NAVAL AVIATION

# NEWS

## FRANK TALLMAN

*King of the Movie Airdevils*

MARCH 1975

COVERS — On the front, Harry Gann snapped Frank Tallman in his Grumman Duck trying to elude a T-6 "Zero" at an NAS Miramar Air Show. Photo of the painting on the back cover is by Bruce C. Jones. The FF-1 in the painting is the only one in existence today and is currently exhibited at the Naval Aviation Museum in Pensacola. In this picture, McDonnell-Douglas' Harry Gann was right alongside to film a VT-4 Skyhawk and Buckeye as they flew by USS Lexington during carquals.

# NAVAL AVIATION NEWS

FIFTY-SEVENTH YEAR OF PUBLICATION

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Deputy Chief of Naval Operations (Air Warfare)

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# EDITOR'S CORNER

On the masthead he's listed as Editor in Chief, Star Reporter, Owner and Taker of the Rap, and Art Director. His is pretty much a one-man show although he does let a subordinate named Terry Bice handle the printing chores. He hails from Perry, Fla., and much of the sunshine he's absorbed in his 20-odd years rubs off into the newsprint. He's an AZ2 named Pup Hatcher and his journalistic vehicle is *The VA-46 Times*, a weekly publication with a popular if not profitable circulation among the Cecil Field-based *Clansmen.*

Sample item from the December 10, 1974, issue:

**It is rumored that those people in the detachments picked up some strange habits while they were away. For instance, those who were in Lemoore can't understand why there are no tacos in the coffee mess, and those who went to Yuma now have a habit of dressing in green fatigues, while those who were in Oceana are walking around with eyes as big as saucers because they gave up sleeping – not to mention the mysterious cold-chapped skin that the shipboard detachment suddenly developed. Oh well, we could all come home from Cuba with a Havana cigar habit.**

It follows that VA-46's A-7 *Corsairs* have been flying on both sides of the U.S. Detachments have participated in the electronic warfare joint test in California, weapons training at MCAS Yuma, Ariz., and carquals aboard USS *Kennedy* in the Atlantic – all since September of last year.

*The Times'* format is similar to its big city counterparts. To wit:

### Want Ads...Whether You Want Them or Not

Wanted: A little slack in light attack...contact any trooper.

Wanted: A fairy god-AZ who will instantly update and incorporate all outstanding TDCs...contact AZ1 Wallace, analysis branch.

Wanted: Some time off so he can see his wife. Contact Ens. Trayner, maintenance office.

Hatcher fills any open space on the pages with a variety of declarations:

### 21,500 Flight Hours and Still Truckin'...Don't Blow It!!!!

### Chief Gillean Declares War On Smokers!

### Our Motto: No News is Good News

He even has an advice to the lovelorn column:

Dear Scaggy,

I seem to have this problem about wanting to date more than one man at a time. Last week I had a date with the entire crew of USS *Enterprise* and I didn't know which ones to break the date with. What should I do about this?

Perplexed in Pawtucket

Dear Perplexed,

My advice to you is to avoid these sticky situations. Try dating smaller groups. Next time go out with some fellows off a tin can and set a maximum of 200 guys. Meanwhile just enjoy it, you lucky little chihuahua.

Hard news, of course, is the backbone of *The Times.*

**It was disclosed early today that Airman Gussman of the airframes shop had a slight accident with his car as he ran into a horse trailer and did upwards of 50 dollars' damage to his auto. It just wasn't his day for horses. Gussman drives a Pinto.**

The word is out on the *Big John* (USS *Kennedy*) that the master-at-arms force is nabbing people for haircuts and wearing short-sleeved shirts. Last week five of our people from the advance party were tagged for haircuts. General quarters drills will require long-sleeved shirts which button at the collar. A word to the wise: Don't get caught with your sleeves up and your hair down.

Most important, people make the news.

### Yager Does It Again

As in the past, when AK3 Bobby Yager checked in off leave this year, he proudly wore a shiny black eye. It has become a yearly ritual for him. When asked to comment, he wouldn't tell us where he got it but we have some good speculations.

### LCdr. Lentz Wins Fame and Fortune For Bombing Abilities: Well, Fame Anyway

LCdr. Fred Lentz, better known in bombing circles as "Let 'er Rip" Lentz, has achieved his claim to fame in an article in the A-7 *Maintenance Digest*. He was the top scoring bombardier in the CLAW-1 bombing derby held last September. LCdr. Lentz is better known in squadron football pool circles as "Shifty Fred."

We doubt that Pup Hatcher aspires to become the William Randolph Hearst of Navy underground newspapers or chief gag writer for Don Rickles. He comes across as a young man with an attentive eye on the human folly in all of us. We hope he keeps his typewriter perking and mimeograph machine humming with words like those from Vol. I, No. XIII of *The Times*:

Smile, It Doesn't Hurt That Much.

# did you know?

**Timation III** A Naval Research Laboratory experimental satellite, *Timation III,* has been in orbit since July 1974. It is the forerunner of the proposed NavStar Global Positioning System to be developed as a team effort by the Army, Air Force and Navy. Pioneered by NRL's Roger Easton, it is the latest in a series to demonstrate whether satellites can provide extremely accurate worldwide navigation and time transfer capability for ships, aircraft and ground forces. Equipment aboard *Timation III* will measure the accuracy that can be achieved by using crystal oscillators and rubidium atomic clocks to provide precise time transfer, navigation and geodesy.

The doughnut-shaped satellite — weighing about 650 pounds after its two solid-fueled engines were released when the satellite was in a circular orbit — transmits signals in the 335 mc and L band regions to obtain a direct measurement of ionospheric effects on satellite ranging. This technique has proven an ideal method by which ships and aircraft can obtain highly accurate fixes of their positions in any weather. The *Timation* technique is passive, requiring no signal transmissions by the users. Signals are received automatically from the satellites and converted by a small computer to highly precise position elements. This allows a navigator to read his position and altitude accurately at all times.

The principle of this technique has been known since Newton first formalized the laws of motion. The range from a satellite to an observer can be computed by measuring the time required for a radio signal to travel from the satellite to the observer. The heart of the system lies in two precision clocks, one in the satellite and one in the receiver. Using the precise time in both satellite and receiver, the time of travel of the signal can be measured, giving the accurate range. The same time base would then be used by precision clocks in ground tracking stations so that the exact orbit of the satellite can be measured and predicted. Knowing the satellite's position at any given moment and measuring the range, the observer can locate himself with a high degree of accuracy.

**One of a Kind** The YA-7H, LTV's two-seat A-7 prototype, has undergone AIMS testing at the Naval Air Test Center, Patuxent River, Md. AIMS is a system that gives Navy aircraft an automatic altitude reporting capability.

The one-of-a-kind YA-7H returned to Dallas where 81 single-seat A-7B and A-7C models are being converted to two-seat TA-7C versions of the *Corsair II.* BIS trials will be conducted at NATC after preliminary evaluations in Dallas.

**Casualty Bag** An inflatable casualty bag for evacuating wounded SEAL (sea, air, land) team members from a beach out through the surf is being developed at the Naval Coastal Systems Laboratory in Panama City, Fla.

The bag will allow the victim to be towed by his teammates through the surf to an offshore pickup vessel. It resembles a small, one-man life raft with an envelope that completely encloses the individual. An injured man can remain in the closed canopy for up to 15 minutes without suffocating. Its longitudinal inflatable ribs or stiffeners meet medical requirements for maximum rigidity and support for bone fractures. This eliminates one of the shortcomings of the old system of inflating the victim's life vest and manually carrying him to safety, which did not provide sufficient physical support and subjected him to further injury.

The NCSL project engineers hope to reduce the bag's size so that it can be carried around a swimmer's waist.

# did you know?

**P-3C Orion Updated** The first production model of Lockheed's updated P-3C *Orion* has been delivered to VX-1, Patuxent River, Md., Navy's ASW evaluation squadron. It features new avionics and software designed to advance the aircraft's ASW capabilities.

Features include a versatile computer language, the *Omega* worldwide navigation system, increased sound-processing sensitivity, a tactical display scope, improved magnetic tape transport, and a seven-fold increase in computer memory capacity from 65,000 to 458,000 words.

Lockheed expects to deliver a total of 24 of the updated P-3Cs between now and 1977.

**A New Concept** A modified version of the Singer-Link general aviation flight and navigation trainer, the GAT-IVS, was delivered to the Naval Academy, Annapolis, Md., in December. Developed jointly by The Singer Company of New York and the Naval Air Development Center, Warminster, Pa., the trainer makes it possible to vary several handling quality parameters. This in turn permits the simulation of the handling qualities of different types of aircraft from light single-engine planes to large transports. The student can actually feel the effects of various design characteristics such as wing or stabilizer area, control surface size, or center-of-gravity location. The simulator will be used in a course given at the Academy in aircraft stability and control.

**Toxic Gas** Shipboard fires below deck have long harassed the Navy. More recently, man-made polymeric materials such as deck coverings, paints and electrical insulation have created additional hazards. Experiments by the Naval Research Laboratory reveal that soot and water particles generated in fires with chlorinated polymeric materials carry potentially toxic amounts of hydrogen chloride (HC1) gas not only in the smoke but also in the water used to fight the fire.

NRL scientists say that normally moderate concentrations of HC1 gas are removed by an individual's upper respiratory tract and will not penetrate the lungs. However, if the gas is deposited on minute soot and water particles of less than three micrometers, the gas can get past the defense of the upper respiratory tract and invade the delicate tissue of the lungs. This can cause pulmonary edema which sometimes results in death up to 48 and even 72 hours after exposure to certain fire situations.

This research points up the importance of using masks or some other method to avoid harmful breathing when a fire involving chlorinated polymeric materials breaks out aboard a ship.

**Helo Rescued** Most helicopters arrive on aircraft carriers by flying aboard. Not so with HS-5 chopper #804 deployed on USS *Independence*. This squadron helo arrived via motor whaleboat and aircraft crane.

The SH-3D *Sea King* developed mechanical problems during a routine night mission, and the pilot, Ltjg. Ronald Pignataro, and his copilot, Ens. George Palms, set their craft down in the Med on a calm sea. The guided missile destroyer USS *Sampson* soon reached the scene, launched a motor whaleboat and attached a line to the crippled helo until *Independence* arrived. The carrier steamed to within 100 yards of the chopper and dispatched two motor whaleboats. With a boat tied to each end, the helo was soon hoisted aboard by the aircraft crane, with the crane hook attached to the rotor head. No. 804 was back on board without a scratch.

## Low Volume RamJet

The Navy's Low Volume RamJet, a propulsion system designed for a new generation of high-performance missiles, has made its first free flight with results described as excellent.

Launched from an A-7 over the Pacific Missile Range, the vehicle flew in excess of 35 miles, reaching speeds above Mach 2 or 1,450 miles per hour. While the system is capable of higher speeds and range, performance was limited for the initial flight.

The new system, under development for the Naval Air Systems Command by LTV Aerospace Corporation, combines an integral rocket/ramjet engine in a single motor case. Boosted to high speed by the solid-propellant rocket, it uses the empty motor case as a combustion chamber to burn ramjet fuel for longer flight duration.

A relatively simple system, the LVRJ has a minimum of moving parts. Once it reaches ramjet takeover speed with its booster, port covers are blown in from four air intakes at the rear of the vehicle, permitting ram air to enter and mix with fuel to support combustion. The LVRJ can also be made smaller or larger for other applications such as surface-to-air and surface-to-surface missions.

## Antiradiation Missile

*Brazo*, the first U.S. air-to-air antiradiation missile, scored a direct hit on a target drone over the White Sands Missile Range in New Mexico in a recent test firing from an Air Force F-4D *Phantom*. The missile is designed to intercept an enemy aircraft by homing on signals from the enemy's radar. It uses a *Sparrow* missile airframe and employs a broadband receiver designed by the Naval Electronics Laboratory Center, San Diego, Calif.

The test firing completed *Brazo's* initial demonstration phase with three hits for three launches. The first firing demonstrated the missile's guidance capability in a look-down tail attack. The second and third firings were long-range look-down nose intercepts.

## Sidewinder Test System

The brains of the *Sidewinder* can now be tested in 17 minutes rather than two hours. The new automatic test station (ATS) is being developed by the Missile System Branch of the Naval Missile Center Instrumentation and Flight Support Division at Point Mugu, Calif.

ATS automatically conducts about 50 tests on the *Sidewinder* brain – its guidance and control. When certified, it will replace the 1,500 manual operations now required to test one missile. ATS is not only quicker but can conduct the same test any number of times at intervals. This prototype system was designed by Bill Wishon and John Russell, engineers in the Missile Systems Branch.

ATS will be used to make acceptance inspections on *Sidewinders*. From a lot of up to 200 missiles, 16 are selected at random for testing. Thirteen are actually tested with three held in reserve.

## Airboat

Navy men and scientists in Antarctica are witnessing the evolution of a new form of transportation – an airboat designed and built by Allen E. Smith, president of American Airboat Corporation. VXE-6 is testing the sleek orange craft – a far cry from the dog teams and sleds used by antarctic pioneer Captain Robert Scott of the Royal Navy in the early part of this century.

Powered by a 250-hp aircraft engine, the 20-foot craft is expected to fly over the ice, slush or water at 60 mph. Successfully tested on the Alaskan frontier, the airboat was then modified for antarctic weather. An enclosed, insulated cabin was provided to hold 12 passengers. A special teflon layer was added to the bottom of the boat to reduce its surface friction with the ice.

# GRAMPAW PETTIBONE

## Under the Weather

An instructor pilot briefed his two student Naval Aviators for an airways navigation flight in a TH-1L helicopter. The instructor, a Marine, had considerable experience in helos including a combat tour. The weather called for reduced visibility and ceiling, generally below 1,000 feet. Following an uneventful preflight, start and taxi, the helo departed home base.

