

NAVAL AVIATION

# NEWS



OCTOBER 1975



*COVERS — Harry Gann photographed the AH-1J Huey Cobra from HMA-169 based at Camp Pendleton, front. A Sikorsky three-engine YCH-53E, slated for transport duty with Navy and Marine units, was filmed by Sikorsky's James Tobin. While at 2,000 feet over USS Hancock, VA-55's Lt.R.L.Segars captured wingman Lt.B.W.Harmon with a pod-mounted KB-18 panoramic camera. A unit of CVW-21, the Warhorses were operating their A-4Fs off the California coast.*



# NAVAL AVIATION NEWS

FIFTY-SEVENTH YEAR OF PUBLICATION

**Vice Admiral William D. Houser**  
Deputy Chief of Naval Operations (Air Warfare)

**Vice Admiral Kent L. Lee**  
Commander, Naval Air Systems Command

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**H**oroscope — as in “Yesterday I couldn’t spell astrologist, now I are one.”

The following are excerpts from the secret notebook of a flying soothsayer.

Pilots best equipped to lead flights share the signs of Aries, Gemini, Leo, Sagittarius, Libra and Aquarius. Good followers, therefore wingmen, have the remaining signs: Taurus, Cancer, Virgo, Scorpio, Capricorn and Pisces.

If you’re influenced by the planet Mars and are a leader, you ought to be king of the air wing. You’re strong willed, you get to the target expeditiously and you’re disinclined to take static from anybody.

Taurus flyers due for annual physicals and anxious about their less than razor-sharp eyesight (“The LSO said I was high, but I swear the ball was in the middle!”) should schedule exams on April 23 or 25, or on May 1, 7, 12, 17 or 31. If the flight surgeon also happens to be a Taurus, you should get by even if the corpsman plays optical hide and seek with that depth perception device.

If Uranus is in the first house, an Aries is certain to love flying his own plane any place, any time. But woe — he feels unsettled in the passenger section when somebody else is at the controls. An Aries ruled by Mars, incidentally, may be impulsive — flat-hatting is still, and always will be, a no-no. Ask for him if the target’s a tough one, though, because he’s considered aggressive and quick-witted.

Capricorns should be excellent aerial companions when the weather turns to worms, fuel is low and both the UHF and the tacan threaten to falter. Capricorns are impressively cool and calculating under pressure.

Taurus types have been lauded for fine evening performances which, we surmise, means they’re good around the boat at night. Unfortunately, they tend to use their own innovations, which doesn’t enhance section or division integrity.

Gemini lead well and are also agreeable wingmen. They tend to avoid arguments with the boss and usually heed cautions to stay out of deals which may be unsafe.

Students with the Cancer sign tend to do all right under the duress of instruction. They recognize and correct faults on their own. Leos follow Natops pretty well and have been known to delay takeoffs to ponder carefully whether

or not they’ve forgotten anything.

Virgos are good on those demanding low-level nav hops. They keep a low profile. Libras should lead flights only in the morning. After 1200, details bother them and detract from the concentration required by all wearers of the golden wings.

Keep Scorpios out of the admin office because of their aversion to paper work. At the same time, they’re determined and alert in the sky. They are open and “vital” late in the evening and tend to emphasize their own personalities. An unusual ratio of Scorpios have been sighted at Miramar’s Fighter Town, U.S.A.

Sagittarius types are OK to live, fly and socialize with after lunch but watch out when the rooster sends out his first crow at daybreak. In the mornings, Sagittarius have negative vibrations, are shaky with weapons and have no valid sense of direction.

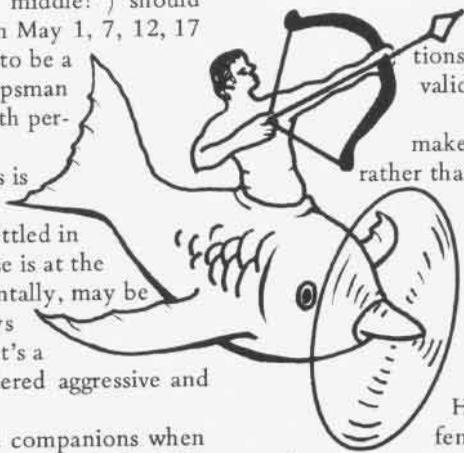
Capricorns are wishy-washy decision makers, so make sure they’re on your wing rather than vice versa when things get complicated in the ozone. At the same time, they’re pretty good at conforming to the will of others.

If your squadron slush fund officer is an Aquarius, you already know he’s controversial when it comes to investment and spending matters. He tends to be articulate in his own defense. Beware of him because he likes to travel on cross-countries and could abscond with the funds.

You’re in luck if your maintenance officer is a Pisces. He’s an expert at repairs and renovation. He does tend to over-cannibalize from the hangar queen, however. In the air, he’s a good competitor and will enhance the bombing derby team.

Regardless of your sign, if Mars and Uranus influence you, beware of absentmindedly walking into the path of an airplane. Further, don’t stand on the rim of an extinct volcano or at the edge of a canyon. Most importantly, avoid plane travel on the 1st, 9th, 16th or 20th of May.

Now, if you’ve read this far and have begun to believe these forgettable assertions from the flying soothsayer’s notebook, you are well advised to get out of the aviation game altogether and into some other field of endeavor.



**Gray Eagle** Admiral Noel Gayler, Commander in Chief, Pacific, has become the Gray Eagle of Naval Aviation. He replaces Rear Admiral L. V. Swanson, who retired following duty as Commander, Field Command, Defense Nuclear Agency, Kirtland AFB, N.M. The Gray Eagle is the Naval Aviator on active duty with the earliest date of designation. Adm. Gayler received the Gray Eagle Trophy from Mr. Paul W. Thayer, Chairman of the Board of LTV, at ceremonies in Albuquerque.

**Flatley Awards** The Chief of Naval Operations has announced the winners of the Admiral Flatley Awards for FY 1975. *Constellation*, *Roosevelt* and *Inchon*, winners in the Group I, II and III categories, respectively, were cited for superior performance in aviation safety. Runners-up were *Enterprise*, *Coral Sea* and *Iwo Jima*. *Lexington* was named the winner of a special award for her outstanding performance.

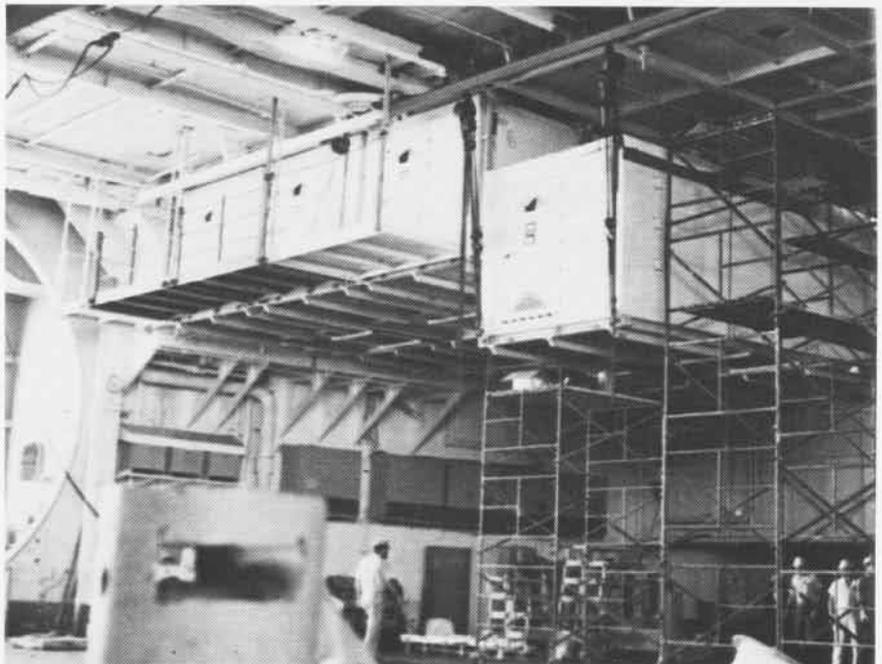
**Maintenance Vans** Aboard aircraft carriers, hundreds of miles from the nearest maintenance facility, Navy men depend upon their training and knowledge to keep the six, and sometimes seven, different types of aircraft aboard in an operational status.

Aboard USS *Saratoga* (CV-60), portable-type units are being installed to support the electronics maintenance requirements of the EA-6B. They are 20-foot trailer-like vans built by the Navy and outfitted by Grumman.

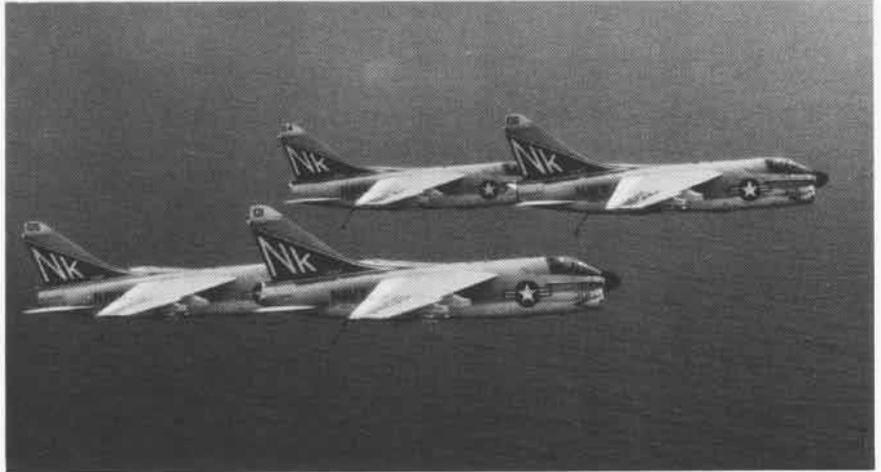
When the *Prowler* is deployed aboard a carrier, the vans also go aboard and are installed in the ceiling of the hangar bay. If the aircraft are assigned to another carrier, the vans go along.

*Saratoga* is the second ship in the fleet to receive a five-van installation. Six other carriers have the three-van installation which is capable of partial electronic maintenance.

Aboard *Sara*, the vans will be operated by crewmen from VAQ-131.



**McClusky Award** Attack Squadron 97, NAS Lemoore, Calif., has been named the winner of the Admiral Clarence Wade McClusky Award for FY 75. The trophy, symbolic of meritorious achievement, recognizes an attack squadron's embodiment of the



leadership demonstrated by McClusky when he led a bombing attack which destroyed an enemy carrier force during WW II.

VA-97 demonstrated outstanding performance as it competed with A-4, A-6 and other A-7 squadrons from the East and West Coasts.

During the period of the competition, on an eight-month deployment aboard *Enterprise* in WestPac and the Indian Ocean, the *Warhawks* won the CVW-14 Golden Tailhook Award, engaged in six major combat exercises, demonstrated that the A-7 can be employed in an ASW role and, late in the cruise, flew limited combat sorties in support of the evacuation of Saigon. These feats were accomplished while maintaining an operationally ready rate of 71 percent and completing 97 percent of their scheduled sorties. In addition they passed three years of accident-free flying in May.

Commander Bert D. Terry was C. O. during the period of the competition.

**Honorary Naval Aviator** Jay R. Beasley, a 61-year-old Lockheed-California Company instructor pilot, has been designated an Honorary Naval Aviator, one of a few people accorded this honor. For the last 23 years, he conducted postgraduate courses in the art of flying Lockheed-built naval patrol aircraft in the safest, most efficient manner possible.

Beasley's aviation career began 48 years ago in Fort Worth, Texas, when he was a part-time aircraft mechanic's helper. He took flight training in 1932 and then, for 20 years, tried his hand at many different flying jobs — instructor and charter operator, civil service ferry pilot for the USAAF during WW II, executive transport pilot for a petroleum company and United Airlines pilot.

Twenty-three years ago, he joined Lockheed where he flew most of the company-built airplanes — *Lightnings*, *Vega Venturas*, *Electras*, *Connies*, *Nep-tunes* and *Orions*.

His students, already highly professional pilots when he took them in hand, included more than 5,000 young Naval Aviators, 22 of whom have since become admirals. His personal log book shows that he demonstrated or instructed more than 22,000 landings for his students — in the P-3 alone.

Beasley's reputation as a skilled flyer, instructor and friend has made his name a legend in the ready rooms of Naval Aviation patrol squadrons and has earned him the title of Mr. P-3 Orion.

At his retirement, the Honorary Naval Aviator certificate, acknowledging his special niche, awarded by Vice Admiral W. D. Houser, Deputy Chief of Naval Operations (Air Warfare), was presented, along with a pair of golden wings, by Vice Admiral E. C. Waller III, Director of the Weapons System Evaluation Group, Office of the Secretary of Defense.

**VAST Repairs** NARF Norfolk, the East Coast overhaul point for VAST, has been tasked with refurbishing and updating 13 Versatile Avionics Shop Test stations for Navy and Marine Corps test centers throughout the country. The \$3 million refurbishment project, under the direction of NavAirSysCom and the NavAirSysComRepLant, is expected to continue through December 1978.

