Sep . . . 7

P - S

PACV's	Feb	20
Parachute team	Jul	36
Patuxent air show	Oct	28
Photo reconnaissance in Vietnam	Jul	18
Plane captains (<i>Blue Ears</i>)	Aug	26
Racing planes	Dec	8
Record flight	Dec	20
Research		
Aerospace Medical Institute	Aug	6
ASW system tested	Jan	2
Self-inflating target	Mar	2
Weapon limitations	Aug	18
Robb, Izetta Winter (retirement)	Jul	11
SAR (HC-5)	Nov	14
SATS at Patuxent River (pic)	Feb	3
Schoeni, Arthur L. (pic)	Mar	37
Schram, Capt. Richard A. (in memoriam)	Aug	15
<i>Silver Eagles</i>	Nov	20
SISMS study completed	Jun	2
Squadrons		
CVW-11 (PUC)	Mar	2
HC-5 (SAR)	Nov	14
HMX-1 (safety record)	Jun	38
HT-8 (safety record)	Jan	3
VA-42 (safety record)	Jun	2
VAH-123 (10th anniversary)	Jun	15



PRODUCTION models of the Navy's A-7E Corsair II's are coming off the assembly line at LTV equipped with the new Allison TF-41-A-2 turbofan engine which delivers 15,000 lbs. of thrust.

Letters

Photos Needed

The Director of Naval History is searching for photographs of a Japanese delegation visit made to the island of Attu, Aleutian Islands, in 1953 and again in 1964. Additionally, he needs photographs of the ten-man U.S. Navy weather detachment captured on Kiska Island, Aleutian Islands, by the Japanese in 1942.

Also needed are photographs of USS *Orvetta* (IX-157), acquired April 4, 1944, and commissioned June 5, 1944. *Orvetta* was stricken from the Naval Register on June 10, 1947. She was formerly named *Tampa*.

None of these photographs are in the Navy's files. If anyone has any of these photographs, it would be appreciated if the Naval History Division could borrow them to have copies made. The mailing address is:

Rear Admiral E. M. Eller, USN (Ret.)
Director of Naval History
Room 1204 Main Navy Building
Washington, D.C. 20360

Request for Material

I am doing a research paper on the history of the Naval Flight Officer program, intending to cover, in addition to the more recent NFO's, the entire story of the non-pilot aviation officer in the Navy. I need material, reminiscences and personal experiences on the earliest observers, later Naval Aviation observers, navigators, dirigible crews and later specialties. The eras particularly lacking in information are: 1921-1930, 1941-1945 and 1950-1960. All written material will be handled with care, postage repaid, and returned promptly.

Philip A. Keith, Ltjg., USN
FAETUPac
NAS North Island
San Diego, California 92118

Anybody Else?

The officers and men of VP-26 have reviewed with somewhat more than a casual interest the claims to a Marker Time operational record made by our sister squadron VP-45 in the August 1969 issue of *Naval Aviation News*. Official operational summaries of the *Trident's* six-month tour in WestPac substantiate 413 Marker Time missions totaling 4,432 flight hours with no aborted missions and an average of nine

hours low-altitude, on-station time per mission.

Of further interest is the fact that these totals were accumulated by a detachment of only three aircraft and five crews while the majority of the squadron's nine aircraft and 12 crews flew another 4,815 hours from Sangle Point in support of other WestPac commitments.

The entire Navy appreciates good operational achievements, but to claim a record requires a close, confirming scrutiny of old facts.

R. C. Chickering
VP-26
FPO New York 09501

Naval Aviation Films

The Eagle Has Landed, a documentary film based on man's first voyage to the Moon, and a three-film series on fire fighting aboard aircraft carriers are among the latest motion picture films released by the Film Distribution Division, U.S. Naval Photographic Center. These and other aviation-oriented films are listed below:

MD-6962GM (unclassified) Armed Forces Information Film No. 194 - *The Eagle Has Landed, Apollo 11* and its crew of astronauts on man's first trip to the lunar surface. The film includes the first photograph taken on the Moon (28 minutes).