The first leg of the flight was to be IFR with destination weather forecast as 500 feet broken, 1,200 feet overcast with three miles visibility in light rain and fog, and occasionally 1,200 feet broken with one mile visibility. Upon takeoff the aircraft encountered a ceiling at 700 feet and broke out on top at 2,500 feet.

The flight soon went into the soup and, for 60 minutes of the 70-minute leg, the pilots were in actual instrument conditions. At their first stop, the weather was 1,200 feet broken and 500 feet scattered. The pilots had the helo refueled and prepared for the second leg of the flight.

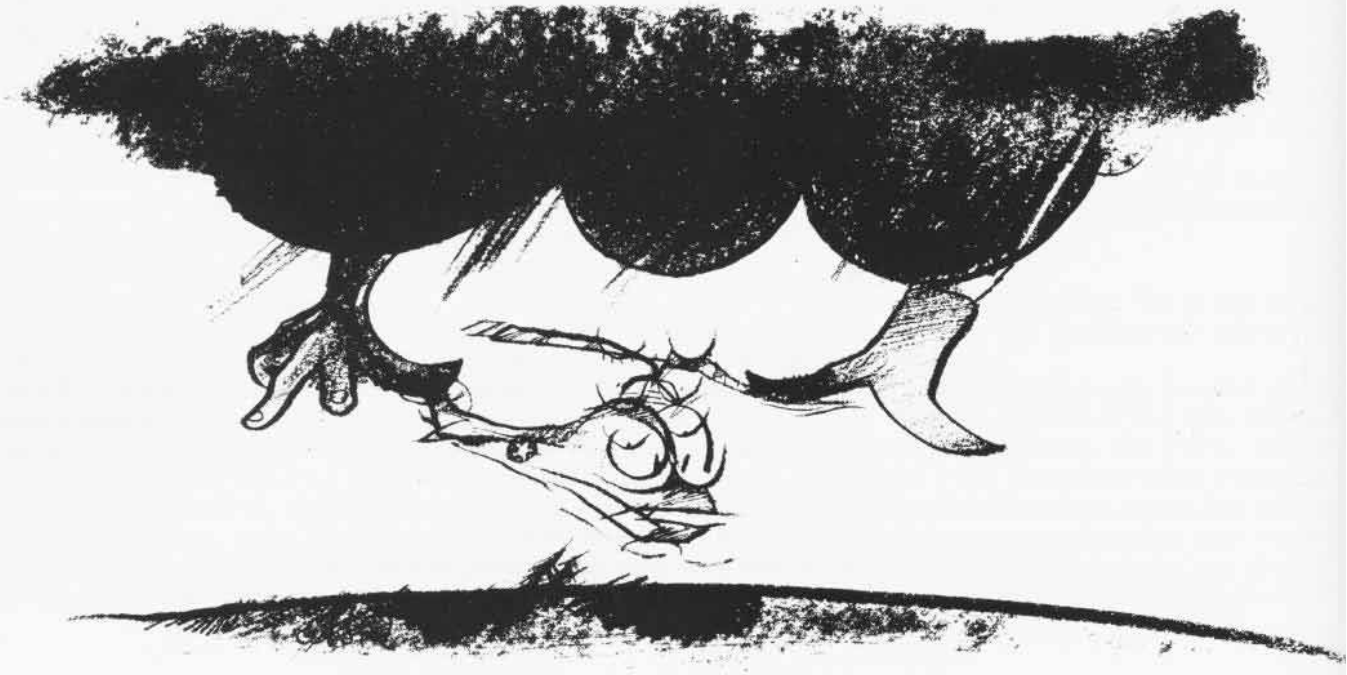
For this leg the instructor intended to fly a student-syllabus VFR tactical navigation hop at low altitude, with the student navigating and the instructor flying the aircraft. The destination weather was forecast 1,000 feet overcast with five miles visibility in light rain and fog. Forecast en route weather called for minimum ceilings of 500 feet.

The helo made an uneventful departure. The pilots had a 400 to 500-foot overcast with seven miles visibility at takeoff, and 400 to 600-foot overcast during the first half of the flight. When they were approximately halfway to their destination, the ceiling began to drop and it became necessary to decrease altitude to maintain VFR. Deteriorating weather conditions made navigation increasingly difficult, and the pilot decided to land in a farmer's field so the crew could positively fix their location with the help of local residents. The landing was uneventful.

The instructor then used a local resident's telephone to call the local flight service station (FSS). At this time he closed out his VFR flight plan and informed FSS that he would give

them a call on the radio to file the remainder of his route when he could get airborne. While talking to FSS, the instructor obtained a brief of the current weather at destination which he understood had a 400 to 600-foot ceiling. He also received advice concerning the best VFR route to take.

The weather had now shown some improvement, an estimated 300-foot ceiling with 1½ miles visibility. The TH-1L left the farmer's field with the instructor intending to follow a major highway to his destination. Because of their altitude, the crew was unable to





ILLUSTRATED BY Osborn

contact FSS. After following the major highway for approximately ten minutes, the aircraft encountered a small cloud which limited forward visibility for approximately five to ten seconds.

The aircraft was slowed and power reduced to descend and maintain VFR. The flight continued along the highway under 200 to 300-foot ceilings and one mile visibility. About one minute later, the helo made an uphill right-hand turn, followed by a downhill left-hand turn. While in the right-hand turn, with 15-degree bank, it entered unexpected IFR conditions and the pilots had no visual flight references.

The instructor then began to shift his scan to the instruments and told the student copilot that he was "experiencing vertigo, back me up." He then raised the nose and reduced power to return to VFR conditions, but with his peripheral vision he saw that he was approaching trees and added power to prevent settling into them.

He realized that contact with the trees was inevitable. He leveled the aircraft attitude, adding power to cushion the impact.

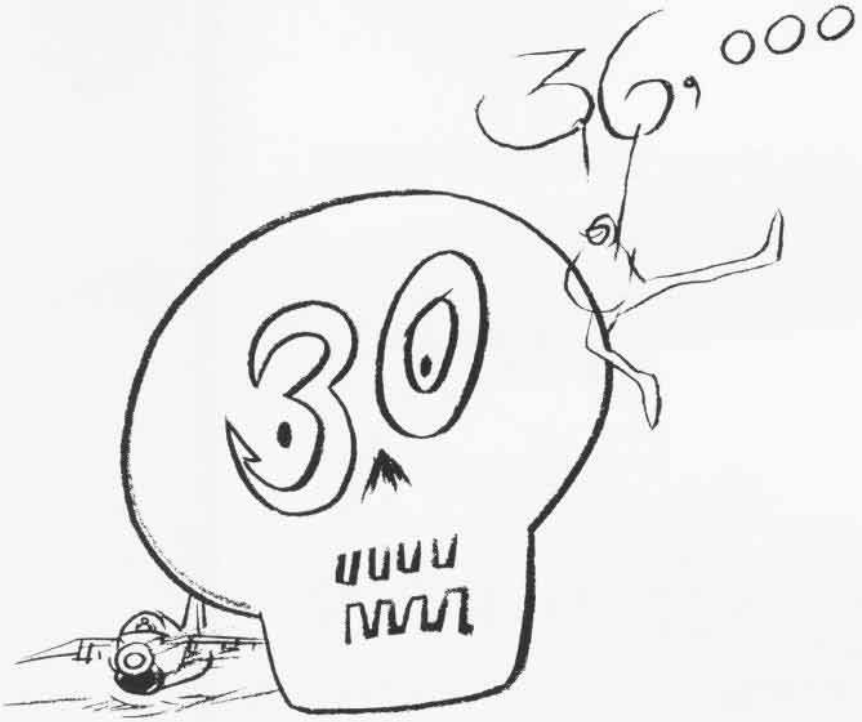
The uninjured crew exited the aircraft after impact. The instructor secured the engine which was still running, to minimize the possibility of fire. The helo was a total loss.

**Grampaw Pettibone says:**

**Great gallopin' ghosts! I thought we stopped this kind'a accident long ago – apparently we still have pilots who try to "sneak under the weather."**

**This pilot violated so many regs that there ain't enough paper to list 'em. However, the biggest violation is that of "lack of common sense," i.e., the decision to continue the flight VFR after the first stop and a similar decision to continue the flight from a farmer's field when conditions were below VFR minimums.**

**This particular gent had an outstanding flying reputation and was particularly known to be very safety conscious. However, in this case, he used extremely poor judgment. I believe the correct word for him is "overconfident." For years we have been sayin' that "complacency kills." Can overconfidence also kill? Think about it!**




## Wrong Weight

A young Naval Aviator was scheduled for a night tanker mission in an A-7 *Corsair*. As is the policy in the launch, the junior officer carried the aircraft weight sheet, which indicated the launch weight of the aircraft, to the flight deck control personnel.

The aircraft's gross weight was correctly indicated at 36,000 by the squadron duty officer. Preflight, start and poststart were normal in all respects and the *Corsair* was the fifth aircraft launched. As the aircraft stopped behind the jet blast deflector, the checker held the weight board up. It indicated 30,000 pounds. It was not acknowledged by the pilot. The weight board checker then positioned himself beside the flight deck director who was standing just forward of the deflector, approximately 30 feet from the A-7. Just as the aircraft was being taxied forward, the pilot acknowledged the 30,000 gross weight. The checker had put 30,000 in the window because he failed to notice the tanker configuration or the aircraft side number.

Because of the delay in acknowledgment, the checker felt he was getting behind on launch. After showing the weight board to flight deck edge control and receiving acknowledgment, he proceeded to center deck control. He received positive acknowledgment from center deck control and from the catapult officer. Subsequently, the A-7 was launched with a steam pressure set for 30,000 pounds, resulting in a reduced catapult end speed. Even after repeated calls to the pilot to "keep it climbing," the aircraft impacted the water in a wings level, flat attitude approximately 300 yards in front of the ship. No ejection attempt was observed. The aircraft appeared to explode in a small fireball. The pilot was not found and only a small amount of debris was recovered.

**Grampaw Pettibone says:**

**Holy Hannah! The number of people who allowed this aircraft to be shot at the wrong weight is awful; the launching officer, the control console operator, the weight board checker and, of course, the driver himself!**

**In addition, NATOPS requires that the weight be written on the aircraft — it weren't. I shouldn't be amazed anymore when so many wrong things fall into the right place to cause an accident, and no one does anything to stop its happening. In many cases what is "wrong" may be minor; however, if personnel on the scene do not take immediate corrective action, one additional "minor wrong" works out to be catastrophic. When will we learn!?!?!**