VAST, composed of from 23 to 37 specially-configured building blocks, is used at the intermediate and depot levels to maintain and test naval aircraft electronics weapons systems components. The systems being worked at Norfolk support the avionics of the F-14, S-3A and E-2C.

Damaged components will be repaired, modifications incorporated and limited-life items replaced. After each building block has been tested individually, the entire system will be tested, packed and taken to its permanent site where a NARF team will reassemble it and perform on-site verification.

**Jet Noise Facility** One of the largest echo-free chambers in the country, recently completed at NASA's Lewis Research Center, Cleveland, Ohio, is expected to increase the center's capability to research ways of reducing the piercing noise of jet airplanes.

The Engine Fan and Jet Noise Facility is the first all-weather indoor installation at Lewis capable of testing noise characteristics of quiet fans for advanced aircraft engines and evaluating new ways to reduce the rumble of jet noises. The use of the outdoor sites at Lewis, while still needed for full-scale testing, has been limited by inclement weather and the interference of background noises.

The new 50,000-cubic-foot facility is 52 feet wide, 56 feet long and 17 feet high. All surfaces are treated with anechoic 30-inch fiberglass wedges which absorb sound. The chamber can absorb all sound from aircraft engine fan models up to 20 inches in diameter and from jet nozzles up to four inches in diameter.

**Aviation Medical Officers** Because of an acute shortage of flight surgeons, the Navy Medical Department is introducing a new breed of physician, the Aviation Medical Officer (AMO).

The AMOs, who receive their training at the Naval Aerospace Medical Institute, Pensacola, Fla., will be assigned to installations where medical services for flight crew personnel are required but no flight surgeon is available. They will augment flight surgeons where aeromedical workloads are heavy, and they will meet contingency requirements for aeromedical personnel to deploy with the Marines and Navy air wings. They will perform flight physicals, provide routine medical care and sign aeromedical clearance notices — all as back-up support for flight surgeons.

AMOs do not undergo flight training and are not assigned duty involving flying. Neither do they incur a service obligation.

The first of four Navy physicians to participate in the program completed training in June. Another course began in August and others are scheduled for November, February and May. Interested medical officers should apply, via BuMed and the chain of command, to the C.O., Naval Health Sciences Education and Training Command, National Naval Medical Center, Bethesda, Md. 20014.



# grampaw pettibone

## Brakes Breaks

A young crew consisting of a Naval Aviator and his bombardier/navigator (B/N) were scheduled for a flyoff from the ship to NAS home plate in an A-6 *Intruder*. The brief was normal in all respects. There were no major discrepancies detected during preflight and start-up.

The A-6 then taxied toward the number four catapult. In the vicinity of cat four, the B/N rogered the weight board informing the pilot that he had done so. A short time later the cat officer ordered the board returned for verification and the B/N again rogered the weight information. The *Intruder* was taxied into the holdback with the wings folded in order to clear another aircraft spotted just aft of cat 3. The shuttle was forward at this time.

The spread-wings signal was then given after considerable discussion among the flight deck crew regarding clearance of the other aircraft. The takeoff checklist was completed as the other aircraft was taxied clear of the area. The shuttle was moved aft and the pilot thought that tension was about to be taken. However, at the cat officer's direction, the shuttle was again moved forward and the flight director gave the pilot a signal indicating a ten-minute delay until launch. The pilot held the brakes for about five minutes while observing an E-2 launch from cat 1. The pilot then set the parking brake.

When he observed a sister A-6 being positioned on cat 2, he released the parking brake, expecting to be launched in section with the other A-6. At this time, still another A-6 was taxied alongside. A fold wings signal was given to the other A-6 for clearance purposes. The pilot then lowered his flaps and slats, and completed the



takeoff checklist again. When it became apparent that the other A-6s were to be launched as a section, he reset his parking brake, making a mental note that the brake would have to be released prior to launch. He then informed the B/N that they would have an additional five-minute delay.

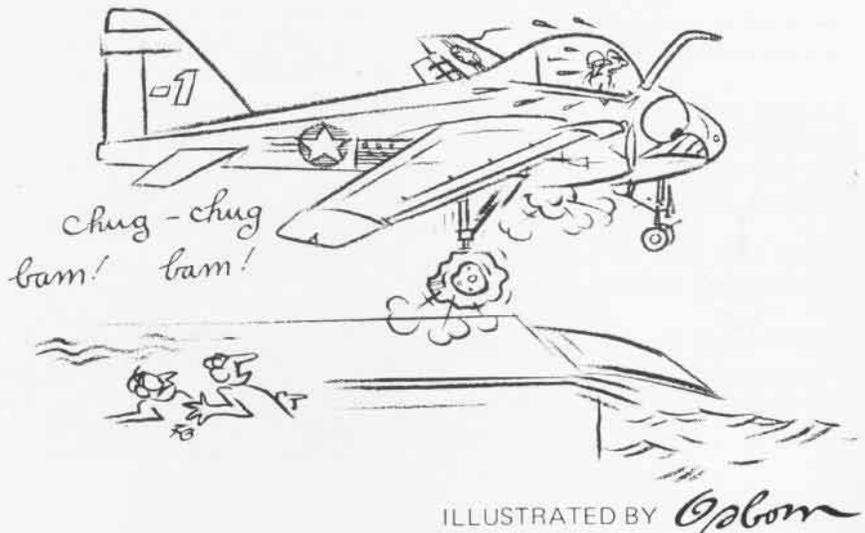
The pilot misunderstood the brief regarding aircraft intervals and was anticipating a five-minute separation between section launches. As the B/N was correcting the pilot's misconception, the crew felt tension being taken

and the pilot looked to see the director giving the off brakes/take tension signal. He immediately applied military power and performed his control and instrument checks. No discrepancies were noted by either crew member. The pilot asked the B/N if he was ready, received an affirmative reply, and saluted the cat officer. The total elapsed time from man-up to launch was approximately 70 minutes.

After approximately two-thirds of the deck run, the pilot noted a wobbling of the nose and both crew members sensed a marked deceleration. Examination of the skid marks substantiated eyewitness reports that the brakes were locked from commencement of the catapult stroke. They also indicate that the port tire exploded 35 feet past shuttle release and the starboard tire, 15 feet further. A careful study of the plat tape confirms the locations of the explosions.

As the aircraft continued its deck run, the pilot experienced an "overwhelming feeling" that the aircraft was not going to fly, and the B/N felt that the deck edge was approaching slower than expected.

The pilot ejected in approximately a ten-degree nose-up, wings-level attitude; the B/N ejected in approxi-



mately a ten-degree nose-up, ten-degree right-wing-down attitude. Following ejection, the aircraft entered a gentle climbing turn, continuing to roll right. The aircraft impacted the water. Both crew members were rescued.



Grampaw Pettibone says:

**Holy Hannah!** What in the heck was this young fella thinking about?? One thing is obvious. He wasn't thinking about the job at hand! And what about his NFO? He was a lot of help, too!

Boy, as usual, there were all sorts of corrective actions suggested after the fact. Sure wish we could accomplish more prevention by discussin' "potential accident situations" *before* they occur. Oh well, enough ramblin' on.

### Super Hot

Our pilot was to be the number three aircraft in a flight of three F-8s. He had approximately 800 total hours with over 450 hours in the *Crusader*. The briefing was normal in all respects. The weather was clear with visibility in excess of 15 miles and the winds were calm.

The pilots manned their aircraft and taxied without incident to the takeoff runway. Upon receiving clearance, the flight took the duty with our pilot in the #3 position as briefed. After #2 had rolled 700 to 800 feet, our pilot released his brakes to commence his takeoff roll. Afterburner was selected, all engine instruments were scanned and found to be normal. The *Crusader* accelerated normally with rotation established as per normal takeoff procedures and the nose began to rise from the runway.

When the pilot felt he was flying, the gear handle was raised. Just after this, the pilot encountered jet wash and wake turbulence. The F-8's nose pitched up and the right wing dropped as the aircraft settled back on the runway.

The pilot tried to keep the aircraft flying but the ventral fins contacted the runway making further rotation impossible. After full fuselage contact, he initially decided to ride it out, deselected afterburner and pulled the power to idle. Shortly thereafter, the aircraft yawed and rolled right, dragging the wing tip.

At this instant, our pilot changed his mind and decided to eject. After a

normal ejection, the aircraft continued down the runway finally departing it with 2,400 feet of runway remaining. It came to rest in sand with the engine still turning.

The aircraft sustained substantial damage. The pilot was not injured. Tire marks on the runway indicated that gear retraction was initiated very shortly after the NATOPS computed distance for takeoff roll was reached.



Grampaw Pettibone says:

**Holy Hannah!** Amazin' the number of "super hot" pilots we have or at least pilots who *think* they're super hot.

After the investigation was over, the board recommended a change to NATOPS, rebriefing of pilots, etc. However, the cause of the accident was not clearly spelled out by the board. Fortunately, a subsequent endorser said it like it really is, or should I say was . . . "the cause of this accident was poor judgment on the part of the pilot" . . . and to again borrow another line from the same endorser — there is a helluva difference between *professionalism* and *exhibitionism!*

### Free Flying Lessons

A young pilot reported to maintenance control for a brief on a maintenance test flight in a UH-1N *Huey*. One of the maintenance personnel, a qualified aircrewman, requested that he accompany the pilot as the crew chief. The pilot and crew chief proceeded to the aircraft and completed the preflight inspection. The engines were started. The crew chief checked for leaks. The start and cockpit checks were normal. No leaks were noted.

The crew chief then took a position in the copilot's seat (left) and the pilot received clearance from the tower to position the aircraft on a prescribed hover area. The pilot proceeded to that area and performed a required power assurance check on each engine. The check was satisfactory. After check completion, the pilot made a vertical takeoff into a four-to-seven-foot hover. The pilot granted his crew chief permission to

attempt to control the aircraft during the hover. Simultaneously, the pilot physically monitored the flight controls.

After about one minute, the crew chief's control movements caused the aircraft to move to the right and aft. Noting this, the pilot increased the collective. The nose of the aircraft yawed to the left. The pilot attempted to regain control of the aircraft through use of the directional control pedals but was unable to do so due to the crew chief's excessive pressure on the pedals. The pilot told the crew chief that "he had the aircraft." However the crew chief increased cyclic input to the right and the pilot was unable to move the cyclic to the left forward position against the crew chief's pressure.

The aircraft hit the ground and came to rest on its starboard side. The transmission departed the aircraft and landed approximately 20 feet from the helo. One main rotor blade was destroyed on impact. The tail rotor blades struck the ground and were severely damaged.

The two men departed the *Huey* through the left cabin roof window. They were both uninjured.

The crash crew arrived at the scene and extinguished a small fuel fire in the engine intake and transmission housing area. The aircraft sustained substantial damage.



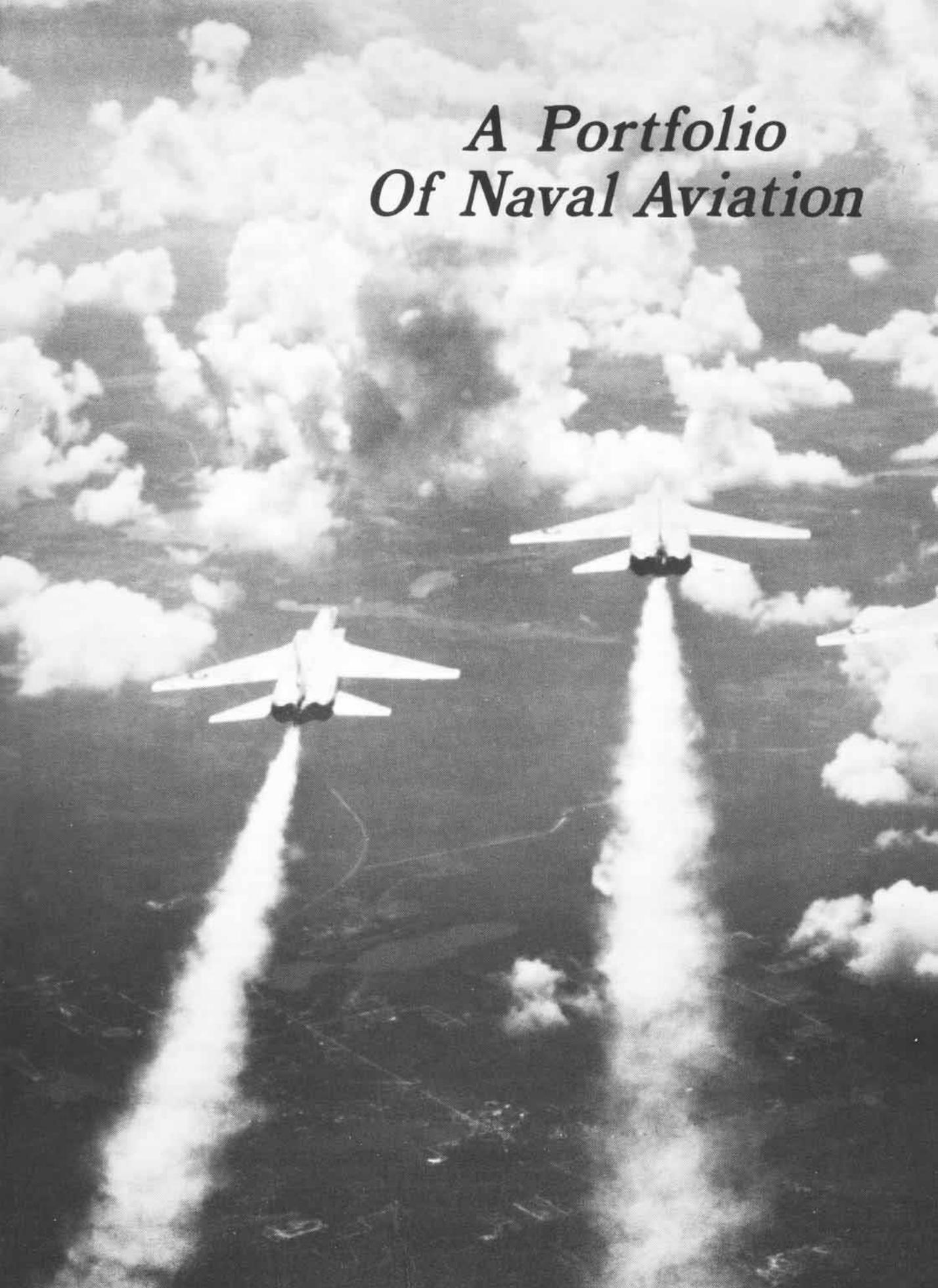
Grampaw Pettibone says:

**Holy Hannah!** I can't believe my eyes. This pilot turned the aircraft over to a non-aviator at a most critical phase of flight — and on a test flight yet! This takes the cake as one of the dumbest maneuvers I've read about in years.