MN-10540A (unclassified) *Fire Fighting Aboard Aircraft Carriers - Principles, Organization and Equipment*. Organization of damage control and fire-fighting responsibilities aboard carriers. General equipment and techniques for fire fighting on hangar and flight decks (18 minutes).

MN-10540B (unclassified) *Fire Fighting Aboard Aircraft Carriers - Fighting Flight Deck Fires*. Equipment, techniques, organization and responsibility for flight deck fire fighting (12 minutes).

MN-10540C (unclassified) *Fire Fighting Aboard Aircraft Carriers - Fire Fighting on Hangar Decks*. Equipment techniques and responsibility for fire fighting on hangar decks (12 minutes).

MN-10621 (unclassified) *Introduction to Basic Aircraft Engines*. An introduction to the radial aircraft engine, an explanation of the basic parts and the theory of operation (24 minutes).

MC-10447 (unclassified) *Hovering Angels*. Illustrates helicopter rescue operations (10 minutes).

MC-10448 (unclassified) *Wings for the Ground Commander*. The use of the CH-46 helicopter in Vietnam (15 minutes).

MN-10481B (unclassified) *T-2B Familiarization: Air-to-Air Gunnery: Gunnery Pattern*. Illustrates the pattern for aerial gunnery on a towed banner in the T-2B (20 minutes).

MN-10481C (unclassified) *T-2B Familiarization: Field Carrier Landing Procedures*.

How to become FCLP-qualified in the T-2B (15 minutes).

MN-10481D (unclassified) *T-2B Familiarization: Carrier Qualifications*. Qualifying aboard an aircraft carrier in the T-2B (17 minutes).

MC-10848 (unclassified) *Counter Punch*. The air war in South Vietnam (23 minutes).

MC-10876 (unclassified) *Sea Knight Front and Center*. The valuable service performed by the CH-46 helicopter for the Marines in Vietnam (14 minutes).

MN-10164 (unclassified) *Attack Carrier - Task Force 1 - Sea Orbit*. A historical review covering the development of the aircraft carrier, from USS *Langley* (CV-1) to USS *Enterprise* (CVAN-65). Color (29 min.)

MN-10607A (unclassified) *Carrier Air Traffic Control Center - SPN/35*. The relationship between the air traffic control center and the rest of carrier operations (16 minutes).

Instructions for obtaining prints of newly released films are contained in OpNav Instruction 1551.1E.

Information Needed

JO2 Farrell Seiler and I are working on a book on military hops.

I would appreciate hearing from anyone with interesting stories to tell about long-distance or unusual hops. Please send any material to:

JO2 Barry Meadow
Com 7th Flt. Det C
PAO, Box J-39
APO San Francisco 96201

Memories

I am writing in regards to an article in the Naval Aviation News of July 1969. I wanted to tell you how much I enjoyed your article on the NC-4's 50th anniversary. It brought back memories. My husband, Ltjg. E. C. Fiedler, trained with those men and piloted the NC-2 and the NC-8. He was Naval Aviator #616.

Mrs. E. C. Fiedler
3811 South Main Road
Vineland, N. J. 08360

Whoops!

Hate to be a nit-picker but would like to point out a small goof.

On page 6 of the October issue is a picture of an F4U given to the Marine Corps League. The country is El Salvador, not San Salvador. San Salvador is the capital city. True it is a small country but a proud one.

I enjoy the magazine.

W. R. Crim
210 Pioneer Building
Kilgore, Texas 75662



SQUADRON INSIGNIA



Commissioned in July 1965, VSF-1 was the first squadron assigned the primary mission of providing protection for Navy ASW forces. Flying the A-4C, the unit functions as an attack squadron with a detachment performing in an ASW role. Commanded by Commander Blair Stewart, the NAS Alameda-based squadron is scheduled to be decommissioned in January 1970.



Proudly, We Salute...



Captain Charles Conrad, Jr., USN
Mission Commander

Captain Richard F. Gordon, Jr., USN
Command Module Pilot

Captain Alan L. Bean, USN
Lunar Module Pilot

NAVAL AVIATION
NEWS