# FRANK TALLMAN—

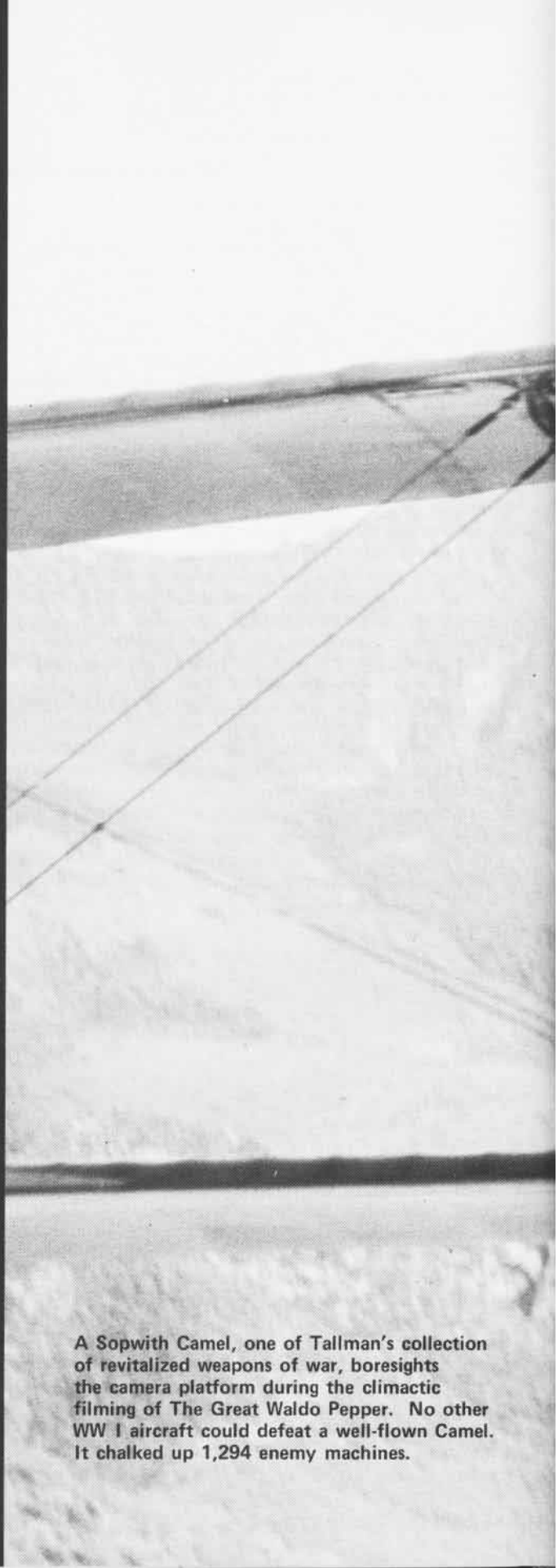
# King of the Movie Airdevils

By Captain Ted Wilbur

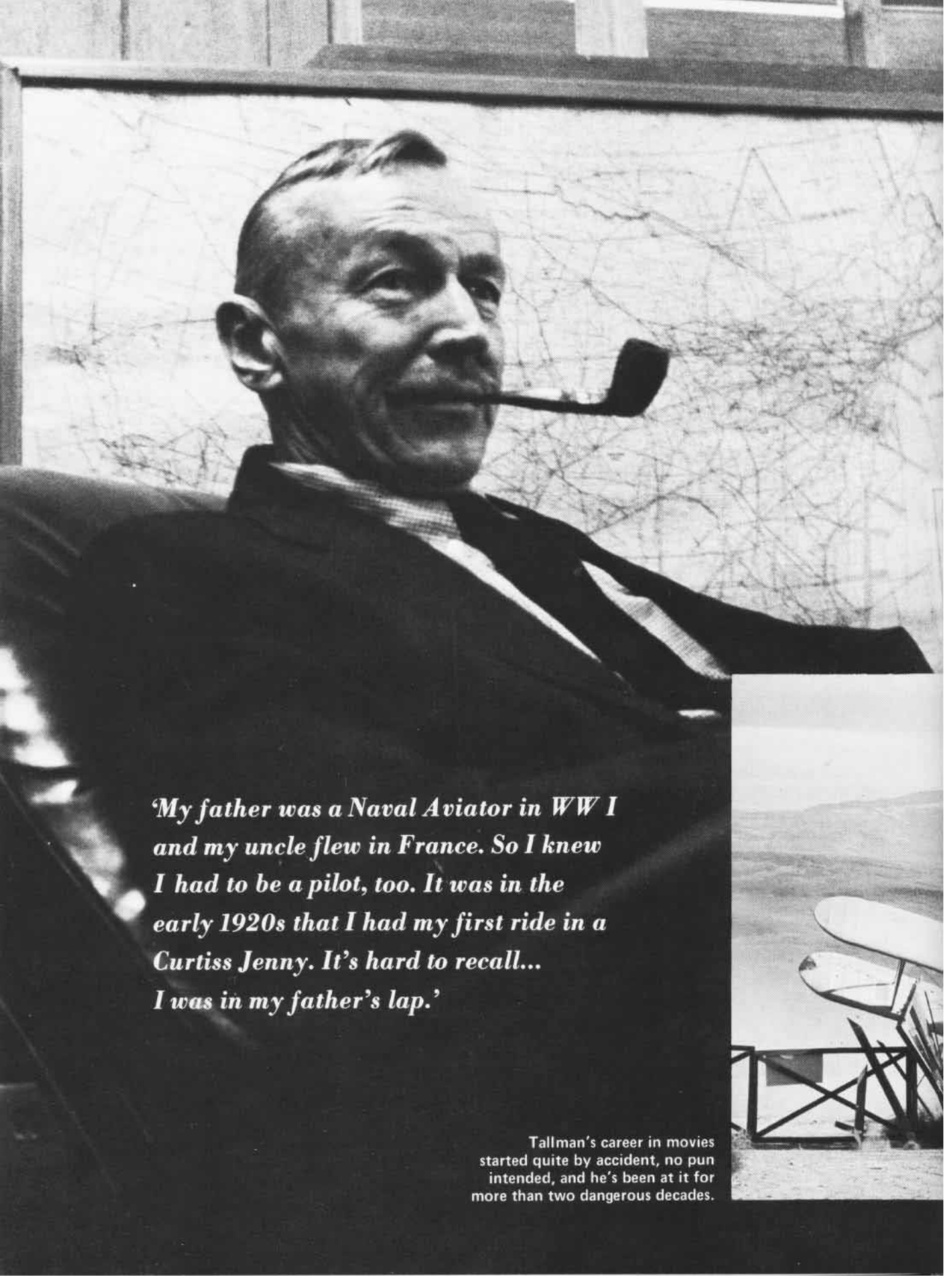
Walk someplace with Frank Tallman. You'll begin to feel pretty good. People smile and say hello. His open friendliness is as characteristic of his deliberate stride precisely cadenced by the elegant, gold-tipped cane. If you didn't know better, you might by his appearance judge him to be a writer or maybe a sportsman. A polo player, most likely.

But on the Universal Studios lot, where preparations are under way for a major motion picture on the Battle of Midway, just about everyone recognizes him. In the Hollywood world of actors and ersatz, he is a genuine standout. They all know Frank Tallman flies the old airplanes for films.

Occasionally, he cracks one up, and he doesn't always walk away. Recently, during the filming of *The Great Waldo Pepper*, while slipping a Nieuport 28 to a landing in a California valley, he lost his left rudder post and pedal. Suddenly out of control, the plane flipped into a diving right spiral. Barely managing to cut the switch before plunging into high tension wires, Tallman threw an arm in front of his face and braced for the impact. When he came to later, 70 feet below in a tangled wreck on the river bank, he idly watched as his blood dripped off his head down onto his shoes and, as if in a fantasy, he considered the dream-like quality of a nearby bird singing happily in the quiet surroundings. He hadn't expected to be alive.



**A Sopwith Camel, one of Tallman's collection of revitalized weapons of war, boresights the camera platform during the climactic filming of The Great Waldo Pepper. No other WW I aircraft could defeat a well-flown Camel. It chalked up 1,294 enemy machines.**



*'My father was a Naval Aviator in WW I and my uncle flew in France. So I knew I had to be a pilot, too. It was in the early 1920s that I had my first ride in a Curtiss Jenny. It's hard to recall... I was in my father's lap.'*

Tallman's career in movies started quite by accident, no pun intended, and he's been at it for more than two dangerous decades.

# FRANK TALLMAN—
## *King of the Movie Airdevils*

They sewed his scalp back on and took care of the other damage – two cracked vertebrae, broken ribs, cuts, bruises and torn muscles. Within a month he was back in the air. Not bad for a 55-year-old poor risk pro.

It has been said that years ago when Frank earned his wings he was advised: A Naval Aviator can fly anything! Being one of the good guys, he believed it, and set about to log over 14,000 hours in more than 500 different types of aircraft, helicopters, gliders, balloons and even a blimp – just about every kind of flying machine except spacecraft. Today, he is one of the few pilots in the world to hold every license and rating in aviation. He is the only one to have earned that status as an amputee.

**The Fokker DR1... a "squirrelly, treacherous venetian blind."**

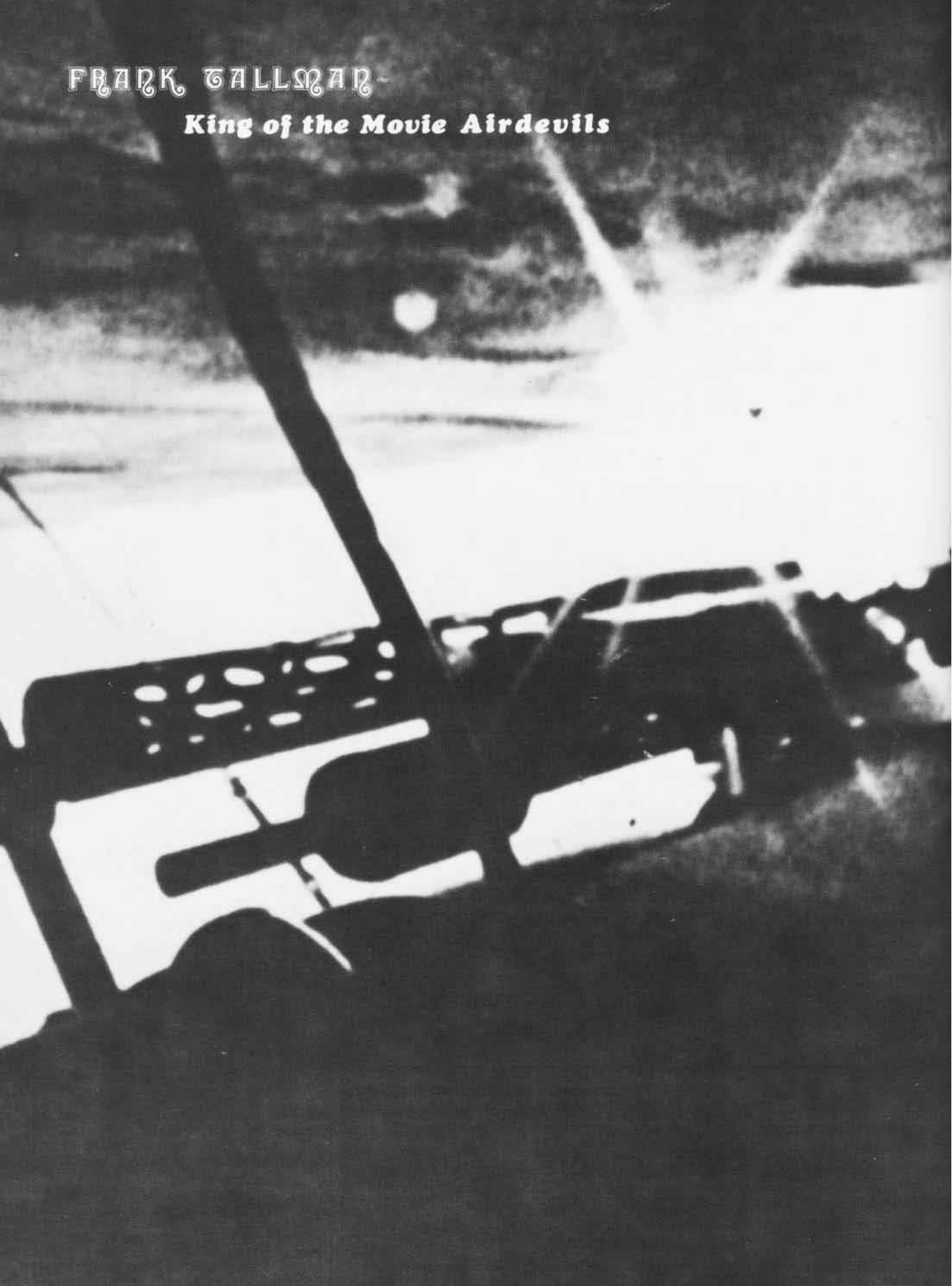
Lieutenant Commander Frank G. Tallman, USNR (Ret.), peers across the smoking bowl of his pipe, puffs a few times and says, "My dad was a Naval Aviator and, more than anything else, that's what I wanted to be. When World War II came along all I had acquired was one year of high school at a time when the Navy stipulated two years of college. Well, I had soloed when I was 16 and was then a civilian instructor for the Air Corps, so I beat on a lot of desks until the Navy decided it could use me."

Tallman spent 14 years in the Navy before deciding to be a precision pilot for aviation movies. Along the line he had started a collection of vintage aircraft, the first being a Sopwith *Camel* he had discovered in a New Jersey barn in 1949. Later, after adding such items as a Bleriot, a Farnum, a Canuck, a Pfalz and a Fokker, he formed a partnership with fellow stuntman and friendly rival, Paul Mantz. In 1964, they opened their "Movieland of the Air" exhibition at Orange County Airport in Santa Ana, California.

There, in a single Los Angeles location, the public was offered the world's largest collection of historical aircraft, replicas, engines, armaments and artifacts available to the motion picture and television industry. Eventually, Tallmantz Aviation would expand into the training of helicopter pilots, the maintenance of a wide range of aircraft and the specialty of helicopter use for motion pictures.

# FRANK TALLMAN

## *King of the Movie Airdevils*



But in 1965, the year after Tallman and Mantz teamed up for potentially unlimited prospects in their distinctive field, bizarre tragedy struck. Frank, in falling from his son's 30-mph go-cart, impacted his left leg at such a critical angle that his thighbone drove into his knee, shattering the socket and splitting the tibia — a serious but not ordinarily disastrous occurrence.

Obdurately, the injury would not heal; instead, infection set in. Then as the condition worsened, Tallman received word that his famous friend and partner, the veteran stunt and racing pilot, Paul Mantz, had been killed while flying the last aerial sequence in "The Flight of the Phoenix." Three days after Paul's funeral, Tallman's leg was amputated above the knee.

# FRANK TALLMAN—
## *King of the Movi*

The road back is never easy. With Frank Tallman it was one thing to learn how to walk again with the aid of an artificial limb, but something else to be able to work a rudder and brake pedal, and fly, in an exacting profession. "It was the worst year of my life," he recounts.

Lieutenant Commander Frank Ellis and other aviator/amputees were a big help. Ellis had lost both legs in an aircraft accident a few years before and yet had achieved reinstatement to flight status after a long, uphill battle. For Tallman, it was the same torturous route but a year later he was learning to taxi the F4B, his favorite airplane, and soon afterwards he was flying the maneuverable old Navy fighter again.

The day we went over to visit with Frank and see his exhibition, the beautiful little Boeing was parked outside his "Movieland" hangar. The Tallmantz inventory varies from time to time. One month it could be 50 different aircraft, another time considerably more. For *Catch 22* he had to round up 18 B-25s and there are still a couple of those around in use as camera planes.