In addition, once he allowed the crew chief to fly the aircraft, the pilot was not even smart enough to know when to "take over" so he could salvage a bad situation.

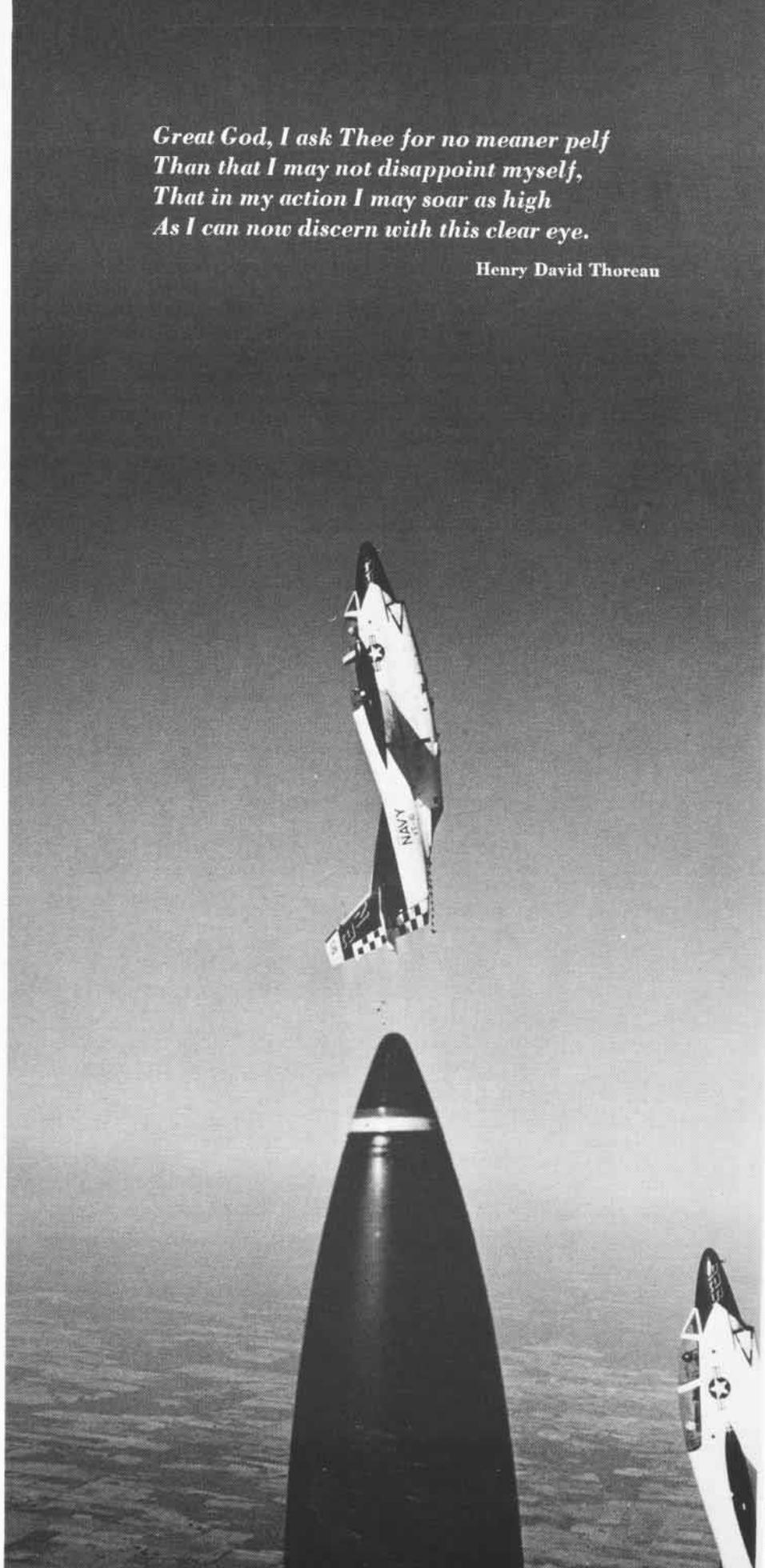
Being a suspicious cuss, I wonder what kind of leadership exists in a unit where a junior pilot, without even a second thought, allows a non-aviator to control an aircraft in direct violation of Natops! Well, a lot of heads rolled over this one. Nuff sed!

*A Portfolio  
Of Naval Aviation*



*Great God, I ask Thee for no meaner pelf  
Than that I may not disappoint myself,  
That in my action I may soar as high  
As I can now discern with this clear eye.*

Henry David Thoreau



*Have you ever heard the wind go  
'Yooooo'??  
'Tis a pitiful sound to hear!  
It seems to chill you through and  
through  
With a strange and speechless fear.*

Eugene Field



*If anyone pings on me for  
gettin' flight pay I'm gonna  
invite 'em along for a cat  
shot on one of those nice  
pleasant evenings at sea when  
there is no moon and all  
about you is black,  
black, black!*

Anonymous



*Here a star, and there a star,  
Some lose their way.  
Here a mist, and there a mist,  
Afterwards — day!*

Emily Dickinson





*They [atoms] move in the void and catching each other up jostle together, and some recoil in any direction that may chance, and others become entangled with one another in various degrees according to the symmetry of their shapes and sizes and positions and order, and they remain together and thus the coming into being of composite things is effected.*

Simplicious



*Cutlass: a short, thick  
curving sword with a single  
cutting edge . . . used  
especially by sailors.*

Webster's *New World Dictionary*



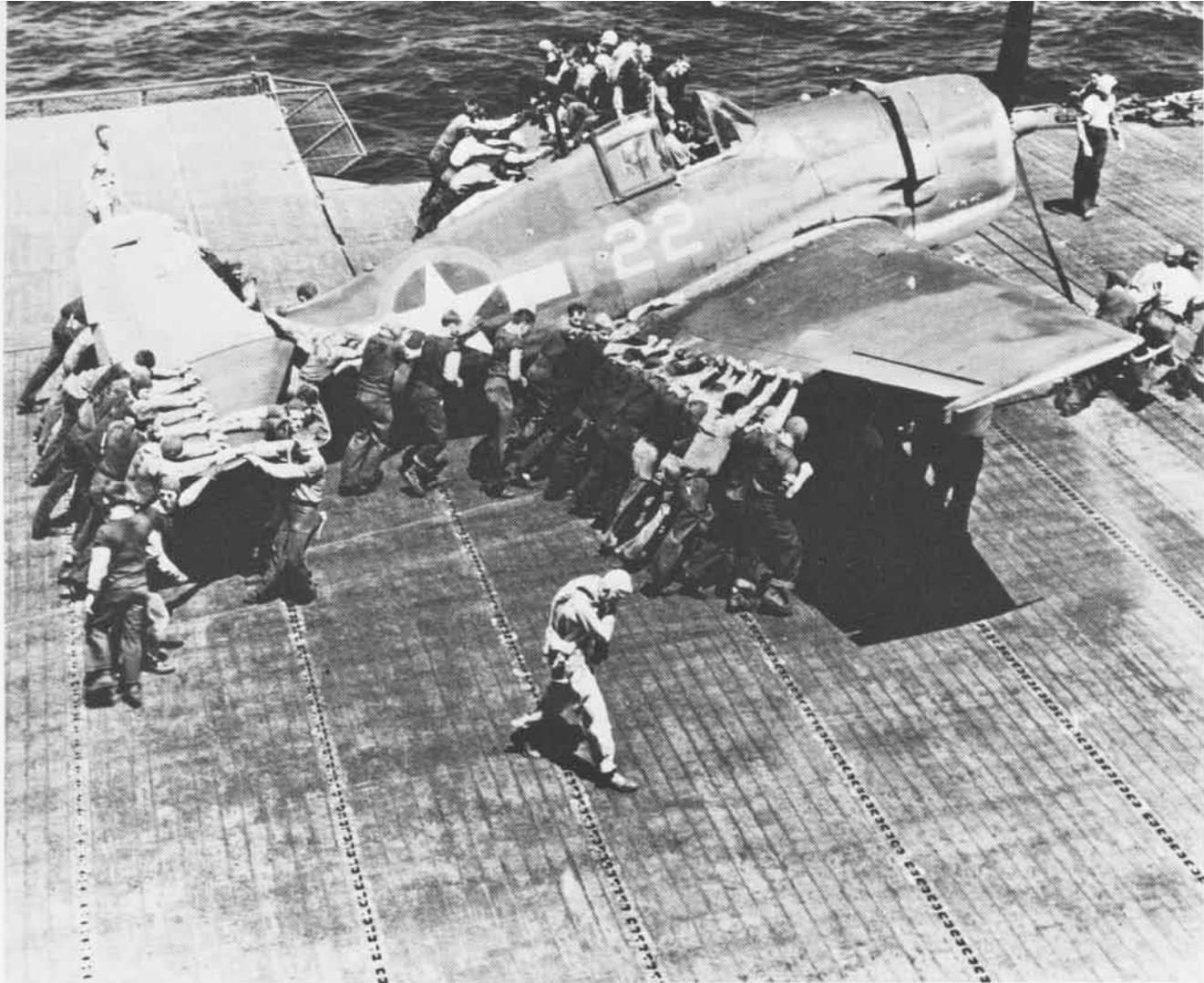
*When I play with my cat, who knows  
whether I do not make [him] more  
sport than [he] makes me?*

Michael De Montaigne

*And think to burst out into sudden blaze,  
Comes the blind Fury with th'  
abhorred shears.*

John Milton

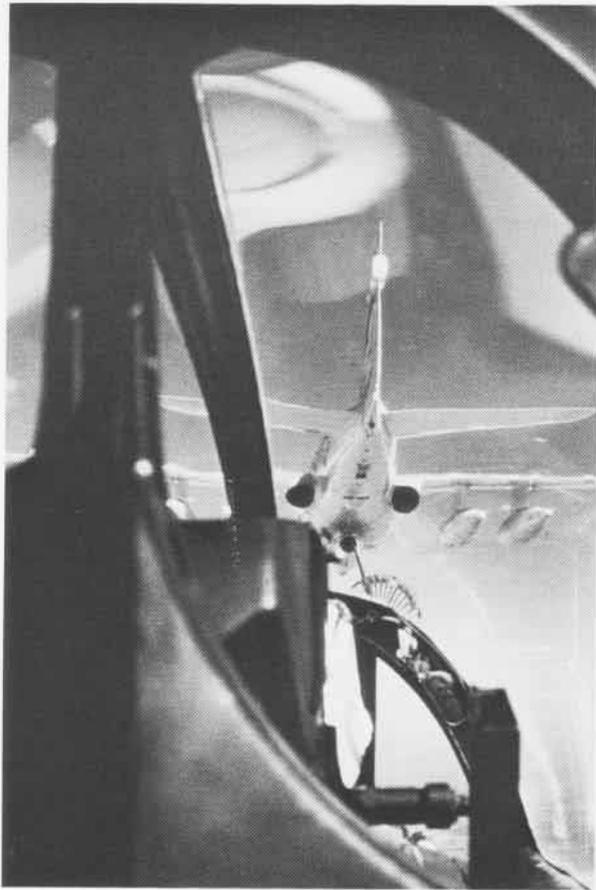




*Solon was under a delusion when he said that a man when he grows old may learn many things — for he can no more learn much than he can run much; youth is the time for any extraordinary toil.*