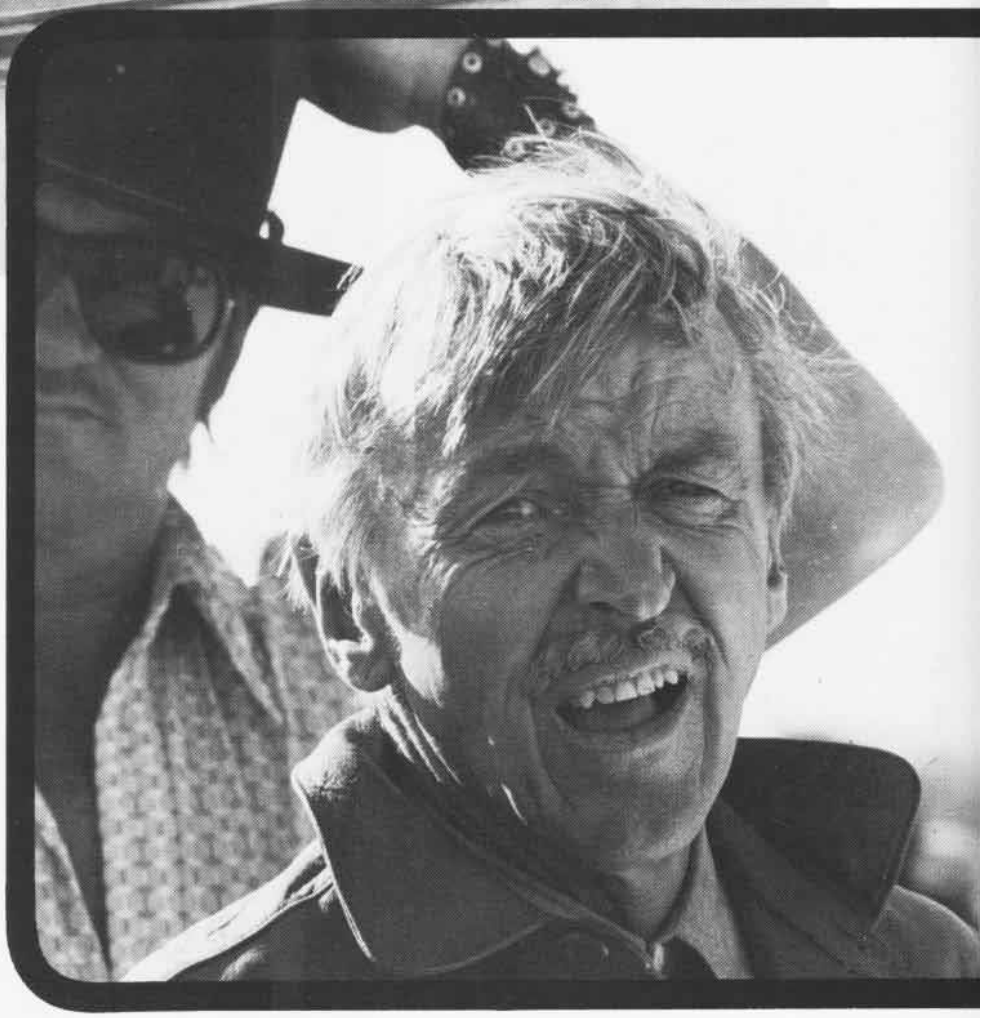
Alongside the F4B was a P-40 (in Chinese markings and *Flying Tiger* shark's teeth) and an immaculate Waco biplane. The blue and yellow two-seater belongs to Major George Hill, USMCR (Ret.). Major Hill is probably better known as George Roy Hill, producer-director of such films as *Butch Cassidy and the Sundance Kid*, and *The Sting*, which won seven Oscars.

Tallman and Hill first worked together when Frank was doing the funny aerial sequences for George's *Thoroughly Modern Millie*. At that time the two Naval Aviators began to kick around the notion of doing a complete aviation film together. As a result, Hill came up with the idea for *The Great Waldo Pepper*, a tribute to the barnstormers. In its screen translation,

**Out of uniform for a Navy pilot but great garb for B-25 driving in Catch 22.**

A year after amputation of his left leg, Tallman learns how to taxi, with an artificial limb. The hardest part was getting the feel of brakes and controls.

The light Boeing fighter has a sharply positive, steerable tailwheel, can get airborne in less than 100 feet and climb out at 40 degrees.



Frank and the heroine head downtown aboard a J-1 Standard. Their vintage mount, one of 14 aircraft used in the Waldo Pepper film, was constructed in 1919, the same year as its pilot.

airplane buff Hill insisted on maximum authenticity. For example, no process shots (theatrics executed in front of a back-projection screen) are used. Actors seen flying the old planes are actually flying them and they are shown performing their own neck-risking stunts. When the *Waldo Pepper* characters climb out of cockpits, clamber precariously around wires and wing struts, fighting wind and turbulence, Hill's cameras are photographing them at altitudes of 2,000 to 3,000 feet.

Using the stars of a film (Robert Redford, etc.) to perform such tasks is probably a first in motion picture history, and probably the last, if the insurance people have a say about it.

For operations such as the climactic dogfight, the actors rode back seats and were photographed by cameras in various perspectives, including fuselage outriggers. The truly hairy events were performed by Tallman alone.

One of the most spectacular of these is his flight down the main street of a small Texas town, his wheels skimming the pavement.

"That," he says, "was the toughest one of my career." Considering the wild, vertigo-inducing, low-level night attack on the mountain-surrounded airfield in *Catch 22*, or his flight through a hangar and then through a steel-rimmed billboard in *It's a Mad, Mad, Mad, Mad World*, or any of his other cinematic feats, that remark seems an overstatement. Frank explains it this way, "On that lengthy pass down the street, I had to be constantly aware of any crosscurrents at corners and intersections, on the lookout for any pedestrian who might ignore George's orders to stay in doorways, or people sticking their heads out of upper story windows to watch what I was doing. You see, it got down to the point where there wasn't more than three feet of free space between my wingtips and the buildings."

During the aerial filming, George Roy Hill was usually driving one of the camera planes. "For an old, ex-*Corsair*-driver Marine," says Tallman, "George is a pretty fine pilot. He's very imaginative. And he is also a perceptive

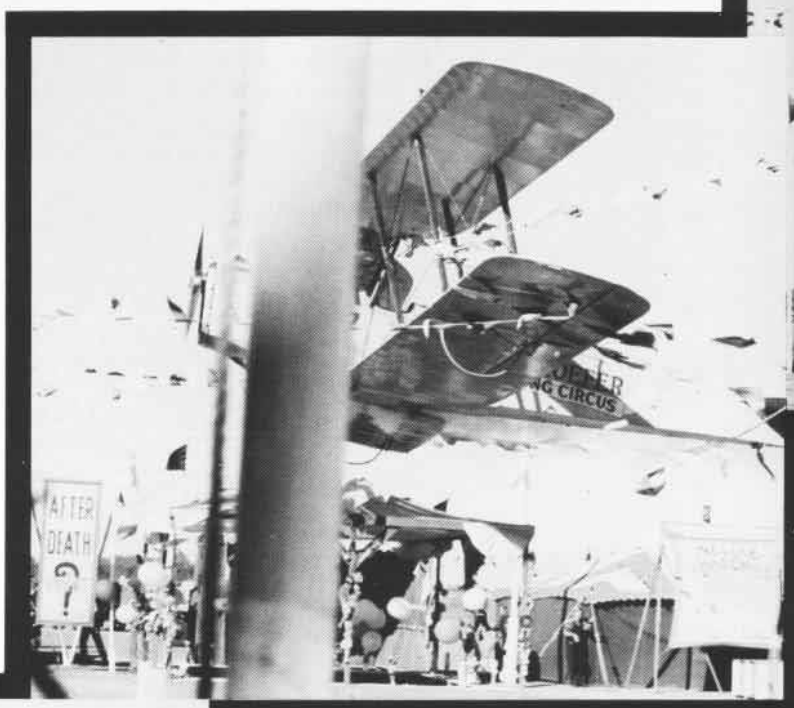
**At any time during the 45-second pass, hooking a wingtip on a pole would have meant careening into a building. After weeks of careful planning, the run was finally made — but not to director Hill's satisfaction. "That was nice, Frank, but you were too low. On film it may look as if you're just taxiing down the street. Why don't you try it again about 10 or 15 feet higher?"**

## 'Don't worry, Frank. We got every foot of that!'

human being." Frank grinned a little, so we almost guessed what was coming.

"For instance, when I did the carnival midway crash for *Waldo Pepper*, I had the misfortune to pick up a little tailwind and sail right past George's camera setup and all the balsa poles I was supposed to hit, and instead I plowed into real hardwood ones! The airplane was completely demolished around me and it was a miracle I wasn't hurt. As I was climbing out of that awful mess, feeling terrifically lucky to be among the living, George came running up yelling, 'Don't worry, Frank. We got every foot of that.' "

On the way back to the *NANews* office, we couldn't help but wonder what will happen when Frank Tallman and his organization take on Universal Pictures' version of World War II carrier warfare in the Pacific....



**WHAT! NO LSO? As Tallman's J-1 Standard unexpectedly plows past one Todd-A-O camera, three others capture a scene reminiscent of a holdoff in the days of the old straight decks.**

OVERLEAF: The Boeing F4B-1 in which Frank Tallman will perform at the April 13 dedication of the Naval Aviation Museum in Pensacola. Tallman considers the tough fighter, which is stressed to more than nine Gs, his "most exciting airplane to fly...one that you can't tear apart in any attitude."

Photo by Jim Caparelli

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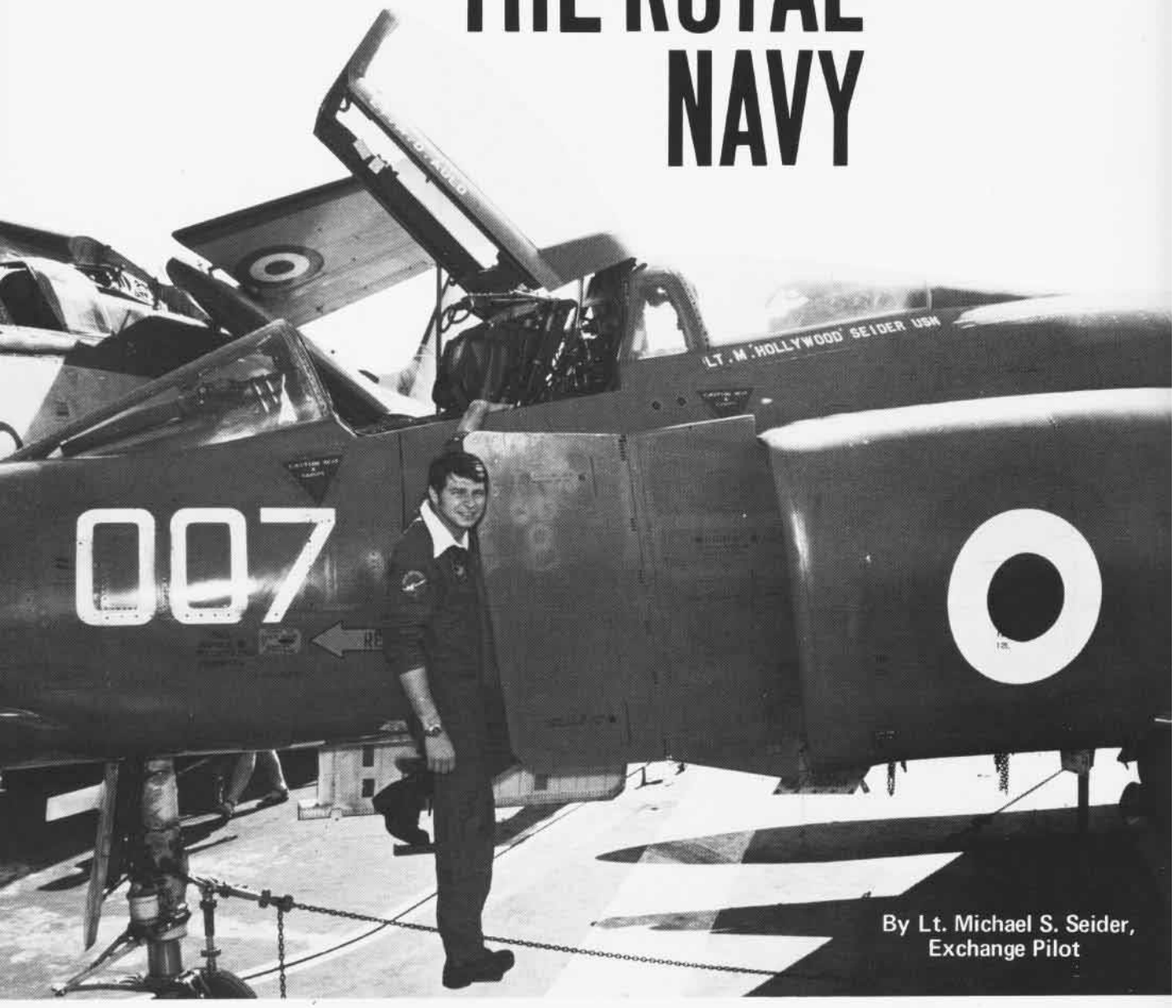
# YANK IN THE ROYAL NAVY




By Lt. Michael S. Seider,
Exchange Pilot

The squadron troubadour, Lt. Peter Hardy, slowly finished the closing verse of "The Four Four Wires of Home" as the Phantom Phlyers of 892 Naval Air Squadron completed the last of their ales.

The sun has already begun to set on the Royal Navy's Fleet Air Arm. The fourth *Ark Royal* is the last of the attack/strike aircraft carriers in the British Fleet. (The first *Ark Raleigh,* renamed *Ark Royal* after Sir Walter Raleigh fell from favor, led the attack on the Spanish Armada in 1588. The second *Ark Royal* was a seaplane carrier during WW I and the third to bear the name was the first hull laid strictly as an aircraft carrier. Involved in numerous WW II Mediterranean battles, she was sunk off Gibraltar in 1941.)

*Ark* is scheduled for decommissioning in early 1978 or possibly before. At that moment, one of the pioneers of carrier aviation goes down in *Janes* for the last time.

The inventors of the angled deck and the steam catapult will have a fleet air arm of choppers only. Fleet air defense will pass to the Royal Air Force as maritime reconnaissance and fixed-wing ASW already have. However, the romantic diehards who remain, supplemented by Royal Air Force officers, still maintain an impressive attack carrier capability. With her air wing complement of *Buccaneers, Gannets* and *Phantoms, Ark Royal* is still the capital ship of the Royal Navy.

The 56,000-ton *Ark* has an overall length of 846 feet and a beam of 168 feet. Her top speed approaches 30 knots. She has one forward and one waist catapult. Normal ship's complement is 260 officers and 2,400 men, including the air wing.

Though small by our standards, she has many of the capabilities of our super carriers. However the limited size of her flight deck and hangar areas severely curtails continuous operational readiness for she cannot launch and recover aircraft at the same time. The location of lifts, at center deck rather than at deck edge, eliminates movement of aircraft on deck when either of them is down. The ship is of 1940 design and wasn't intended for the operation of heavy jets like *Phantoms* and *Buccaneers. Ark* can truly be called an aircraft handler's nightmare. For all her drawbacks, though, the carrier can still launch tactical air support and nuclear strikes. Her updated, AWG-11-equipped *Phantoms* are a match for any airborne fleet threat and the level of training of aircrews would be the envy of any air wing commander.

Personnel to man the existing F-4K squadron are becoming scarce as the chop draws near. There are only 17 *Phantom* pilots left in the entire Royal Navy. Many of the current chaps are back for their third front-line tour with 892. The fleet replacement unit has ceased to exist and all new blood for the fleet comes via the Royal Air Force. Think what the life of a squadron commander would be like if half of his flyers were USAF-exchange types trying to land on an *Essex*-class carrier. Now you can imagine how a song like "The Four Four Wires of Home" came to be written.

There is a surprising lack of "color" on the squadron's carrier approaches. This is primarily because of the training received and the fact that the Royal Navy has very stringent rules on night flying.

A pilot must have 40 day cats and traps before he is allowed to "dusk fly," pinkies to us Yanks. During "duskers" there must be a clear horizon. After you become dusk-qualified, you are eligible to launch in the black, again provided there is a clear horizon and divert field. Fully qualified night flyers are able to launch in any weather without a bingo field. The squadron has three ace crews considered non-diversion night qualified and an additional three, night-diversion qualified.

To fly at night, a crew must have had a day launch the same day or a night sortie the previous night, a rule very similar to our own. Unfortunately I am one of the night flyers, which means I don't get to see too many movies. The wardroom cinema doesn't wait for the conclusion of night operations. *Ark's* carrier controlled approach system uses SPN-35 equipment, the normal backup system on our ships, but the quality of control is excellent.

*Ark's* operations guide permits a maximum of eight aircraft airborne at night, due primarily to deck spotting problems. There simply isn't enough room to park more airplanes on the bow without fouling the landing area. The area aft is so narrow that aircraft cannot be parked there at night. Deck lighting is similar to our own with red droplights and a centerline string with a mid-deck T arrangement. White floodlighting is kept at a bare minimum. The critical factor in landing on *Ark* is lineup. The landing area is only 86 feet wide with a 10-foot off-center engagement.

Replacement pilots for the *Phantom* are trained by the Royal Air Force. The Phantom Training Flight (PTF) at RAF Leuchars in Fife, Scotland, conducts Navy pilot refresher and Air Force conversion training. This training is highly flexible depending on the individual background and experience of the aviator involved. Each receives a program which is personally tailored to his background. This is possible because of the small number of aviators involved. The typical RAF conversion type has *Phantom* experience and most Navy refresher gents have *Phantom* and *Ark* experience. All the instructors are Naval Aviators except the squadron commander, who is a former naval officer (now air force). The unit is actually an RAF squadron and is governed by RAF rules. This arrangement exists because the role of fleet defense is being turned over to the Royal Air Force as the carrier is phased out.

For myself, an American assigned to 892 NAS, life aboard *Ark* is quite convivial. While somewhat limited in space, compared to *Forrestal* or *Enterprise,* other factors make life more enjoyable at sea. A hot cup of tea delivered to your bedside by your cabin steward at 0700 each morning is a luxury that only captains of big U.S. ships enjoy. While I never complained about the cuisine served aboard U.S. ships, I must confess that *Ark* does a brilliant job of feeding all hands. Meals generally consist of a selection of four hot entrees and a dozen wines. (Beer may be consumed after night flying.) Domestic services on *Ark* are provided by Chinese from Hong Kong. Royal Navy sailors perform wardroom and cabin duties (for security reasons), but laundry, tailoring and cobbler services are Chinese. Tailor-made Hong

*The last aircraft carrier in the British Fleet steams at full power.*

Kong suits and boots of exceptional quality are available at very reasonable prices. The Chinese laundry is very similar to the laundries on U.S. Navy ships, and the British have incorporated the familiar button crusher that our fleet enjoys. Shops, which are similar to Navy exchange facilities, are also on board. Toiletries, tobacco, watches and perfume are available for purchase. By any standard, life aboard *Ark Royal* is crowded, but as enjoyable as life at sea can be.

Before reaching *Ark Royal* and 892 NAS, I was sent to the previously mentioned PTF in Scotland for my conversion training in the Rolls-Royce/Spey-powered *Phantom*. I managed to complete the conversion course in about five weeks and even found time for some golf at St. Andrews. As I was the only student for a portion of the time, I normally flew twice a day and, on one occasion, three times.

The only major difference in the Royal Navy version of the *Phantom* is the twin-spool Spey bypass engine. The almost 25-percent increase in thrust in maximum reheat over the American F-4J gives the F-4K a better initial acceleration. But its increased drag does not give the K model a great advantage throughout the flight envelop. At high level its performance deteriorates faster than the American models. While the airframe limits are the same for top speed, the low-level acceleration of a clean K is very impressive even to an experienced F-4J man.

My actual training began at Royal Air Force Station North Luffenham in Northamptonshire at the RAF Aero Medical Center. I received my flight clothing and survival equipment which was fitted by RAF flight surgeons. A very comprehensive fitting procedure followed, including the testing and refitting in cockpit mockups. I received the F-4 high-altitude course which included a 60,000-foot-pressure-breathing, low-pressure chamber ascent, all in my new kit. I was given all the aviation medicine lectures and a cold weather survival course was included.

The flying equipment has some very good items that the U.S. Navy might look into. The dry immersion suit could be an improvement over some of our wet suit designs. It is a double layer of fabric that becomes waterproof only after it has been soaked. The cloth breathes while it is dry, making long hours in it bearable if not exactly comfortable. Rubber seals at the feet, neck and hands give good protection once you're in the life raft. For all skeptics, as I was myself before my April dunking in the cold North Sea, it really works as advertised.

The British Mk2 helmet is heavy, bulky, and vision is restricted to a small degree in air combat maneuvering. I found that the U.S. Navy formfits are significantly better.

After departing North Luffenham, British rail deposits you at HMS Vernon, a naval installation in Portsmouth where the thrill of the dunker awaits you. Very similar to Dilbert, the Royal Navy version is less terrifying because it doesn't roll over; it just submerges. Orientation in a British helicopter version is also required because helicopters are used for COD and even fixed-wing aviators can expect to be flown around in one. You receive four rides in this machine, one at each sitting position. The cockpit enters the water and rotates 180 degrees in either direction. For a fixed-wing aviator who has done a loop, it is not very disorienting and the escapes are actually fun, assuming you know how to swim.

After Portsmouth it's off to Scotland for ground school and assorted

***An F-4K in maximum reheat is about to be fired off Ark's bow cat.***

survival drills. Ground school lasted two days and a third was used for wet-dinghy and wet-winching drills in the North Sea with the SAR squadron.

Having completed all the preparations for flight, one last item remained, a test of my knowledge in the British version of the 2F-88 or *Phantom* flight simulator. The biggest advantage of this trainer is its visual display. Various airfields can be projected and it has a plate for *Ark Royal* as well. Night landings on the simulated *Ark* are quite realistic. After this phase I was certified competent to fly in the Fleet Air Arm.

Normally, the first sortie is established as a performance demonstration ride. I was given a one-on-one air combat maneuving flight instead. That happened to be the program of the week when I started flying. Having been a RAG instructor, it was falsely assumed I knew everything I needed to know and I was launched right into the ACM phase.

Most of the RAF aviators going through the PTF are strike-command experienced, so air-to-air training is emphasized. The course does include low-level navigation exercises throughout the numerous lochs and valleys of the Scottish Highlands.

I had radar flights and also flew bomber profiles, normally against ECM *Canberras*. The *Phantom* can simulate the other two threats nicely and typical evasion includes high-G maneuvers to break pulse Doppler locks. Loops and drastic altitude changes are also favorite tricks. These realistic evasion techniques make for exceptionally well trained air defense crews.

The normal brief for air intercept flights also includes a countering turn into the fighter upon visual sighting by the bogey. The AWG-11 radar with the 1971-update modifications is exceptionally reliable. The squadron does not fly an airplane with unserviceable radar. Availability on board *Ark* is not seriously reduced by this policy.

Air-to-air tactics are very similar to U.S. Navy-developed techniques. The same tactical manuals and publications that we use are employed by the Fleet Air Arm. Tactics are practiced on every sortie in Scotland.

With minimal air space restrictions, a section of aircraft launch as a pair and, at the field boundary, split into battle (loose deuce) formation. Even on air intercept sorties, transit to and from the operating area is in battle formation with turns, attacks and counters being practiced. This amounts to approximately 20 minutes of fundamental ACM practice per sortie.

I left PTF just in time to deploy with the Omegas of 892, the last commissioned fixed-wing squadron of the Fleet Air Arm. The unit uses the word Omega because Omega is the last letter of the Greek alphabet.

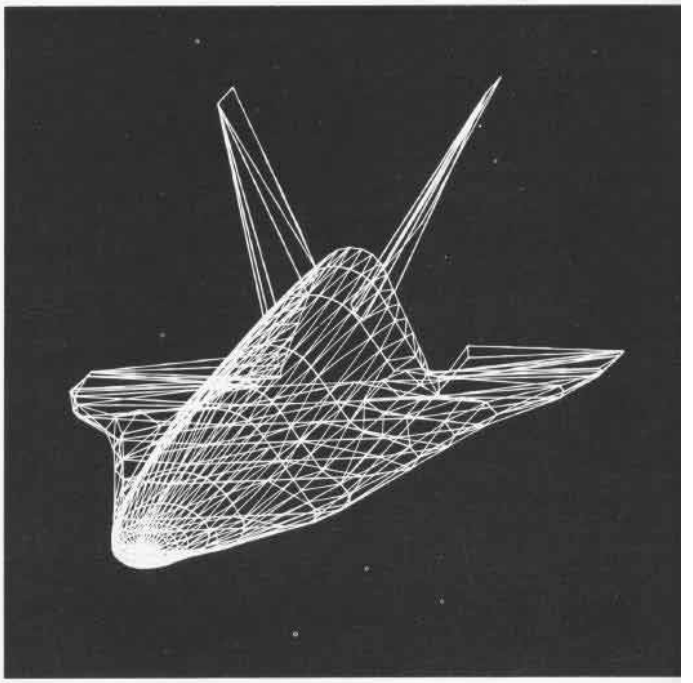
We operated in the Bristol Channel for refresher workups all summer and in September we sailed to the North Sea in support of the NATO Exercise, *Northern Merger*. Under extremely adverse weather conditions, *Ark* contributed air support and strike aircraft both day and night for the combined fleet units. Most of the aircrews accumulated almost 30 hours during the exercise. Reliability of airframe and radars was truly impressive even under the tremendous tempo of air operations. Weather, in fact, was more of a limiting factor than aircraft availability was.

It will be a sad end to a glorious chapter in the history of the Royal Navy when *Ark* launches her *Phantoms* to the beach for the last time. That will signal the finale of the most powerful ship ever to fly the battle ensign of Her Majesty's Royal Navy.

# NAVAL AVIATION NEWS . . . and views

## Up and Away

A Fighter Squadron 32 Phantom II is launched from the flight deck of USS John F. Kennedy. Heat from afterburner is clearly visible.

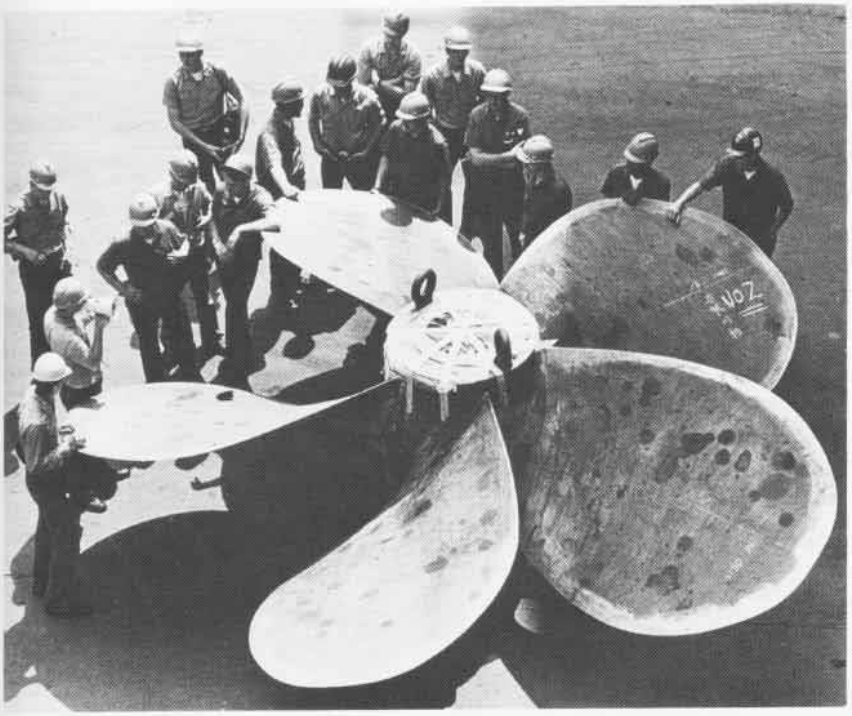


## Ethereal

is the word for this preliminary design of a orbiter space shuttle by ERNO/VFW-Fokker.