Plato





*A pair of thirsty jets had jockeyed into position behind a Yankee Station tanker aircraft. They had just escaped from the beach after an alpha strike over North Vietnam. Many strenuous and fuel consuming maneuvers while evading a flurry of Sams and flak had intensified an already desperate need for sustenance from the great gas station in the sky. The following conversation was monitored on a nearby carrier's frequency.*

*'You plugged in zero four?'*

*'firm.'*

*'How much longer you gonna be?'*

*Pause. 'Few minutes — I'm only up to 300 pounds.'*

*'I can't wait, zero four — move out!'*

*Pause. 'Look, I'm only up to ah . . . 400 pounds, gimme a break!'*

*'That's fine, zero four, unplug and slide over. I need a drink and I need it now.'*

*'But I haven't even got 500 pounds yet.'*

*'Tell it to the judge, zero four. I'm readin' empty!'*



*The finger that turns the  
dial rules the air.*

**Will Durant**



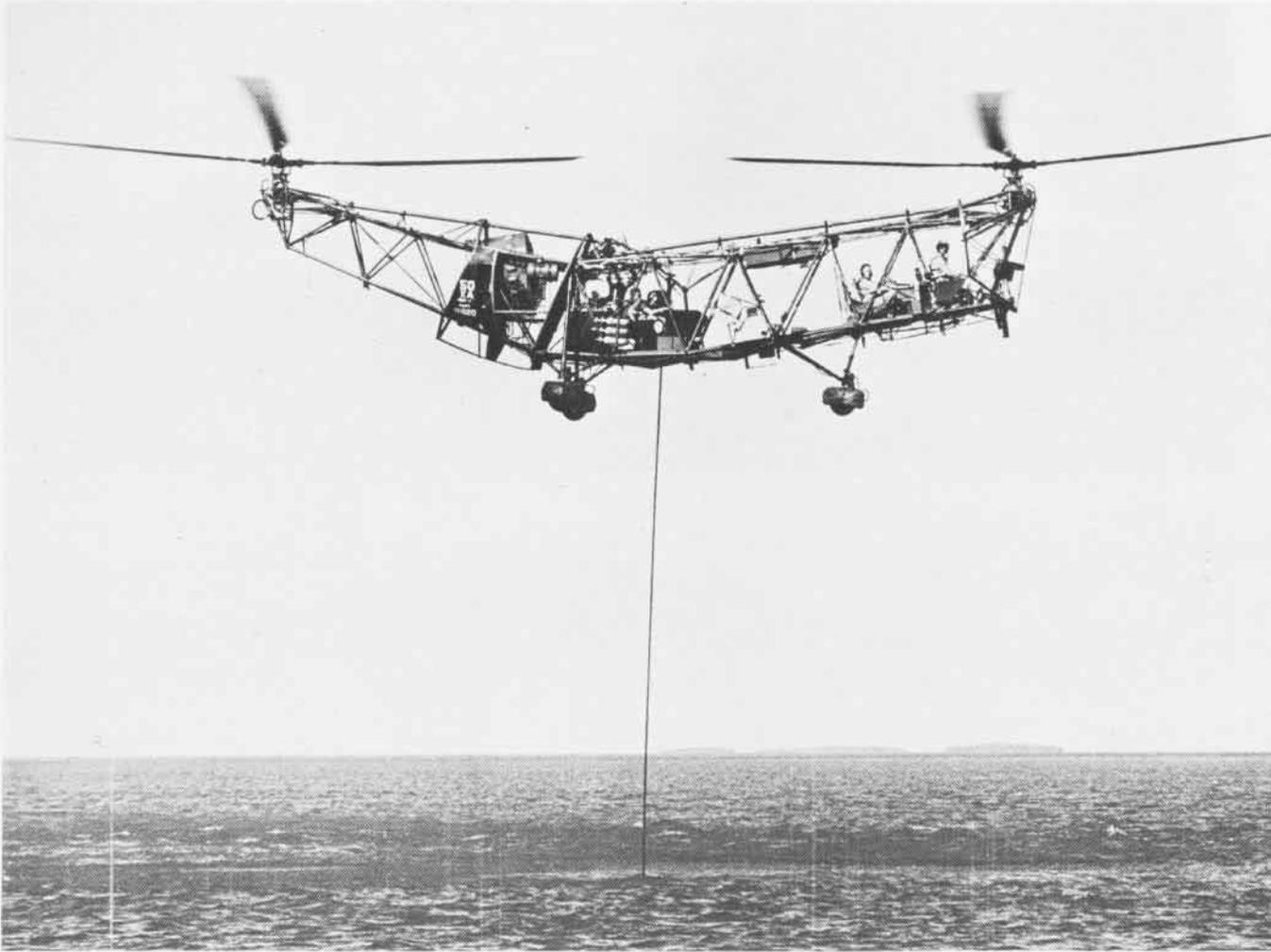
*Nothing in life is so  
exhilarating as to be shot  
at without result.*

Winston Churchill



*If the Army and the Navy  
Ever look on Heaven's scenes,  
They will find the streets are  
guarded by  
The United States Marines.*

United States Marine Song  
Anonymous



*He made one laugh some-  
times by speaking the  
truth, but this is a form of  
humour which gains its  
force only by its  
unusualness.*

William Somerset Maugham





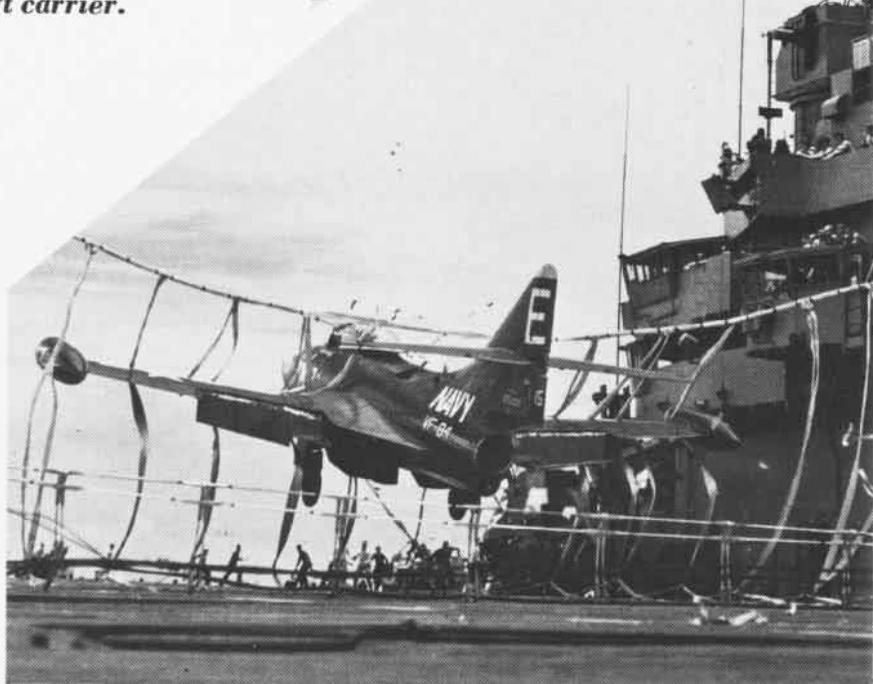
*Everything is funny  
as long as it is happening to somebody else.*

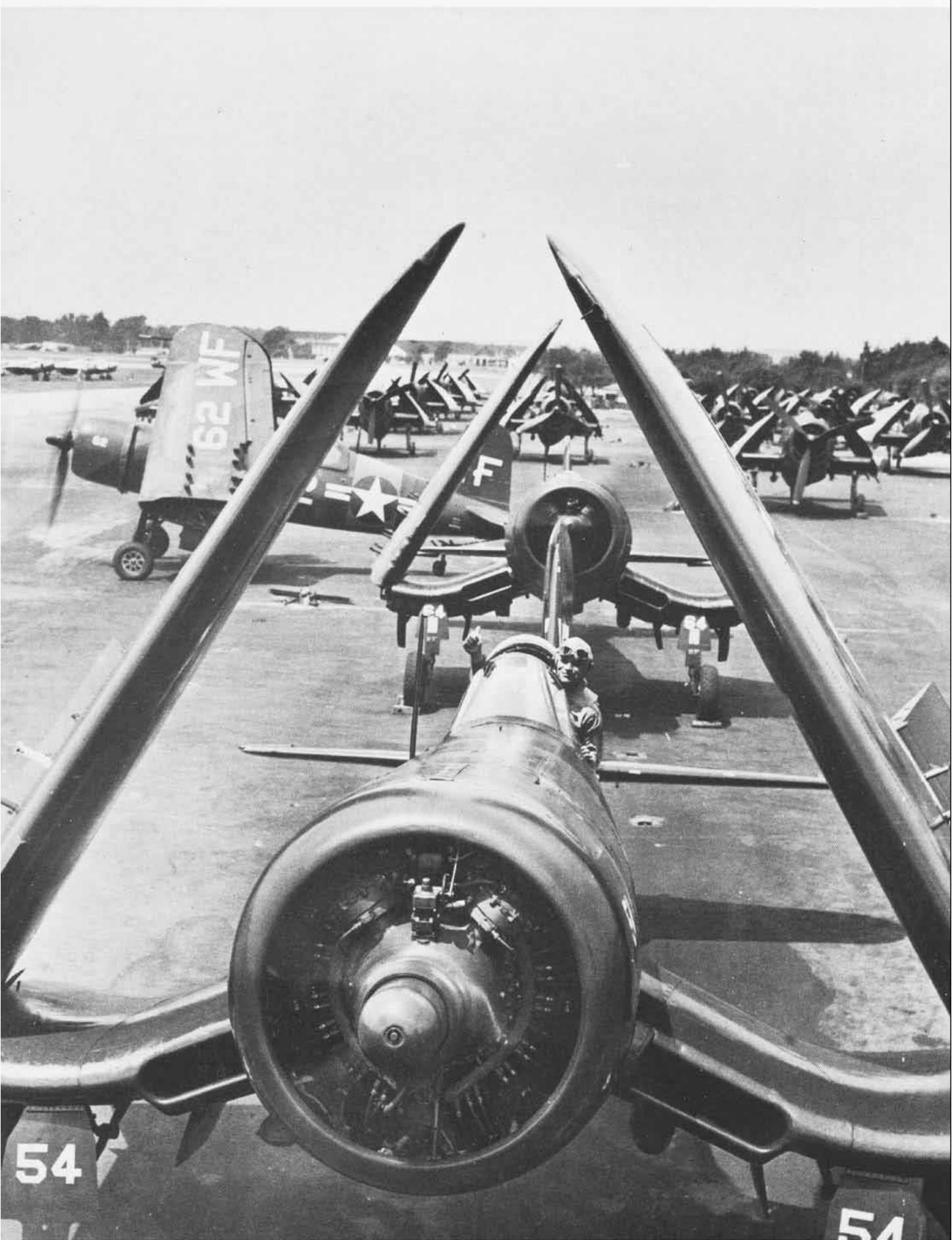
Will Rogers





*It has everything — drama, danger, beauty. It's a classic stage for vivid demonstrations of precision and power. And the people who run it, not to mention the flyers and planes who leave it and return to it with great jolts of mechanical energy, represent a zenith in human skill and professional achievement. It's the flight deck of an aircraft carrier.*





*There was an Ape in the days that were  
earlier;  
Centuries passed, and his hair became  
curlier;  
Centuries more gave a thumb to his wrist—  
Then he was Man — and a Positivist.*

Mortimer Collins

*So it's home again, and home again,  
America for me.  
My heart is turning home again,  
And there I long to be.*

Henry Van Dyke



# A Matter of Perspective

Hitting the ship should be no sweat. I kept telling myself that as carqual day approached. After all, I'd seen *Lexington* (CVT-16) any number of times, tied up alongside the pier at the naval station. She was huge, easily as large as any landing strip I'd seen. Her flight deck was as large as two football fields and seemingly as wide.

But on my carqual morning, as the twelve students and six instructors who were scheduled to launch filed into the ready room for the briefing, I began to have second thoughts about the landing.

The brief went down at zero dark thirty. Sometime during the middle of my third cup of boiled mud, the flight leader came in. He began his presentation and the room became silent. The only sound, other than his voice, was the scratching of pencils as we jotted down the flight order, formation, Tacan, navaid and radio frequencies, aircraft assignments, emergency procedures and a thousand other items.

At 0600 we headed out of the well lit confines of HT-18's squadron building into the crisp early morning air at Ellyson Field and made our way to the line shack. We signed for our birds, made preflight inspections and initial radio checks.

Another student and I carefully looked over the previous yellow sheets and, after a stop at the paraloft for our issue of survival gear, life vests and emergency radios, we moved out to inspect the H-1 *Huey* which would take us and our instructor to *Lex*.

Everything looked OK and, joined by our instructor, we jumped in and prepared to go. 1st Lt. Bill Sidebottom, the instructor, rode in the left seat. 2nd Lt. John Genduso, the other student, was in back. Yours truly rode in the right seat. I got the honor of bouncing first because I had more hours than John did in the Lima model we were flying.