## Beware of Blast

LCdr. K. M. Smith, officer in charge of NAF Washington's VFP-306, takes no chances when he preflights his F-8. Photo by JO1 Russ Egnor.



## What to Do?

seems the question in the minds of the men gathered around one of Midway's 22-ton propellers. Underway, CVA-41 gets a push from four of these giant screws.

## Then There Were

Three — carriers tied up at the dock. In the foreground, John F. Kennedy. In the background are Franklin D. Roosevelt and Saratoga.

## Fighters All

While CVA-67 steams in the Mediterranean, Marines aboard do their daily push-ups under the noses of carrier aircraft. The photograph is the work of PH2 S.K. Lane.

# THE BUSY BASEMENT OF AARON CRANE

Photos by Bob Moore

Down in the basement of Building 200 at the Washington Navy Yard, Aaron Crane leafs through a NATOPS flight manual. It has been ten years since he supervised the first complete Naval Air Training and Operations Manual and Pocket Checklist. This followed a beneficial suggestion by a chief editor at the Naval Tactical Doctrine Activity (NavTacDocAct), Chuck Taylor.

Taylor thought NavTacDocAct could produce manuals "in-house" rather than have the Navy pay high prices to industrial sources for the same work. When Crane's NATOPS manual and pocket checklist, written for the T-34B, appeared, his efforts were described as "innovative." The layout arrangement and design created by Crane in this and other earlier manuals have provided a standard used in the more than 50 NATOPS manuals in effect today.

As a senior writer/editor at the activity, Crane is part of a unit led by Commander J. W. O'Donnell, officer in charge. Commander Ron Shelley heads the NATOPS coordinator division.

The principal functions of NavTacDocAct include coordinating the publication and updating of the many communications and tactical manuals (ComTac pubs) as well as coordinating publication and revisions of NATOPS manuals for all planes in the Navy/Marine inventory. This second task was assigned to the unit in 1961 when the NATOPS program was established.

A CNO field activity, NavTacDocAct is manned by 11 officers, 2 yeomen and 42 civilian writer/editor, production and graphics personnel. Many of these have extensive experience in aviation industry publications.

Complementing these personnel are Navy flyers, operationally experienced, who represent all types of flight activity and are permanently assigned to the unit.

While an aircraft is still in production, the manufacturer manages updating NATOPS manuals. Once out of production, NavTacDocAct takes over and is fully responsible for the total NATOPS effort which has resulted in considerable monetary savings over the years.

The activity turns out an annual 10,080 pages of manuals for ComTac pubs and 6,432 pages of NATOPS changes and revisions. NATOPS changes essentially consist of items approved by conferences which are held regularly at various locations across the country.

Changing safety precautions, tactical doctrine modifications, alterations of on-board weapons systems, warfare plans, combat experience and security constitute the usual reasons for changes.

NavTacDocAct maintains a record of the status of all NATOPS publications and keeps track of the progress of urgent change recommendations. A monthly status report containing this information is mailed to appropriate activities.

At present the activity is handling

*It's a typical busy day at NavTacDocAct. Editor Crane inspects a NATOPS negative with artist Gaela Hime, conferees check helicopter flight procedures and Cdr. O'Donnell discusses his budget.*

117 ComTac pubs and 275 NATOPS manuals. The latter number includes classified supplements and pilot-carried checklists which accompany the manuals.

Final NATOPS review conferences are held regularly at the Washington Navy Yard spaces. Agenda items which have been processed through flying units, evaluators and model managers for each type aircraft are thoroughly discussed, then finally approved or disapproved by CNO. In addition to the NavTacDocAct representatives, model managers and appropriate fleet users are present at these conferences.

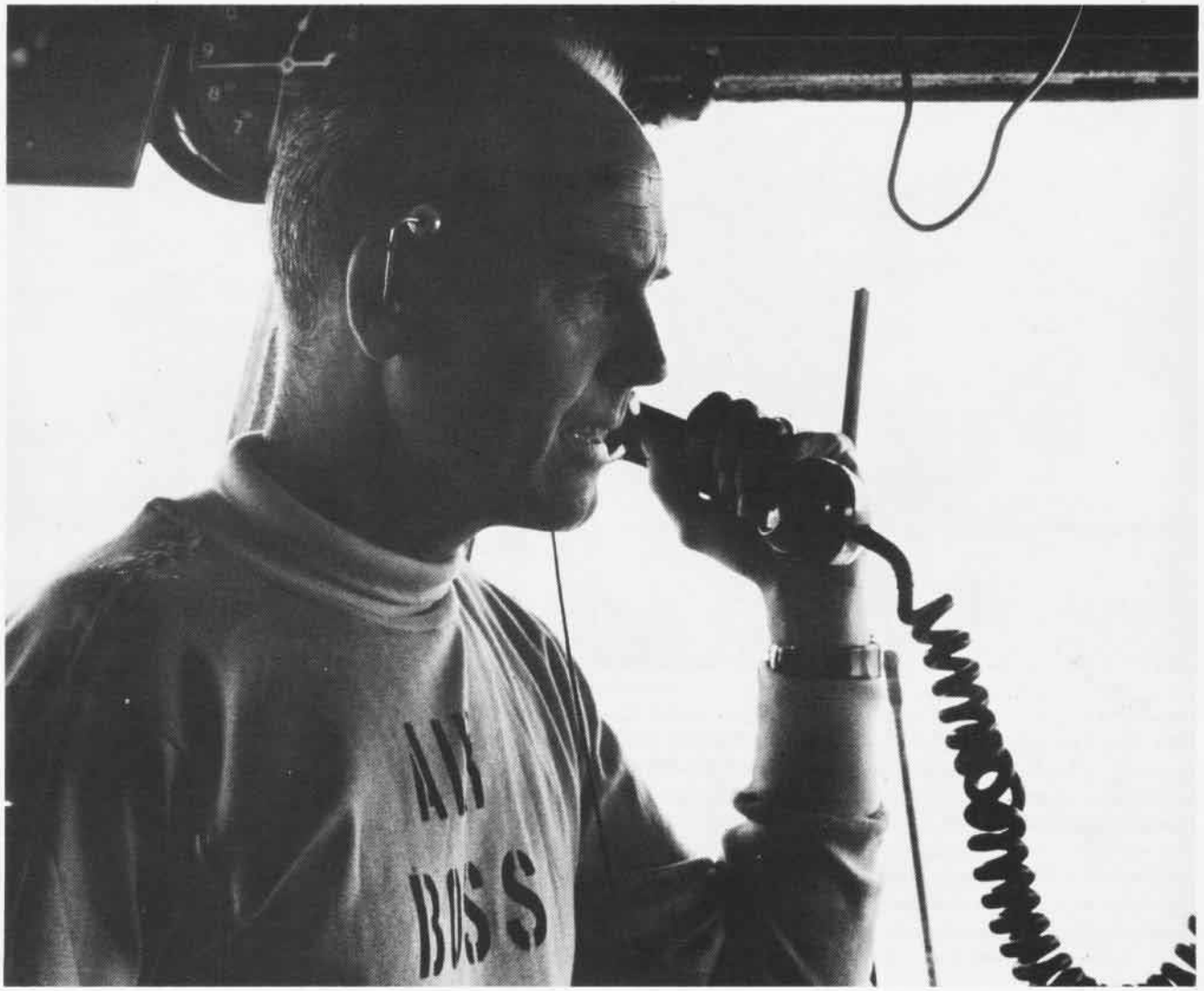
Aaron Crane is heartened by the often heated and dynamic verbal exchanges at the conferences. For example, a Marine pilot was talking about the H-1 helicopter. "Sure," said the Marine, "you can make night landings with just your navigation lights—but you lose all depth perception just before touchdown."

Vigorous discussion continued. The Marine spoke again. "The thing with the H-1, or any helicopter, is to standardize safety and operational procedures."

Aaron Crane beamed at those words. He was thinking, "When you get right down to it, that's what these manuals—these words written on paper—are really all about: standardizing safety while encouraging evaluation and incorporation of new ideas and techniques."

## USS MIDWAY

# air boss




*During the long day the voice of the Air Boss can be heard throughout the ship. He may say to damage control, through an internal circuit, "We've got too much list to starboard. Flood out two three-quarter tanks." Over a loudspeaker he will direct a man wandering topside, not one of the flight deck crew, "Get out of port catwalk. Recovery in progress."*

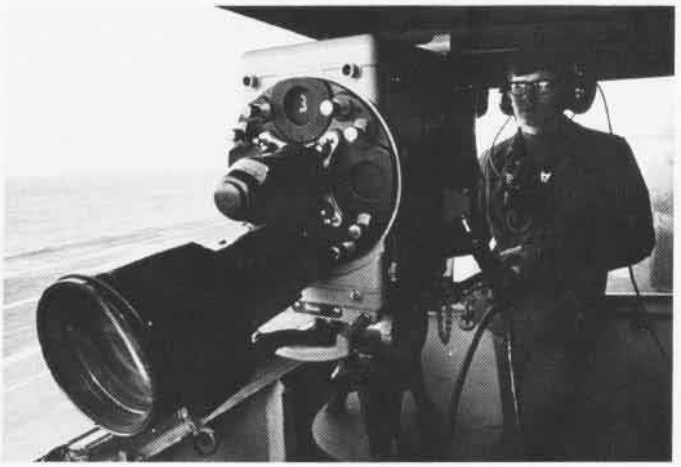
An ordinary workday on *Midway's* flight and hangar decks may begin at any hour for the Air Boss and his men. Those days often last 16 straight hours and call for coordination, teamwork, muscle and a tremendous concentration on speed with safety. CVA-41's Air Boss and his 300-strong crew take a lot of pride in their work as they make things happen in the often hectic environment of flight operations at sea. They are men of the air department and, in every sense of the word, they are pros. Commander Vernon L. Jumper is *Midway's* man in the tower. He is responsible for making the complex operations of launch and recovery work again and again – and again. He describes his job simply, "Through the captain, I control the flight deck." The hangar deck is also part of his territory. Supporting him are the assistant air boss, Commander Peter J. Theodorelos, and the aircraft handling officer, LCdr. Michael F. Falcon.

From his perch in Primary Flight Control, the Air Boss has an overview of the flight deck, fore and aft. An extensive communications system connects the Air Boss with all air department divisions and key work centers, and keeps him in touch with the commanding officer.

Shortly after Cdr. Jumper became Air Boss, an A-7 *Corsair* was unable to land normally because of fuel transfer failure. Says the Air Boss with pride, "In seven minutes from the time we had word of the problem, we had the barricade rigged and recovered the aircraft . . . . It showed the coordination and teamwork required on the flight deck." He must maintain that coordination and teamwork at all times since the decisions he makes, such as waving off, are often critical.

Cdr. Jumper has only praise for his men – for their pride and morale, and for the long, grueling hours they put in. On an average day an aircraft handler on the flight or hangar deck will lift about 3,000 pounds of chocks, chains and tow bars, V-4 men will pump 170,000 gallons of fuel and V-2's personnel are responsible for the proper functioning of the catapults with their 40-million-foot-pounds of power. The Air Boss points with pride to a safety record which has included no serious accidents over the past two years.

His job is demanding and exhausting. But his department passes the test each time a plane is shot off *Midway's* deck into the sky and returns.



*The Air Boss directs flight deck operations from PriFly which is located aft and portside in the carrier's island superstructure. He supervises launch and recovery during cyclic operations, usually one and one-half hours per cycle, eight cycles daily. His workday starts two hours before flight operations and ends two hours after the last plane returns.*

***On Midway, the air department has four divisions. V-1 and V-3 maintain the flight deck and move planes. V-4 handles the critical task of refueling the aircraft, while V-2 operates the steam-powered catapults and arresting gear.***

# THE VIKINGS ARE COMING!

Transition to the S-3A is in full swing. Air Antisubmarine Squadrons 21 and 29 are already flying the *Viking*, and VS-22 will finish its training in April.

Scheduled to change from the S-2 *Tracker* to the S-3A during the remainder of 1975 are VSs 28, 32 and 31. They will complete transition training in June, September and December, respectively. VSs 33, 24, 38 and 37 will switch to the new aircraft in March, June, September and December 1976. VSs 27 and 35 will be flying the *Viking* in March and June 1977 to complete the transition.

Training in the *Viking* is being given by VS-41 at NAS North Island, Calif. Personnel in the RAG squadron were trained in the aircraft at the Lockheed Burbank Plant where the S-3A is built.

Initial fleet transition began in June 1974 when ground personnel from VS-21 reported to VS-41 at North Island. Flight crew training began July 1. Those Naval Aviators not qualified in jet-powered aircraft began their training at NAS Miramar and later went to North Island.

Fleet Air Specialized Operational Training Group, Pacific at North Island provides both classroom instruction and hands-on practical training in the *Viking* simulator. All other training is done by VS-41.

VS-21 completed its transition October 16 to become the Navy's first operational *Viking* squadron. It will deploy aboard USS *John F. Kennedy* (CV-67) later this year.

***At NAS North Island, a VS-21 Viking completes its first operational flight, top, and AO3 Harry Frisbee, VS-41, loads a sonobuoy onto another S-3A under the direction of AO2 Larry Asher.***

A 54-day working tour of South America ended recently for three active duty and six Naval Air Reservists, members of VR-52, NAF Detroit, Mich.

The C-118 unit participated in *Unitas XV*, a joint exercise with U.S. Navy and Navy and Air Force units from South American countries. It supported anti-submarine and patrol operations, furnishing other squadrons with supplies and equipment while visiting nine South American countries.