Bill and I began the checklist:

"Doors...secured.

"Seat belt and shoulder harness...fastened.

"Radios and IFF...off."

Bill read the list, item by item, while I performed the check and gave the appropriate response all the way down to "starter and clock." He took the cyclic and fuel, and I squeezed the starter trigger, pressed the clock, and

began to monitor temps and voltages.

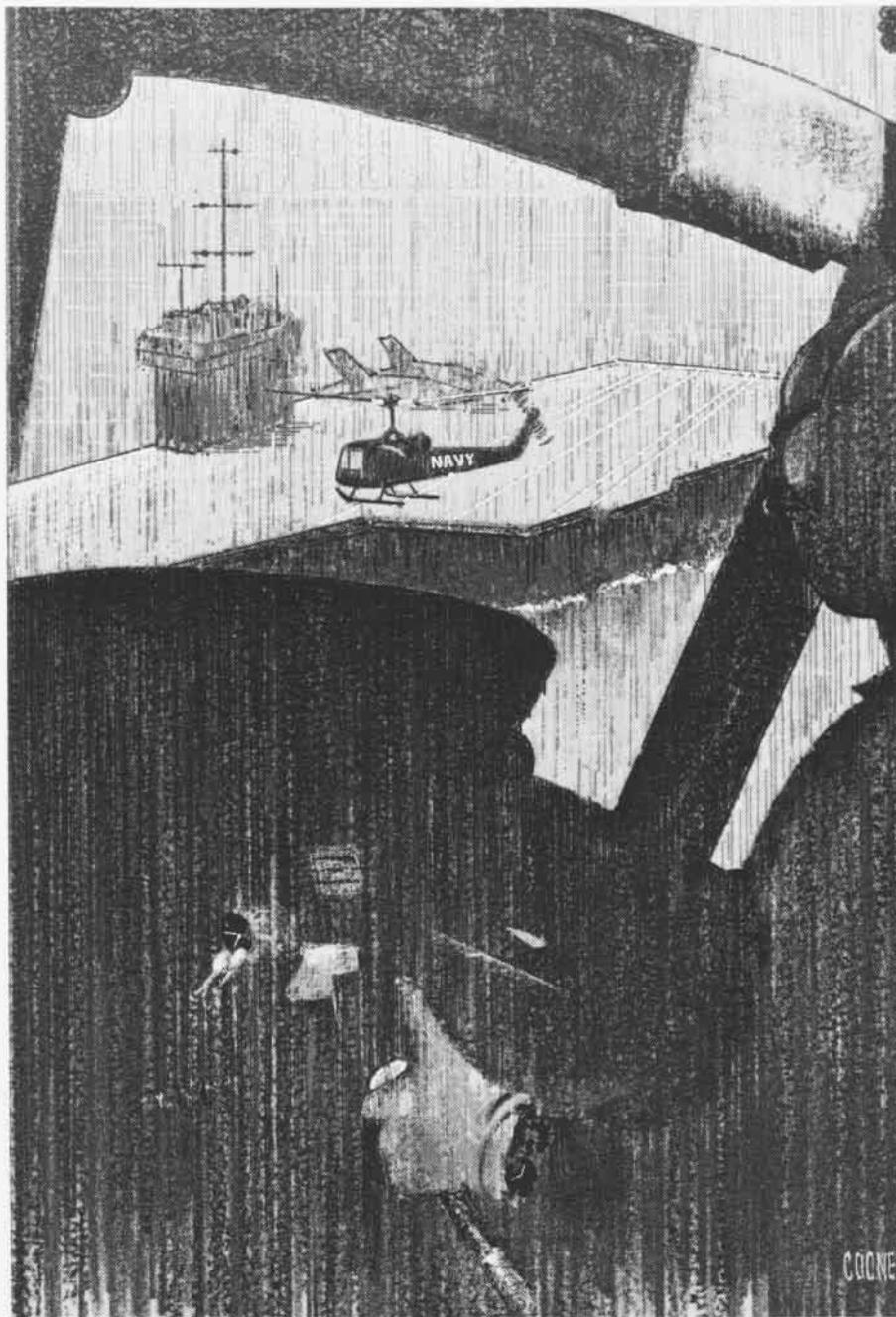
Over the ICS:

"Voltage 15 and rising.

"13 percent, blade turning.

"60 percent, starter released.

"EGT stabilized, looks like a good start, I've got the controls."



## By 1st Lt. Jay P. Reidy

"Rog, you've got it, pressure lights are out and the inverter's coming on."

A flip of the switch and the gauges jumped to the nine o'clock position.

Everything was going OK. Some of the butterflies inside were even gone. My palms had stopped sweating... almost.

We checked in with the leader, taxied to the duty, called for takeoff, and were on our way.

It was cold and clear as we joined on the formation. The wind had blown the haze and dust out of the area and the sky was dark blue and beautiful.

We approached Navy Pensacola and turned out to sea, following the #2 needle and the good old mark-two eyeball to the ship. We soon saw her steaming south at about 20 knots. Our flight was cleared in. We swung downward, got the air boss' OK to make the break.

"I've got it," said Bill, taking the controls.

"OK," he said over the ICS. "When we're established in the break, we'll make our decelerating, descending maneuver to 200 feet and 80 knots. Watch, I'll do the first one."

It all seemed so simple. We had talked about it a thousand times before and had run through it time and again on a dry run last week when we did FCLPs at Spencer Field. But this was the real thing. The ship was actually moving. Below us there was nothing but the chilly blue waters of the Gulf of Mexico. And that big ship I had seen at the naval station had shrunk!

Our helo had moved abeam and we began a turn into the ship. Lt. Sidebottom spoke, "As we approach the ship, at 20 feet and 20 knots, we'll turn towards the bow and slide on in...OK, there's our plane director, we'll do what he tells us." And sure enough, just as smooth as glass, Bill positioned the plane over the spot, lowered collective and touched the skids to the deck.

The director gave us the lift signal and, as we rose from the deck, the

instructor told me to get on the controls with him and ride this one around. In complying, I proved that I could not squeeze juice from the cyclic. We climbed to 300 feet and I went through the procedures in my mind.

Wow, here we were, abeam again. I lowered the collective, stepped on the ball, raised the nose slightly and headed for the deck. I picked up the director, made my slide, landed and launched again in what seemed no time at all. Now I knew why it's called a bounce. "All right," said a voice in my earphones, "not too bad. This time you fly it without me on the controls and I'll talk you through it."

"OK, step on the ball...watch your airspeed...good, slow down...start your turn...60 knots, don't get slow; OK, easy does it...slide."

And there I was! Right over the spot! "All right," I said to myself, "now lower the collective and land this thing."

I did. No sooner had the skids touched down than I got the signal to lift off, slide out and go. Lt. Sidebottom took the plane, got us into position and said, "Well, here you go, it's all yours." My mind went blank momentarily. But I reacted to impulses triggered by more than a year of learning aircraft procedures, a good pre-brief and a calm instructor in the seat next to me.

I was in position — on altitude and airspeed — my heart pounding like a trip hammer. The ball was more or less centered. But I was still a bit scared when the spot loomed before me.

"Slow, flare, slide, land." Wow! I had done it! I had made my first unassisted landing on an aircraft carrier at sea.

My elation was short lived, however. No sooner had I set down than the two *Hueys* ahead of me lifted off and I was launched over the side again.

The pace was frenetic but not as rushed as I thought it was the first time. The climbout, leveloff, turn and landing actually took several minutes.

Not the split seconds it had seemed initially.

On the fourth time around, I felt things had been going too smoothly. My next landing spot on the ship was directly opposite the island. This area is subject to a bugaboo phenomenon known to carrier types as deck edge burble. It's especially prevalent in helo operations. A light aircraft, like the H-1, really gets bounced around.

Burble is caused by the winds coming from several directions and mixing all at once. It includes the natural wind, the relative wind caused by the directional movement of the ship and the downwash caused by our rotors whirling at 300 rpm. When all elements converge and move off the side, the island gets in the way. It's as if the wind hits a brick wall, is jumbled up and bounces back across the flight deck causing turbulence under the helicopter.

You're trying to hit the deck; the burble is trying to keep you away. The longer you hover, the more downwash you create. Combined with the winds across the deck, this causes more turbulence making it even more difficult to land smoothly. Hovering is tricky enough without burble.

Somehow, after three attempts, the skids touched down. But this was no time for a breather. I felt I needed a break to get things squared away but I didn't get it. I was given an immediate launch signal. So, up collective, slide out...watch the lights...nose it over, go.

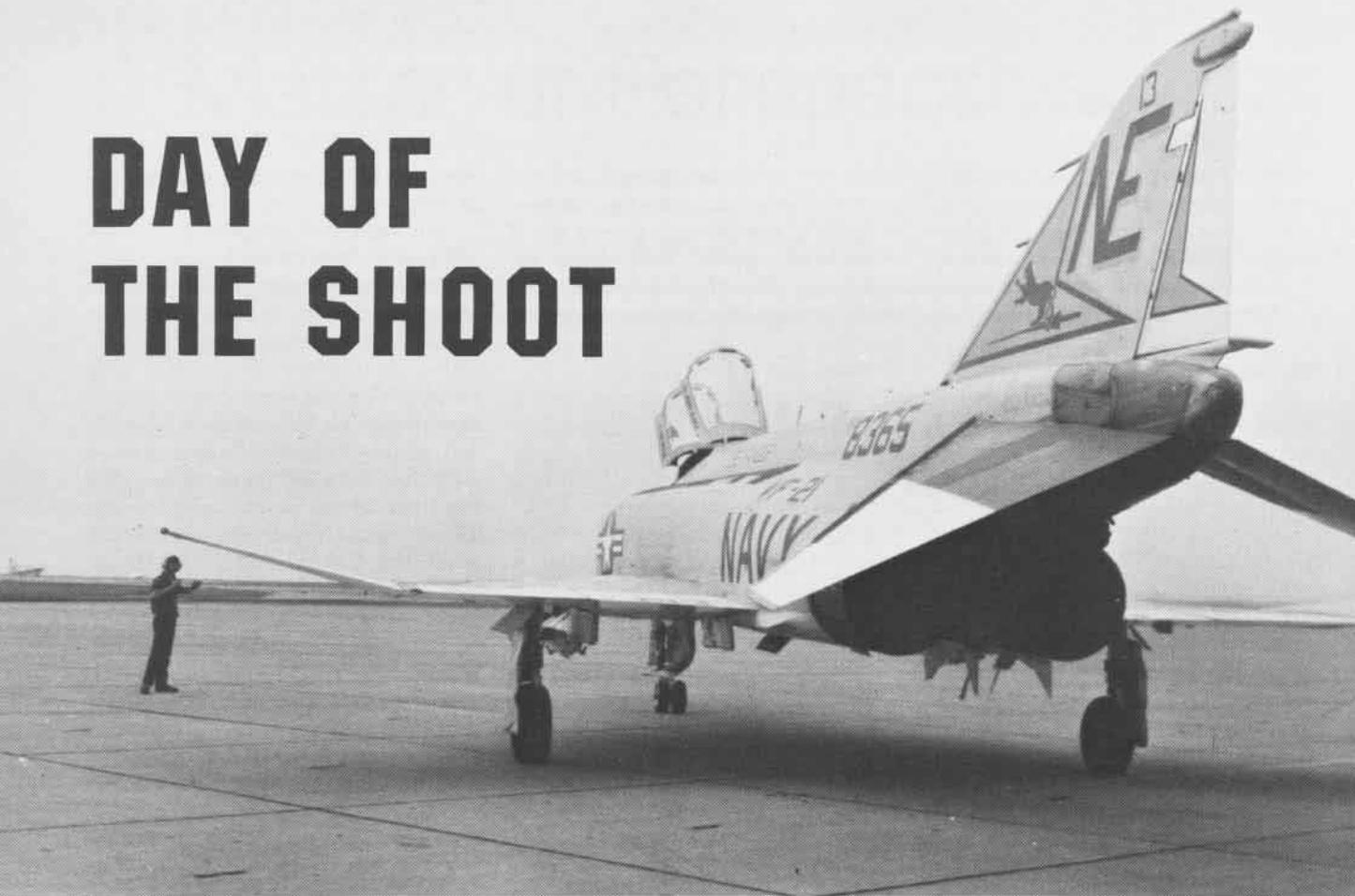
Level at 300 feet, I started my turn and glanced at the instructor. He was still calm, wearing a half-smile. "Gotcha that time, didn't it?" he seemed to be saying.

By my sixth landing, I had settled down. My confidence grew and I began to feel I could do this all day.

On deck we parked as Lt. Sidebottom took the controls and instructed me to unstrap and switch seats with John. I had qualified.

We launched again. This time I was in the back seat. I relaxed. It was a good feeling, a matter of perspective.

# DAY OF THE SHOOT



When it's time for a weapons deployment at VF-21, the evolution commences months in advance. It begins in the operations department, as it does in any fighter squadron. In a flurry of message traffic with the weapons training and ordnance officers, the operations officer procures a time slot at a missile range.

Once the date is set, the maintenance department steps up avionics work. Technicians put in hours of overtime to bring radar and weapons systems to peak performance.

The crews are selected and attend briefings on weapons and range procedures. A range representative explains the workings of the BQM-34 jet-propelled drone.

At five o'clock on the morning of the shoot, ordnancemen anxiously await missile delivery from the magazines. By six, the AOs have started to load and make checks. Aircrews arrive for their mission briefing. Before donning flight gear, leaders brief their wingmen on tactics.

Then the crews walk to maintenance control to sign out their aircraft. There is another walk to the loading area where the planes are parked. After a thorough preflight and strapping in, the pilot starts the engines and checks the weapons systems again. Once airborne, all systems are given a final check before reaching the range boundary.

The planes check in with a ground controller who has positive radar contact with all aircraft on the range. Before launching the drone, the controller checks for any unauthorized ships or planes in the firing zone.

The *Firebee* drone is straining on its launch rail with only the strength of a special sheer bolt holding back its single jet engine which has advanced to full thrust. A loud roar is climaxed by a billowing cloud of white smoke as the drone races skyward at 180 knots. Its solid-propellant jet-assisted take-off motor is automatically jettisoned as the *Firebee* continues on its own power.

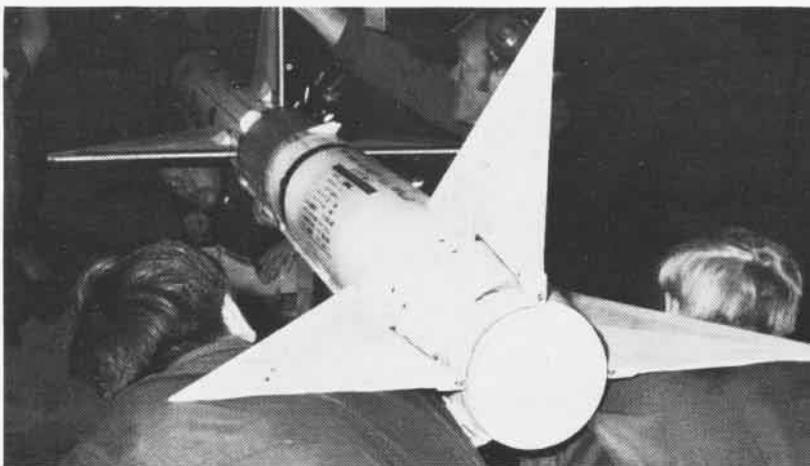
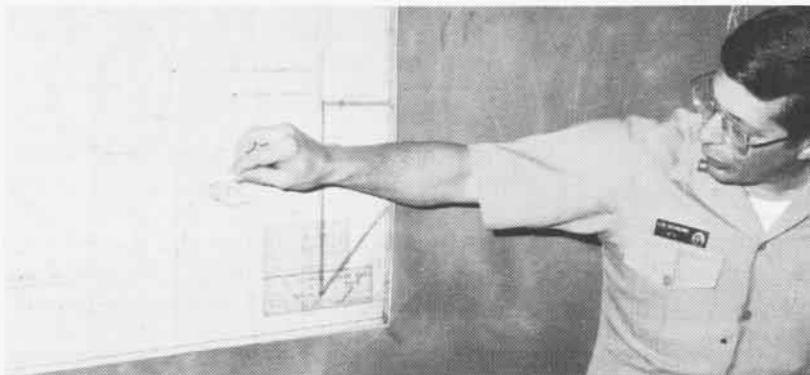
The pilot maneuvers the plane into position while the intercept officer locks on with his radar. The radar-guided *Sparrow* fires its rocket motor with a loud thump. The pilot and RIO strain to follow the *Sparrow's* smoky trail as it vanishes ahead. Then, wham — a direct hit!

Following the lighting of flares on the wingtips of another drone, a heat-seeking *Sidewinder* is fired. This time the drone is missed and it parachutes gently down to be picked up and rebuilt for reuse.

The range results will be recorded by the missile's telemetry pods and sent to the tracking stations. This data is converted to show the miss distance. Drones aren't always killed. A miss can provide valuable data for weapons system evaluation. Whenever aircraft and crew have an unsuccessful firing, faulty equipment is isolated and repaired, crew deficiencies are reviewed and corrected. A debrief covers mistakes. Lessons learned make the next shoot better.



A VF-21 F-4J taxis out of the missile loading area on its way to final arming, left. Above, AIM-7E-2 Sparrow missiles await loading. Top right, Lt. Jim Williams and Lt. Dan Parker check their aircraft's maintenance record before manning up. Above right, Capt. Len Catanzaro, USMC, VF-21 ops officer, covers range procedures during the briefing. Right, VF-21 ordnancemen work in pre-dawn to load Sparrow missiles for the day's mission. Lt. Williams, bottom right, preflights his aircraft and his missiles.



When it's all over, the maintenance department breathes easier. The operations department goes from frantic back to hectic. Confident and combat ready, the crews return to their home bases with new-found knowledge of their systems and themselves. They can shoot a target and score a kill. No amount of simulator time can equal this experience.

In combat, these aircrews won't fumble at their switches. They are experienced now, veterans of a shoot.



VA-212, skippered by Cdr. J. M. Curtin, celebrated its 20th anniversary on June 22, aboard USS *Hancock*. The squadron flies A-4 *Skyhawks* and is on a WestPac cruise.

The *Gunfighters* of VFP-63, NAS Miramar, had an unusual opportunity this spring to match their 20-year-old F-8 *Crusaders* against the Air Force's newest aircraft — the F-15 *Eagle*. The Air Force Test and Evaluation Center



at Luke AFB, Ariz., invited the squadron to simulate potential aggressors and evaluate the F-8's capabilities against those of the F-15. During the five-day stay, Navy pilots completed over 40 mock air combat engagements. Considering the 20 years of technological advances which have gone into the F-15 weapons system

and aircraft performance, the *Crusaders* did a creditable job through the use of solid section teamwork and proven tactics.

To offset the impact of the shrinking defense dollar, the commanding officer of NARF Norfolk, early in 1974, directed all department heads to survey their operations. Their mission was to eliminate unnecessary functions, reduce process time, conserve material resources and increase productivity. The Quality and Reliability Assurance Department (Q.A.) launched Operation Treasure Hunt, special report forms were designed and Q.A. personnel were encouraged to be watchful.

An early find was a check for A-6 *Intruder* engine tubing leaks. The eight-man-hour check duplicated one made shortly before the plane was test flown. The first check was deleted. More and more "treasures" were found in a number of areas. A review of repair and rework specifications disclosed that many tasks were being performed only because their requirement had never been cancelled.

A review of the first year of Operation Treasure Hunt shows that more than 100 items were important enough to correct, and 45 of the 100 have resulted in a saving to the Navy of about \$360,000.

**Changes of command:**

CVW-8, *Nimitz*, Guantanamo Bay: Cdr. John H. Fetterman, Jr., relieved Cdr. W. W. Foote.

NAF Washington, D.C.: Capt. Charles M. Lake, Jr., relieved Capt. David A. Woodard.

Aboard *Kennedy*: Cdr. Dwight D. Timm relieved Cdr. Gerald L. Riendeau as CAG-1.

NAS Miramar: Capt. Donald B. Pringle relieved Capt. Billy D. Franklin.

NAS Chase Field: Capt. Marion H. Isaacks relieved Capt. Robert E. Ferguson.

VS-37, *Kitty Hawk*: Cdr. Bruce C.

Marshall relieved Cdr. Thomas W. Entwistle, Jr.

VC-2, Oceana: Cdr. Larry T. Lowe relieved Cdr. Raymond A. Lambert.

VP-66, Willow Grove: Cdr. John Mulligan relieved Cdr. Richard Winters.

VP-44, Brunswick: Cdr. John Siembieda relieved Cdr. William P. Culhane.

VA-196, Whidbey Island: Cdr. Lyle F. Bull relieved Cdr. Gordon R. Nakagawa.

NARU North Island: Capt. James R. Pavelle assumed command.

Pacific Missile Test Center, Pt. Mugu: Capt. Ira N. Schwarz relieved RAdm. John M. Thomas.

VA-95, Whidbey Island: Cdr. Jerry Rogers assumed command.

Cherry Point: Maj. Richard K. Palmer took command of H&MS-20 from LtCol. James T. Hagan III. LtCol. Hagan, in turn, took command of VMAT (AW)-202 from LtCol. Jerry W. Marvel.

VMA-223 and VMAT-102 are transitioning to the A-4M *Skyhawk*. The first arrived in May and the changeover is expected to be completed late in the year. As each A-4M arrives, it will replace an older A-4F or A-4J. The new model has a thrust of 11,200 pounds.

In June, NARF Pensacola completed rework on the 1,000th A-4 *Skyhawk* it has handled since 1969. The project has accounted for over three million man-hours of the NARF's workload. The 1,000th A-4 to be completed belongs to VF-126, NAS Miramar, and the squadron's skipper, Cdr. Cole Black, was on hand to receive the log books for the A-4 from Capt. D. J. Woodard, C.O. of the NARF.

Fleet Composite Squadron Three, whose primary mission is to provide the Pacific Fleet with aerial drone service and logistic support, is marking 35 years of service. The squadron's two Lockheed DC-130As are specially designed with four BRU-1/Alpha bomb racks and can carry air-launch-



PHCS(AC) Lawson

ed BQM-34A or BQM-34E remotely piloted drones. Users of this service include fighter squadrons flying F-14A *Tomcats*, F-4 *Phantoms* and F-8 *Crusaders*. VC-3 also provides air-to-air and air-to-ground aerial drone service and carries smaller land-launched MQM-74A drones which are being replaced with faster MQM-74Cs.

VC-3's commanding officer is Cdr. Charles W. Cole.

Maj. Gen. Mostafa Seyed Djavadi of the Imperial Iranian Air Force became a Navy tailhooker as he logged his first carrier catapult and landing aboard USS *John F. Kennedy* in the rear cockpit of a VF-14 *Tomcat*. The general was a guest of the *Tophatters* and was visiting *Kennedy* to observe F-14 carrier operations. When the flight was over, he presented LCdr. Steve Husak, the pilot, with his own Imperial Iranian Air Force wings, which represent over 6,500 jet hours.

An HS-6 crew from San Diego, flying one of the squadron's SH-3A's, made a 3,500-mile flight across five western states this spring to support Navy recruiting and promote Naval Aviation. Crew members gave indoctrination flights to ROTC students and



conducted air operations. They also participated in an Aerospace Day at Fairchild AFB in Spokane, where 10,000 people walked through the plane. The visitors learned of Naval Aviation programs and HS-6's role in ASW and SAR. In the week the crew was away from its home base, over 120,000 people got a first-hand look at the Navy through the squadron's aircraft and crew.

BM1 Stanley A. Mallory is the only Navy enlisted man commanding his own aircraft carrier. It isn't sea-going but it has logged thousands of miles on New England highways. His ship, a scale model of USS *Wasp*, is 45 feet long and weighs 17 tons.

A group of Quonset Point sailors built the model in 1949, donating hundreds of hours of their spare time. They used scrap and salvage materials. The plating, deck fittings and superstructure are plywood, masonite and balsa. Most of the inner structure is cypress and oak.

Navy Recruiting uses the "Wasp" throughout the New England States at fairs and parades. "Sometimes during the summer, I work seven days a week," says Mallory, who drives the 55-foot trailer on which the model is mounted. The model's mission is to draw crowds and hopefully recruits wherever it is on display. "There's an

ex-carrier sailor or two in some of the crowds," Mallory says. "If things like the signal flags weren't rigged exactly right, I'd hear about it. I've even had *Wasp* veterans check it over."

LCdr. C. R. McRae and Lt. Bill Beaty of VA-66, NAS Cecil Field, recently achieved milestones in their careers as each surpassed 2,000 hours of flight time in the *Corsair II*.

After nearly three years of testing by VX-1, the S-3A *Viking* is in the final stage of its operational evaluation, scheduled to end in October. The testing began in July 1972 and has spanned 1,000 accident-free flight hours. Carrier qualifications aboard USS *Ranger* allowed an accurate look at the *Viking* in a CV environment and paved the way for future evaluation of the *Harpoon* missile in those surroundings. VX-1 is scheduled to participate in the S-3 follow-on test and evaluation program later this year.

North Island-based VS-21 is flying ten of the *Viking* aircraft aboard *John F. Kennedy* in the Mediterranean.

Two VA-164 *Ghost Riders* passed milestones on board USS *Hancock* when Lt. Tony Colantoni made the carrier's 190,000th arrested landing, and LCdr. Ed Davis qualified as a *Hancock* quadruple centurion with his 400th trap. VA-164 flies the A-4F.

One thousand traps: Friday, June 13th, was a lucky day for three Naval Aviators aboard *Midway*. On that day each of the three made his 1,000th arrested landing: Cdr. W. Lewis Chatham, CAG-5, Cdr. T. R. Swartz, C.O. of VF-161, and Cdr. R. N. Artim, skipper of VA-56. *Midway*, which left the U.S. in September 1973, is based at Yokosuka, Japan.