The 15th *Unitas* exercise consisted of vigorous and realistic training including anti-submarine, antiair and surface warfare environments. This was the second year in a row that the squadron participated.

A record-breaking turnout for both the NAS air show and the 13th annual Key West offshore power boat race was the result of careful coordination by community leaders and the air station command.

Featuring the Blue Angels Flight Demonstration Team, the Marine Corps' *Harrier*, and other aircraft, combined with one of the biggest offshore races of the season, the show attracted 10,000 — the largest crowd ever at any NAS Key West event.

The 50,000th accident-free flight hour achieved by VMAT-102 on January 11, 1975, represents a first in Marine Corps Aviation. First Lieutenants Mike Jindra and John Looney were the crew of the squadron TA-4J which made the record-breaking flight that ended at Tinker AFB in Oklahoma City. It was a cross-country training mission combined with a syllabus formation flight on the wing of the squadron commanding officer, Lieutenant Colonel Henry L. Searle. The accident-free hours were accumulated in A-4 *Skyhawks* during a five-year and nine-month period.

On July 1, 1974, VMAT-102 became the only A-4 Marine Corps training squadron tasked with providing A-4 replacement pilots for the five remaining tactical *Skyhawk* squadrons.

The National Aeronautics and Space Administration has presented its Group Achievement Award to the Navy Underwater Support Team at the Marshall Space Flight Center, Huntsville, Ala. EM1 Michael Bennett accepted the award for himself and fellow team members RMC Joseph Camp, BM1 Alfred Ashton, EN1 Aloysius Ebner, AE1 Charles Fellers, MM2 Roger Gant, EMC Franklin Flynn, OSC Patrick Gruber, SMC Donald LePage, HT2 Rodney Wilkerson, and ET1s Edward McQueen and R. A. Pouliot.

From April 1971 to April 1974, the Navy men from underwater demolition and SEAL teams were stationed at the Marshall Space Flight Center. They were responsible for the maintenance of the neutral buoyancy simulator (NBS) and its associated hardware. The NBS is a 40-foot-deep and 75-foot-wide tank that holds 1,500,000 gallons of water at a temperature between 80 and 85 degrees. During astronaut training the team members served as safety divers and test subjects.

A significant period in the team's tour at Huntsville was during the launch of *Skylab 1* and the subsequent malfunction that tore off the left solar wing panel, meteroid and heat shield, and only partially deployed the right solar wing panel.

It became necessary to find a way to free the solar wing and to deploy a twin pole solar shield for the workshop. A life-size mockup of *Skylab 1* was placed in the NBS and the team worked around the clock assisting the experts in designing and testing devices and tools to effect the repairs, and in the training of the *Skylab* crews in extra vehicular activity methods to be used in making the repairs.

Serviced and ready for the day's operations, seven S-3A *Vikings* wearing the clover leaf insignia of VS-41 are in "eyes right" alignment on the flight line at NAS North Island, Calif. The antisubmarine warfare training squadron provides maintenance and transitional flight training for personnel of S-3A squadrons. The *Vikings* are scheduled for carrier deployment in mid-1975.

Fighter Squadron 32, NAS Oceana, Va., one of the new F-14A *Tomcat* squadrons, has been awarded a citation for being the only fighter squadron in the U.S. Navy today with five years of continuous major-aircraft accident-free flying.

The award was presented by Commander G. L. Riendeau, Commander, Carrier Air Wing One, to the skipper of VF-32, Commander J. G. Knutson, at an awards ceremony at Oceana.

When Lt. Pat Mahoney, HSL-33, Imperial Beach, Calif., started flying UH-2As back in 1966, one of his first aircraft was bureau number 149017. When LCdr. Pat Mahoney flew his 1,000th hour in an H-2, he was piloting number 149017, now an SH-2F. Mahoney, a plank owner in HSL-33, recently became officer in charge of HSL-33 Cubi Point Det.

The most memorable moment of Mahoney's H-2 flying career was piloting the first H-2 across the Arctic Circle in 1966, off the Coast Guard icebreaker *Westwind*.

Lt. John D. Currivan of Training Air Wing Three at Chase Field in Texas is a richer man these days. His beneficial suggestion improving TA-4 and EA-4 canopy-locking design, ultimately titled Air Frame Change 551, won him $1,475. Currivan's idea involved a modified system which gives off a continuous warbling sound and bypasses the instrument light-dimming circuit. This ensures a bright canopy light and an aural warning when three conditions are met: weight on the landing gear, power above 70 percent, and an unlocked canopy rifle bolt. If all three of these conditions exist, the warning continues until the situation is corrected.

VR-24's Det Rota, Spain, has been an unheralded participant in operations involving minesweeping of the Suez Canal. The unit provided nearly all of the airborne support for Operation *Nimbus Star, Nimbus Moon* and *Nimrod Spar*. Although runways in Ismailia, Egypt, were less than 4,000 feet long and temperatures sometimes reached 130 degrees, the Det's *Hercules* made timely flights to the area in support of this critical mission. OinC of Det Rota is Commander E.V. Thomas.

While conducting routine flight operations off the Southern California coast recently, USS *Ranger* counted a record launch and recovery.

Lieutenants Tom Walsh and Ivan Williams, VF-121, NAS Miramar, trapped in an F-4 *Phantom* to mark arrested landing number 174,000. Earlier Ltjg. Al Kemp and Lt. Terry Timmester, also from VF-121, were in an F-4 as it became the 67,000th plane to be catapulted off the ship's number one cat.

*Ranger*, home-ported at NAS Alameda, is commanded by Captain John L. Nicholson.

The first Golden Centurion Award for 1,000 sea power presentations was awarded to members of NARU Norfolk.

"The realization of this country's strong dependence on open sea lanes is a story that needs to be told," said Admiral J. L. Holloway III, CNO, in a congratulatory letter to Captain Fred Thorn, NARU's commanding officer.

On the opposite coast, CWO Ralph Furman Bishop Moore, USN (Ret.), won a Triple Centurion Award. Moore operates from his home at Fountain Valley, Calif.

Lt. Sherry Henderson, the third female to receive naval flight surgeon wings, became the first woman to receive the Navy Surgeon General's Award in graduation ceremonies at the Naval Aerospace Medical Institute, Pensacola, Fla.

Rear Admiral Richard D. Nauman, Commanding Officer, Naval Aerospace and Regional Medical Center, presented the award.

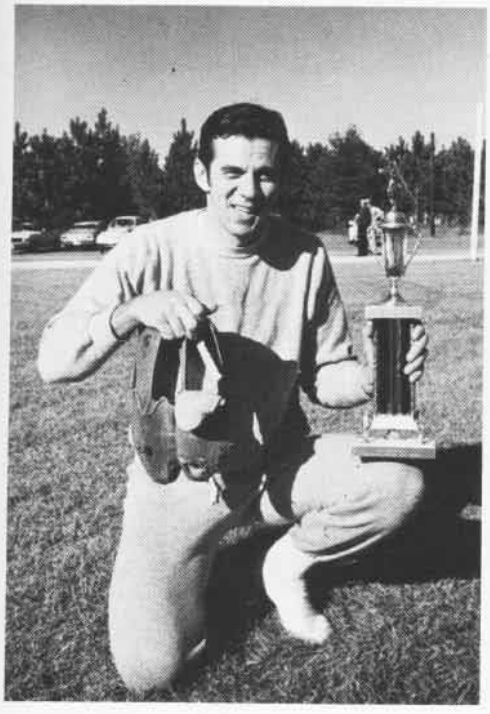
The 1973 graduate of the University of Utah Medical Center completed the six-month basic course in aerospace medicine, including a solo flight and is now qualified for assignment to Navy and Marine Aviation units.

Dr. Henderson has orders to Okinawa.

A senior test pilot, who generates speed on the ground as well as in the air, won the Second Annual East Coast Nautical Mile Race in Jacksonville, Fla.

LCdr. Pat J. Gallagher, head of the Flight Test Division of the Naval Air Rework Facility, displayed a well-worn pair of sneakers which have carried him 2,900 miles and won two consecutive victories in the senior division of the Navy-sponsored event. He entered and captured top honors in his division in 7:13 for the mile and one-eighth course.

Accompanied by his Brittany spaniel, the veteran Navy miler now runs "primarily to keep in condition for the hunting season."



Nearing the completion of its transition from A-4Ls to A-7As, VA-203, Jacksonville, Fla., won the Commander Attack Carrier Air Wing Reserve Twenty bombing derby. VA-203 is the fourth of six reserve squadrons to be equipped with the *Corsair II* and the first on the East Coast.

Commander Bobby S. Morgan, the squadron skipper, received the Golden Bomb Award from Rear Admiral Thomas Russell, Jr., Deputy Chief of Naval Reserve (Air), at NAS Fallon, Nev., where the wing was undergoing its annual active duty period.

The *Blue Dolphins'* squadron insignia shows their namesake which represents their operating area over the waters of the Atlantic, the Caribbean and the Gulf of Mexico. The insignia's background design is a red and blue facsimile of the Chinese symbols *Yin* and *Yang,* representing the inner and outer man molded into one. For VA-203 this represents the joining of citizen and sailor.

For its participation in Operation *End Sweep*, HMH-463 received a Meritorious Unit Commendation from Admiral J. L. Holloway III, CNO, last December. According to the citation, HMH-463 effectively assumed the emergency mission of airborne mine countermeasures (AMCM) when it modified 12 CH-53D *Sea Stallions* to the AMCM configuration, conducted AMCM training for pilots and aircrewmen, designed a Marine Corps AMCM syllabus and trained aircrews from two additional squadrons. HMH-463 performed in *End Sweep* as part of Task Force 78.

# Letters

### Rescue Record

I would like to submit an item for your "Letters" and simultaneously make a challenge. As officer in charge of the Pensacola Search and Rescue Detachment, I recently presented Lt. Terrence W. Black a rescue citation for flying an HH-46 through IFR conditions to evacuate a premature baby from DeFuniak Springs, Fla., to a hospital in Pensacola 50 miles away. The significance of this award lies in the fact that Boeing is the third corporation to make a life-saving award presentation to Lt. Black. His first award was in April 1970 from Kaman for his rescue of an A-4 pilot with a UH-2C while attached to USS *Shangri La* (CVS-38). In June 1972 he received a citation from Sikorsky for his rescue of 28 people with an SH-3G in Wilkes-Barre, Pa., during the aftermath of Hurricane *Agnes*.

My challenge is to other units in the Navy to match or surpass Lt. Black's record of at least one rescue citation from three of the four major helicopter manufacturers.

Lee F. Wright, LCdr.
OinC, SAR Det
NAS Pensacola, Fla. 32508

### Whammy

As an habitual reader of *Naval Aviation News* – all I can say is "Great leapin' fixed wings." Having just finished reading "OK Guys – About That Survey!" in the November 1974 edition, I am completely disillusioned with your publication. Wearing Wings of Gold since 1968, I was shocked to find out that as a Navy helicopter pilot, I am not apparently a member of the elite "Naval Aviation community."

I can appreciate your indignation when the "senior officer" slighted the VP/VS communities with his "cut out the VP and VS stuff and get back to real aviation!" I feel a similar indignation with your quote "Whether racing through the ozone in a *Phantom*, droning low over the ocean in a P-3 or lugging cargo in a transport, we in the Naval Aviation community all have the same basic mission and equal coverage is a must."

The cartoon of your staff in the life raft is rather appropriate in that you better hope there is a boat somewhere in the immediate vicinity because we've voted on it and your attitude makes rescue by helo out of the question.

With all due respect – a whammy on your magazine.

J. M. Bailie, Lt.
Safety Officer, HSL-34
NAS Norfolk, Va.

P.S. As a matter of fact, I was interviewed by a Commander Ted Wilbur when I was recruited at NARTU Norfolk in 1966. Is this by chance the same Captain Ted Wilbur, Head of Aviation Periodicals and History, listed in your magazine? [It is.] If so, he never alluded to the fact that only fixed wings comprised the Naval Aviation community. As I recall during my interview he correctly described the Naval Aviation community.

**Ed's Note: We accept the whammy and will definitely ensure HSL-34 does *not* have SAR duty whenever the staff is on a flight in the Norfolk area.**

### Memorial

Greetings from far away Ecuador. It has been suggested that you might like to publish the following news release in *Naval Aviation News:*

On September 18, 1972, naval Ens. Gregg Schilling was killed in the crash of his *Skyhawk* fighter shortly before he was to have received his Wings of Gold.

Two years later, on September 23, 1974, two memorial plaques bearing Gregg's name were unveiled in the World Radio Chapel at Radio Station HCJB, Quito, Ecuador. One gift in Ens. Schilling's memory was a new Yamaha grand piano; the other was a unit of a new automated control system. The latter, when programmed, will put programs on the air automatically, including station announcements, changes of program, etc. This system will result in a much smoother on-the-air sound for this large, international, shortwave station.

Both the piano and automated control system were given by Gregg's parents, Mr. and Mrs. Paul Schilling of De Motte, Ind. They will perpetuate Gregg's deep interest in this remarkable radio station (oldest missionary radio station in the world, founded in 1931) and its task of beaming the Christian Gospel to places like Russia, all of Latin America and almost the entire English-speaking world.

Harry D. Yeoman, Dr. of Intl. Offices
World Radio Missionary Fellowship
HCJB, Casilla 691, Quito, Ecuador

### Blue Angels

Enclosed is what I think is an interesting photo of the *Blue Angels'* modified A-4F *Skyhawks*. The photo was taken June 3, 1974, at NAF Washington, D. C.

I have been an avid reader of *Naval Aviation News* since the early Sixties when on active duty. I look forward to it every month.