LCdr. Larry Elmore, VA-15, logged his 1,000th arrested landing aboard *F. D. Roosevelt* flying an A-7B. The squadron is deployed aboard the carrier in the Med as a part of CVW-6.





By Ken Riebling

Helicopter Combat Support Training Squadron Sixteen evolved from a somewhat simple beginning. The first rescue unit was formed in the early days of the Pensacola training complex. It performed its missions with a variety of aircraft, ranging from the old H-25s and H-19s to the workhorse H-34s. This was the start of what became known as the Land SAR Unit.

In June 1970, another unit was formed — the CVT SAR Det. Operationally attached to USS *Lexington* and administratively under NAS Pensacola air operations, the unit was responsible for plane guard duties aboard *Lex*. The infant Det made its first rescue less than two hours after commencing operations on *Lex*.

The Land SAR Unit merged with the CVT SAR Det in June 1972 and one year later achieved full NAS departmental status. A new breed of SAR helicopter, the HH-46A, arrived in the fall of 1973, marking the beginning of the SAR training mission. Finally, in November 1974, the Pensacola search and rescue detachment gained squadron status as a rescue training squadron. Today it has a complement of 14 aircraft, 40 officers and 160 enlisted personnel.

In addition to its plane guard duties for *Lexington* and SAR coverage for the Pensacola training complex, HCT-16 will soon have the mission of training SAR pilots and aircrewmembers for search and rescue duty anywhere in the world. The course, which will be fully implemented by the end of FY 76, will include ground training, HH-46A transition and actual flight and rescue procedures. Pilots will receive 40 hours of flight instruction.

Another duty for HCT-16 will be implementing the Fleet Readiness Aviation Maintenance Program. The squadron will train aviation maintenance personnel unfamiliar in the HH-46A before sending them on to their duty stations.

Since the first rescue five years ago, the unit's pilots and aircrewmembers have helped save over 200 lives, military and civilian. This has been accomplished by maintaining constant readiness. At least one crew is on duty around the clock. The vigil never ends, but the officers and men of HCT-16 wouldn't have it any other way.

# THE AEROGRAPHER'S MATE

By Bob Moore

In the days when a trick knee foretold rain and a bunion ache preceded a storm, Mark Twain observed: "Everyone talks about the weather but no one does anything about it." Twain noticed the weather was always "doing something; always attending strictly to business; always getting up new designs and trying them on people to see how they will go." One spring, he boasted of counting 136 different

kinds of weather in one day.

Pitted against this amazing variety of weather, today's Navy has designed better methods of observation and invented new tools linked to computers. Helium-filled balloons carrying radio transmitters have taken the place of the rooster vane atop Mark Twain's barn. Computer-controlled teletype-writers have replaced *The Farmer's Almanac* and radar is an able substi-

tute for aching bunions or trick knees.

Military men have watched the weather through the ages. But it was 1917 before the Navy designated 200 men to receive special weather training.

These men held the rating of Quartermaster with meteorological duties (QMA). In 1923, this was changed to Aerographer (Aerog). The rating became Aerographer's Mate (AerM)

## ENLISTED RATING SERIES



in 1942 with the establishment of the warrant rank. And in 1948, the rating was designated AG, a Group IX aviation rating.

Modern naval meteorology relies on sophisticated equipment and the highly trained specialists who wear the winged weather vane on their rating badge.

Today, 1,800 AGs give accurate and timely forecasts under, on and over the sea as part of a worldwide system operated by the Naval Weather Service Command (NWSC). The Navy's system is composed of personnel attached to combatant vessels—carriers, cruisers, guided missile ships and amphibious assault ships. Weath-

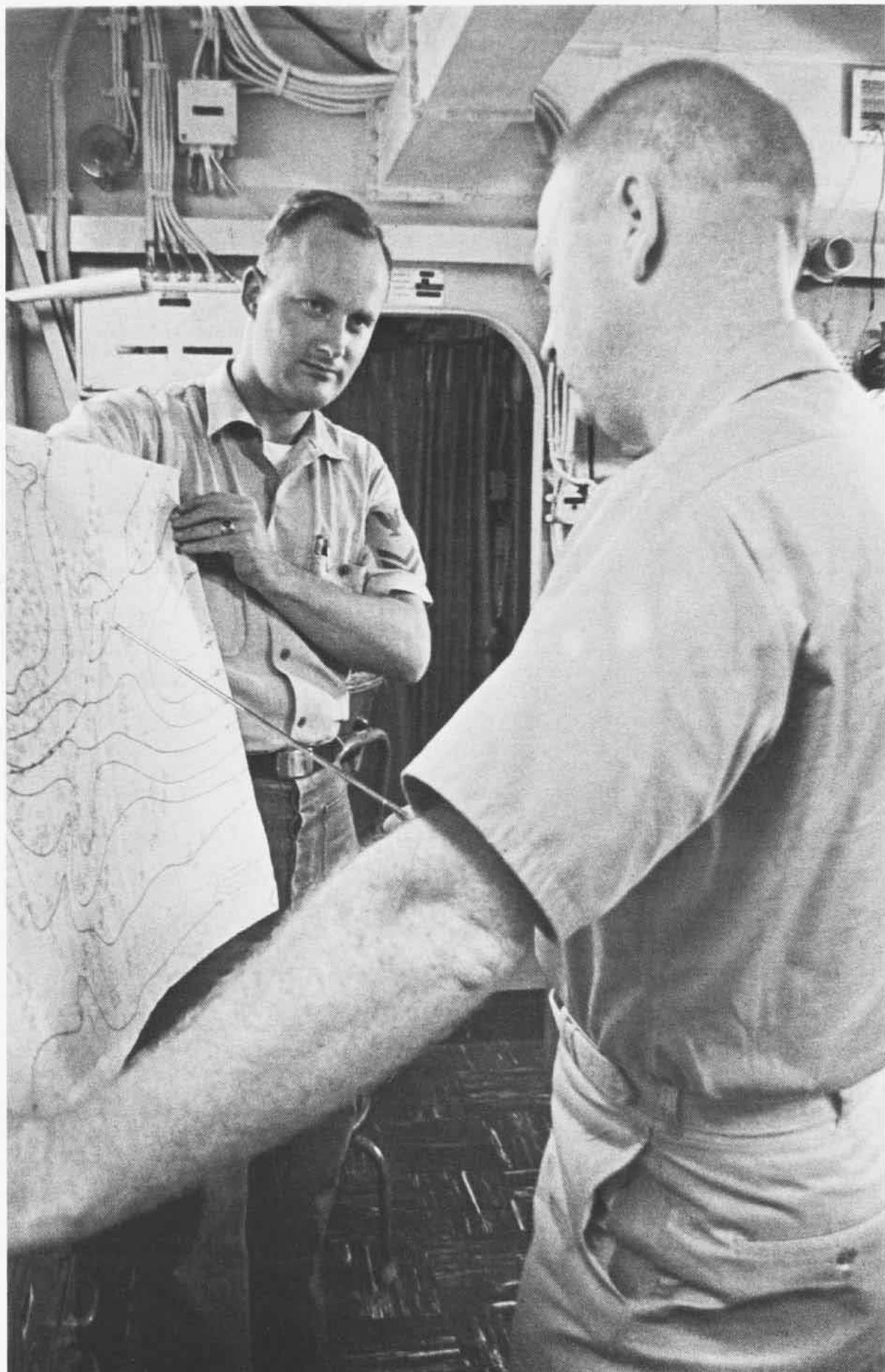
ermen also serve with the staffs of force and fleet commanders, Marine Corps weather office, weather reconnaissance squadrons, support commands, mobile vans and NWSC.

Unique among weather services, the Navy's system provides global meteorological and oceanographic predictions from 1,200 feet below the ocean's surface to 125,000 feet above. Because atmosphere and oceans are treated as two peas in the same pod, the system can use common facilities.

The concept of a naval weather prediction service began with the Marine Meteorological Service in the 1800s and grew with the Aerological Service established in 1919. NWSC



*Aboard Hancock, AG3 Jim Sanders and AG3 Ken Blair read the winds with an anemometer, above. Another hand instrument indicates humidity and temperature.*



was founded in July 1967.

With its headquarters in Washington, D.C., NWSC has computer-equipped Fleet Weather Centrals (FWCs) in Guam, Pearl Harbor, Norfolk and Rota to collect environmental observations, process data and disseminate area analyses, prognostic charts and local weather warnings. A fifth FWC, NAS Alameda, Calif., provides ship routings by integrating sea and weather conditions, vessel characteristics and operating constraints. Meteorological and oceanographic expertise is combined with basic seamanship to provide commanders with the best possible routes and diversions.

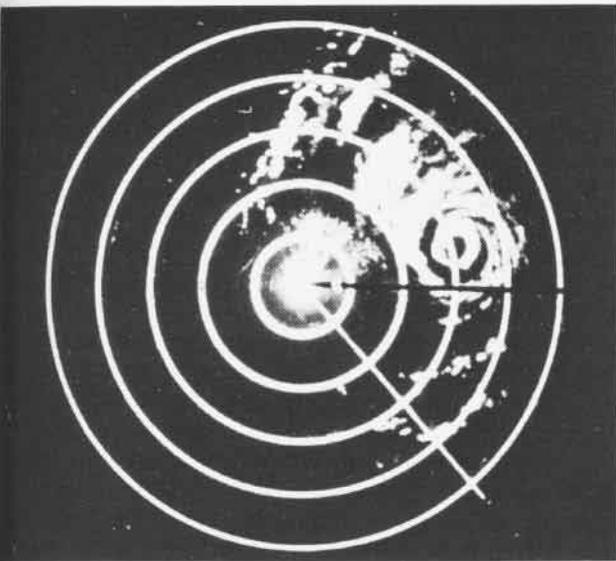
Fleet Weather Facilities (FWFs)

assist the FWCs. For example, Keflavik, Iceland, supports antisubmarine warfare operations and Jacksonville, Fla., deals with hurricanes. An FWF may average 30 briefings a day while handling numerous informal phone queries for weather reports. Naval Weather Environmental Detachments are assigned to these centrals and facilities and a Fleet Numerical Weather Central at Monterey, Calif., gathers the bulk of its meteorological data from an automated weather network at Carswell Air Force Base, N.M.

Most of the system's analysis and dissemination process is automatic—using computers coupled with a three-continent, high-speed communications

linkage called the Naval Environmental Data Network. The main trunks of the network extend from the computer complex at Monterey to Guam, Pearl Harbor, Norfolk and Rota. From Norfolk and Monterey, trunks fan out along East and West Coast tie-lines from Alameda to San Diego, Calif., and from Brunswick, Maine, to Key West, Fla.

Navy AGs also collect data from a high-resolution camera system in a satellite orbiting 450 miles above the earth. The satellite's electronic cameras are so sensitive they can record the streetlights of Laredo: "Laredo—12,000, broken clouds; 23,000, overcast, haze and smoke. Slight chance



*Minutes before a pilot brief, an AG computes weather predictions onboard Bon Homme Richard, far left. Hurricanes and typhoons, left, on radar with 1/10 mile accuracy 200 miles away. Cloud formations can be read horizontally or vertically by AGs with radar. Below, AGs rush a weather balloon aft to avoid tangling with the aircraft on the flight deck.*

PH1 J. Volkman



of thundershower activity but it will soon be to the east. Visibility three miles—a little thermal turbulence.”

The satellite circles the earth every 2½ hours, moving 15 degrees on a north-south orbit. It takes just half an hour to pass from horizon to horizon. Its camera sweeps an area from the Great Lakes to south of Baja, Calif. But the satellite may make mistakes. It needs constant monitoring by AGs in a mobile van to record smaller terrain features.

The van receives a computerized national weather analysis facsimile sheet from Washington every two hours. Washington's computer assimilates up to 40,000 reports and puts together individual charts for the whole United States in five minutes—a job that used to take three hours.

Other data, gathered from balloons, ships at sea, land stations, upper air and general climatological reports—covering remote areas without recording devices—comes into the van twice daily from the Central National Weather Service in Suitland, Md.

To make a modern forecast, the AG first takes weather information by teletypewriter from the automated weather network in printed codes. He must memorize 40 forms and 70 code tables to plot surface condition charts. After

the charts are analyzed, they are combined with pressure, humidity, temperature and wind, to make weather maps.

These maps are then correlated with satellite photographs to provide daily forecasts for aircraft, ships and the local public. Forecasts may be good for a week in summer, or for a few hours on a bad winter day.

The AG provides a three-dimensional hemispheric picture of the air-ocean environment. He forecasts high wind, high seas, hurricane, typhoon and ice warnings for fleet forces.

Amphibious landings require height, type and period of ocean breakers. They need the width of surf zone and coastal currents. Fire-support operations need ballistic winds and air density for accurate gun and missile firing.