Joseph G. Handelman, DDC
1405 Port Echo Lane
Bowie, Md. 20715

### Fiber Optics

I just happened across a May 1974 copy of *NANews* and was intrigued with the item on fiber optics, page 3. It would be interesting to learn more details of the system, such as its limitations and other applications.

It seems to me it would find a good application in intrusion alarm systems (burglar alarms).

Herman Dramen, QAVA
Naval Plant Representative Office
3855 Lakewood Blvd.
Long Beach, Calif. 90846

**Ed's Note: The Naval Electronics Laboratory Center, San Diego developed the system.**

### Got it Right?

I am writing in regards to Commander Flatley's article in your September 1974 issue (C-130 carrier feasibility study). I was the flight engineer on this project, so in the interest of accuracy and with no reflection on Cdr. Flatley, I invite your attention to the article on page 18.

Cdr. Flatley's copilot was LCdr. W. W. Stovall, not Cdr. Stillwell. In my log book I have us performing a total of 29 touch-and-go landings and 21 full stops and takeoffs in all three of the two-hour periods we had with *Forrestal*. Your article indicates 42 touch-and-go landings during the first period.

We performed tests up to 121,000 pounds which certainly is not 3,000 pounds over maximum gross weight. At that time the KC-130F tanker grossed at a max of 135,000 pounds with an emergency gross weight of 145,000 pounds.

Ed Brennan, ADJC
Patrol Squadron 56
Flight Engineer Branch
NAS Jacksonville, Fla. 32212

### Flattened

I am very interested in the Navy and I am interested in going into it. A tornado hit our town and it flattened the Navy recruiter in our county. I got *Naval Aviation News* from him until it happened. I talked to another recruiter and he told me to write you for back issues if I wanted them. Please send August, September, October, November and December 1974.

Kent Jones
194 Hardachre Drive
Xenia, Ohio 45385

### Reunion

The 22nd reunion of former members of the crew, squadrons and Marines who served in *Lexington* (CV-2) from 1927 to 1942, when she was sunk in the battle of Coral Sea, will be held June 25-28, 1975, in Philadelphia, Pa., at the Benjamin Franklin Hotel. Keynote speaker will be Rear Admiral John F. Hines, USN (Ret.). For more information contact Walter D. Reed, 5410 Broadway, #105, Oakland, Calif.

### Publications

I need three Navy publications which are in very short supply these days, at least in our library and from official sources.

It is possible that readers of *Naval Aviation News* may have one or more of these lying idle and taking up room on their shelves. Any duplicates located will be sent to the Naval Aviation Museum since these publications were not obtainable from Pensacola either.

Naval Airborne Ordnance
1. BuPers 10826A (1958) and first edition dated 1952.
2. *Catapults*, Vol. I, Hydraulic, Naval Technical Training Center, Philadelphia, 1957-58.
3. *Catapults*, Vol. II, Steam (NavAer 00-80T-69), same source as above.

I just hope that they have not all been scrapped.

Louis S. Casey
Curator of Aircraft
Aeronautics
National Air and Space Museum
Smithsonian Institution
Washington, D. C. 20560

### Nostalgia

I was a JO striker in HS-5 aboard USS *Lake Champlain* (CVS-39) in 1960. Not to dwell on a nostalgia kick, but I think a lot of ex-airdale Navy types (irrespective of rank) look back on those days with fondness. I know I do. That time of my life really did a lot in preparing me for the future, thanks in large measure to our squadron PIO who talked me into going to college when I left active duty. Because of these positive feelings, I maintain an interest in Naval Aviation and its goals.

Let me say that the December issue was, as usual, enjoyable. Particularly the article "Soliloquy." I'll bet a lot of folks think that *NANews* is another technical, nuts-and-bolts service publication. Oh well, I'm glad that it is as fine as you and your staff make it (and keep it).

Peter Kilduff
57 Sefton Drive
New Britain, Conn. 06053

**Ed's Note: Whether you're an "ex" or active duty airdale, we're always anxious for nostalgic items, be they pictures, stories or both.**

### Kudos

The July and August issues show *Naval Aviation News* at its very best: superb action photos of men and aircraft during flight deck operations, the article on Admiral Moorer and the history of VA-35 in the July issue; the articles on Middleman and Paddles and Sangley Point in the August issue—all add up to first class reading. I have received the *News* for six years and look forward to each issue.

I have dozens of books on U.S. Naval Aviation and have a superb collection of scale models of current Navy aircraft. The only thing missing from my naval collection is a carrier patch. If any public relations officer on a carrier could send me a patch, I would be most grateful.

J. Scott Haldane
60 Glenogil Terrace
Forfar, Angus, Scotland

**REMEMBER !**

**Official Opening**

**NAVAL AVIATION MUSEUM**

**NAS Pensacola, Fla.**

**13 April 1975**

NAVAL AVIATION MUSEUM
PENSACOLA, FLORIDA

### Museum and Helicopters

Enclosed is a picture of the four commanding officers of HelSeaCon-Wing One presenting Captain W. L. Jensen with an oversized check representing the amount contributed to the Naval Aviation Museum to date.

Navy helicopters are one of the more significant and exciting things to happen to Naval Aviation in the past 20 years. Helicopters continue to be the fastest growing, most productive air arm of the Navy. Their future is endless. We in the helo community are chagrined as to why there are no present plans for a helo display for the museum (as proposed in your September 1974 issue). Perhaps in a future issue you can comment on this.

Brian V. Buzzell, Lt.

### VR-24 Det

Congratulations on a fine article about Commander James Flatley III and the Lockheed C-130 *Hercules* carrier landings on page 18 of the September 1974 issue of *Naval Aviation News*.

C-130 drivers, however, probably noticed a small error when the author gives the impression that the maximum gross weight of the aircraft used in the test was 118,000 pounds. If the tests culminated at 121,000 pounds the aircraft in fact was 3,000 pounds over normal recommended landing weight. C-130s are landed up to 135,000 pounds which is their *maximum recommended landing weight*.

Nothing's perfect but the article entitled "Suez Sweep" by JOC Warren Grass and JO2 James Heltsley (on page 34 of the same issue) leaves a lot to be desired as far as the men of VR-24 Det are concerned.

Our C-130s began daily operations into Egypt and Cyprus on April 12, 1974, and were operating daily out of the strip at Ismailia by May 1.

It really irritates us to see the article list the achievements of the Army and Air Force but leave out the Navy's own. Almost all the cargo and passengers received and shipped out by *Iwo Jima* and *Inchon* while in Port Said were handled by VR-24 Det C-130s.

The U.S. ships and helo squadrons are long gone but our C-130s still routinely operate into Cairo and Ismailia supplying U.S. Navy, Army and Air Force and United Nations personnel assigned there. VR-24 Det *Hercules* are and have been the *only* means of receiving and shipping cargo and passengers out of Ismailia by air.

Al Herndon, LCdr.
VR-24 Det
NATOPS Officer
Rota, Spain

### December Issue

Just a note to let you know I really enjoyed your December issue – the color photos add a great deal. I particularly enjoyed "Soliloquy" and, if you know of any books written by Naval Aviators regarding their flying activities, I would appreciate hearing from you.

Gary Webber
Route 2, Box 13-B
Forest City, N.C. 28043

**Ed's Note: If any of our readers are aware of books such as Mr. Webber seeks, please let him know.**

### E's

In the December 1974 issue of *Naval Aviation News*, page 3, the winners of the Battle Efficiency and departmental awards for FY 1974 were listed. Assuming there has been a typographical error, the *Satan's Kittens* of Fighter Squadron 191 respectfully request that you set the record straight. Along with VF-51, VF-191 was the other winner of the AirPac E among VF types.

Roy E. Lester, Cdr.
Commanding Officer, VF-191
FPO San Francisco, Calif. 96601

**Ed's Note: So be it!**

### Registration Reminder

Young men are reminded that 18-year-olds are still required to register with the Selective Service System.

Be sure you register within the 60-day period beginning 30 days before your 18th birthday.

Registration may be accomplished at a Selective Service System local board, with a volunteer registrar or by a mail-in card.

### Rotary Wing

I read with interest your feature article on the Naval Aviation Museum in the September issue. Since you are dealing with history, I felt that your article had, both in pictures and words, a glaring omission of recent history. Granted, Naval Aviation's rotary wing history is mainly post-World War II, but if a museum is to be inspirational to young candidates for flight training, then they should be given a complete picture of aviation history.

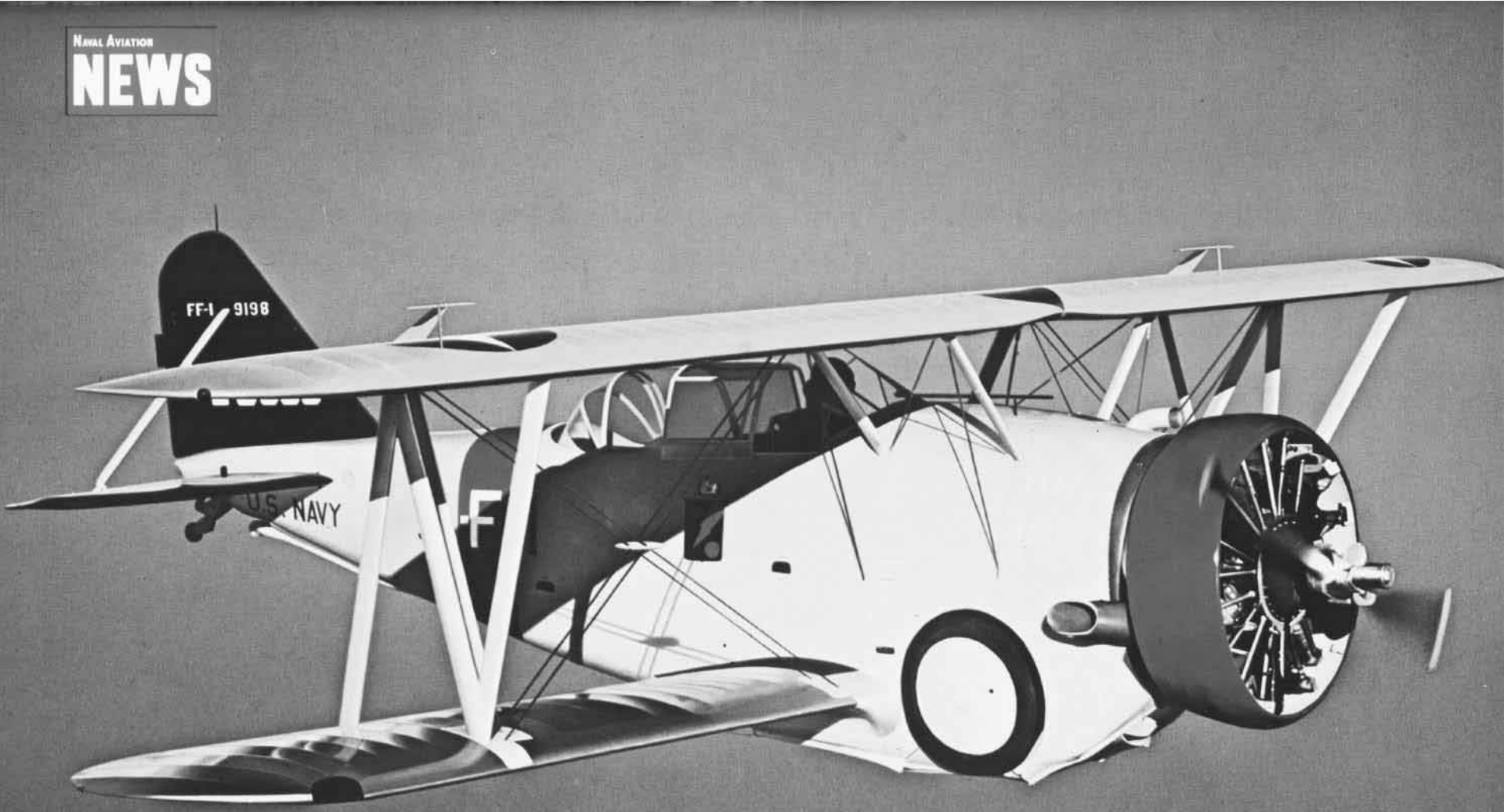
You might have mentioned LCdr. Clyde Lassen or Major Steve Pless (USMC), both helicopter pilots, both Medal of Honor winners and the only Naval Aviators to win this award for aerial combat in the Vietnam War. The night inland rescue alluded to on page 33 might have found a place in your article since the heroic actions of Lt. Harry Zinser and his crew in their battle-damaged Big Mother H-3 earned him a Navy Cross. Hopefully, the display floor will show aircraft such as HC-7's Big Mothers which performed for over 2,100 consecutive operational days on Yankee Station and helped prevent almost 200 POWs. Or the several Navy and Marine helicopter gunships of squadrons such as HAL-3 whose pilots performed day and night for 12 months in-country, and where 500-plus combat missions per pilot was the rule rather than the exception.

I'm sure these events and many more like them would be inspiring to young aviators. Hopefully, the new Naval Aviation Museum will see fit to preserve the history of the entire Naval Aviation community.

F. A. Pinegar, Lt.
Service Test
NATC Patuxent River, Md. 20670

Attack Carrier Air Wing Three has nine squadrons. VA-37 and VA-105 fly the A-7E, while VA-75 operates the A-6E and KA-6D. VF-31 and VF-103 fly the F-4J; RVAH-11 the RA-5C; VAW-123 the E-2C; HS-7 the SH-3H; and VS-24 the S-2G. CVW-3 and its squadrons are deployed aboard USS Saratoga.

NAVAL AVIATION
NEWS




*Grumman FF-1*

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