Underway replenishment operations need weather reports to anticipate risks when rendezvousing on the high seas. Aviation ASW Operators need the range of their sonar. Using the computers in Monterey, NWSC can provide target detection ranges for each of the Navy's sonar systems.

The Navy's air stations need complete weather reports for pilots' pre-flight mission briefings. Using radar, an AG can tell if it's snowing, raining

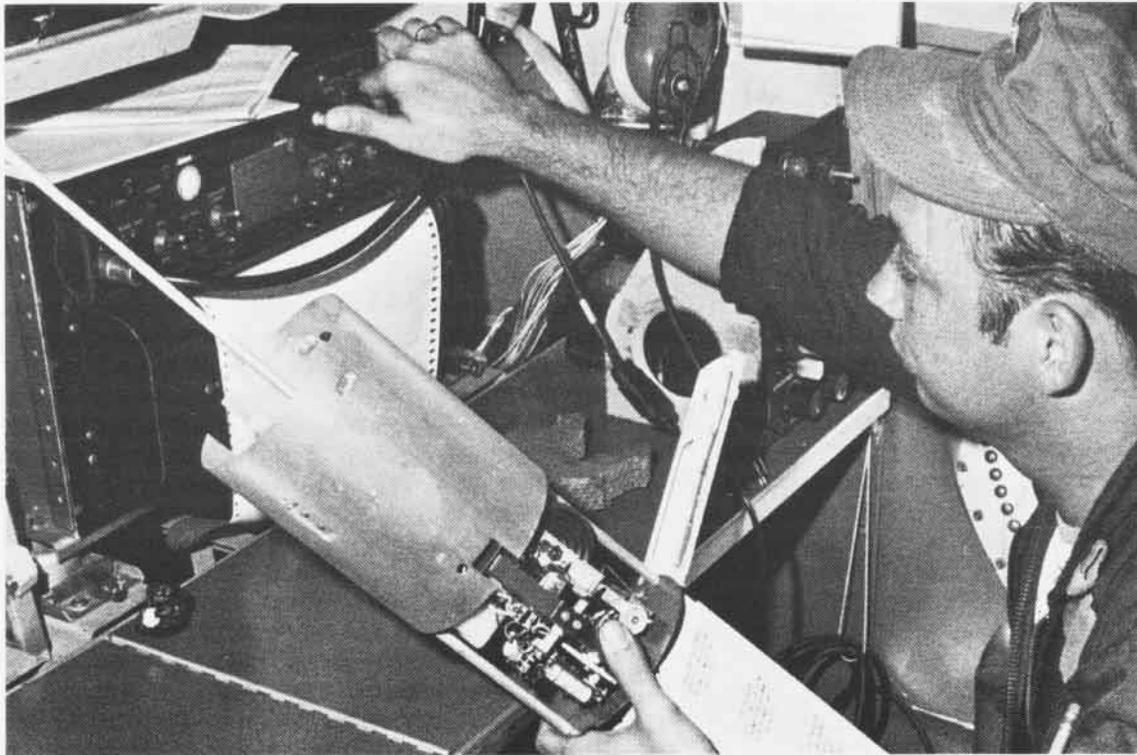
or hailing. He can estimate the freezing level within a cloud formation 200 miles away. He can take humidity and temperature readings in seconds with a hand-held psychrometer or take wind speed and direction by holding a PMQ-3 anemometer.

After graduating from Class A Aerographer's Mate School at Lakehurst, N.J., an AG might be assigned to a fleet weather central unit in the United States. As an AGAN, he would be supervised while taking surface weather observations and entering synoptic (wide-area) reports on a weather map. He might also assist in taking pibal (pilot-balloon) and rawin (radio-wind) observations.

After his 18-month tour of shore duty, he may be transferred to an aircraft carrier where he can complete his practical rating factors and pass his rating examination for Aerographer's Mate Third Class. As a petty officer, he would work with less supervision and begin to analyze weather maps and make short-range forecasts.

After reenlisting, he can pass another test and become an AG2. Now

**When calibrating a dropsonde, AG Alan Zahnle, below, has his right hand on an AMR-1 receiver, his left hand holds an AN/AMT-6C. At Mallet Station Antarctic Support Activity, AG3 Alfie Peterson, right, plots wind for the fleet**





Bill Curtsinger

he would order supplies, make out monthly and quarterly reports, supervise lower-rated AGs and take surface and upper air observations with a radiosonde (radio sounding device) balloon.

To track the atmosphere, he and another AG restrain a seven-foot balloon which lunges erratically in the breeze — jiggling a small white box called an AN/AMT-11E radiosonde. Catching just the right wind, the balloon rises free. Still another AG adjusts machines that sing a throaty hum

**At FWC, NAS Norfolk, AG3 John Kassenbrock, below, processes weather information on the CBC-3100. The Navy Environmental Data Network transmits computer-to-computer at 14,000 words per minute. Weathermen LCdr. Richard Taranto and AG2 Bob Cutting, bottom, look at the latest sea surface temperature charts before sending data on the Fox radio network. Working in the communications center, AGC Jim Miller, AGAN Kim Elsmo and AG2 Chris Love, right, relay weather data to teletypes.**

or high-pitched whine. Needles do the jerk on moving graph paper; green lines tangle on cathode ray tubes. These radiosonde receptors receive and record information from the little box which is now several feet in the air.

When the operator is too busy interpreting the tracing needles to notice if his signal is fading, the hum reassures him. The tone sung by the receptors is an audio signal saying he is properly tuned to the correct mode. Using the cathode ray tubes, he can tune both visually and audibly.

The inexpensive transmitter relates data on temperature, pressure and humidity in electronic code until, after rising to 122,000 feet, its tiny paper parachute floats the little box slowly down and into the sea.

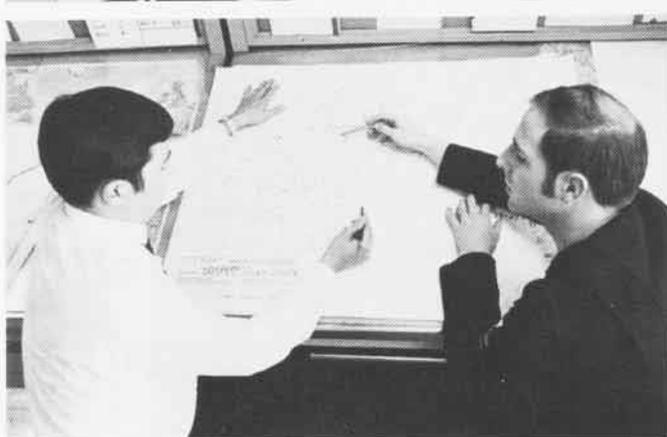
Once all these measurements and observations have been completed, local weather reports are compiled in standard pressure millibars for short-range predictions and long-range fore-

casts — reports of clouds, winds, seas and tides that can mean life or death for flyers and seafaring men.

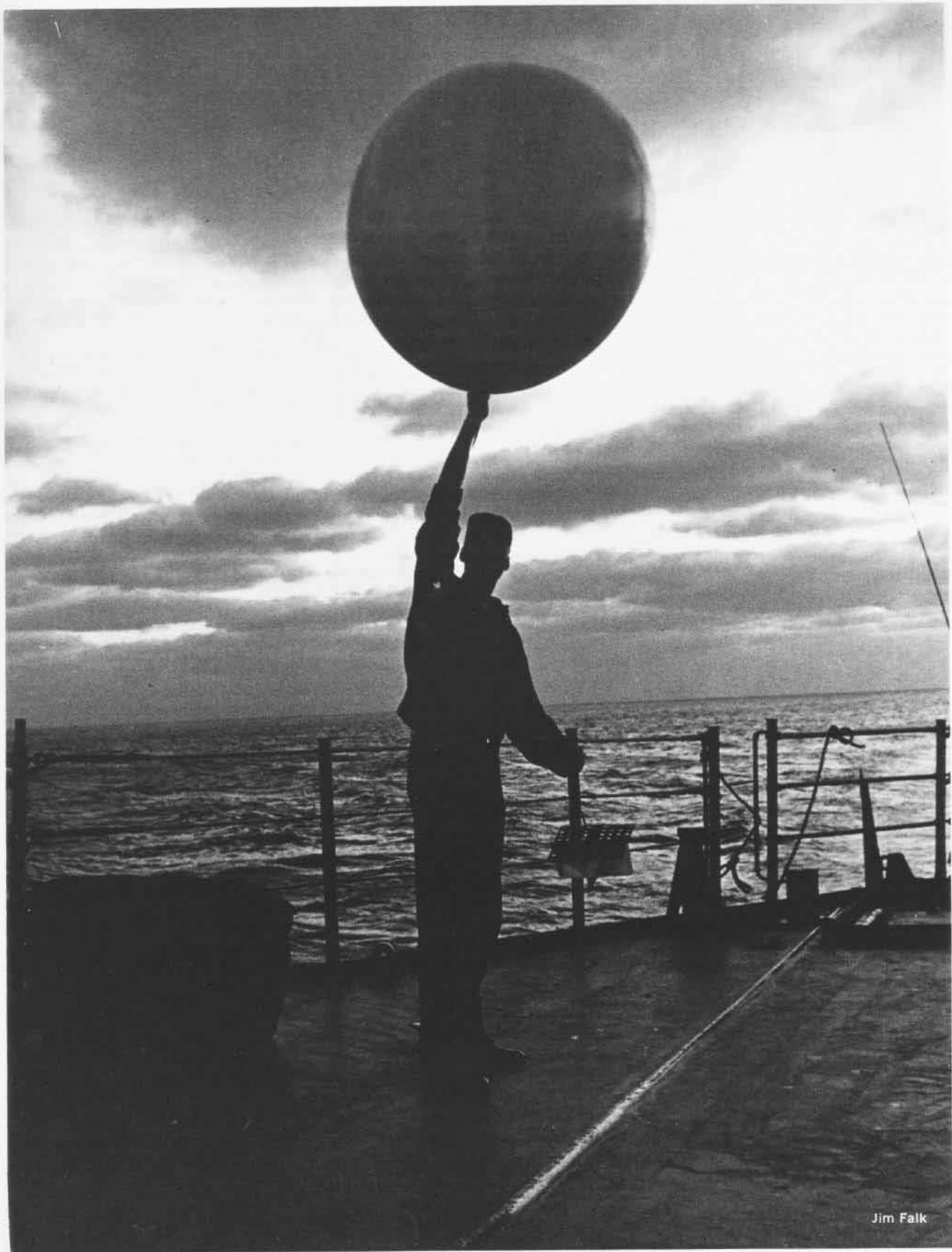
An Aerographer's Mate monitors typhoon and hurricane paths and computes wind and air density. He charts upper and lower air and studies the structure, motion and condition of the atmosphere.

Each AG knows the basic laws of motion, gases, heat and energy. He understands the general characteristics of air masses and basic frontal systems. He is trained in the structure and composition of the atmosphere and the care of meteorological, oceanographic and tie-line equipment.

He can check a 12-hour, constant-pressure, surface prognosis and register water temperatures to one-half of one degree or pick out flowing currents far at sea. And whatever new designs the weather is trying on people — sunny skies, calm seas, or tornado watch — the Aerographer's Mate will forecast it for the fleet.



PH1 John Franca



Jim Falk

**Collector**

I am 14 years old and plan on becoming a Navy pilot. I am very interested in all of Naval Aviation. I thoroughly enjoy reading *Naval Aviation News*, which I get from my dad who was an attack pilot. He flew A-4s with the now decommissioned VA-112 *Broncos*. I have a collection of model Navy airplanes and have just started a Navy squadron insignia patch collection. My collection is small, consisting of only five patches. The patches are from VFs 11, 74, 96 and VAs 95 and 112, plus some of my dad's patches, like the Tonkin Gulf Yacht Club. Since I want to build up my collection, I would be most grateful if some public affairs officers could send me a patch from their squadrons. I will be very happy with any I receive.

Kolin Campbell  
320 Crystal Hills Blvd.  
Manitou Springs, Colo. 80829

**What's a BUF?**

As a former East Coast A-6 pilot, it was especially meaningful to read the excellent story entitled "The Blue Blasters" in the June 1975 issue of *Naval Aviation News*. The pictures and names throughout the article brought back fond memories of my earlier tour. Along with my thanking your magazine for publishing such a fine insight of A-6 operations, I must also include the thanks of all of VA-196, past and present, for the publicity gained on page 14 of that issue through the exceptional photograph on NK 400 crossing the ramp.

From all who have ever been connected to the BUFs with spades on their sides, we thank you.

R. J. Linnander, Lt.  
Safety Officer  
VA-196  
FPO San Francisco, Calif. 96601

**Ed's Note: We thought someone would catch us on that.**

**Corrosion**

In the May issue of *Naval Aviation News* there is an article on corrosion in naval aircraft by Alfred M. Malloy. I found the article most interesting and

informative and would like to know if reprints are available. In teaching general chemistry to plebes at the Naval Academy we spend several weeks on corrosion in general and I like to introduce them to the number one problem in aircraft maintenance — corrosion. This article provides an excellent background into the problems associated with aircraft corrosion and how we deal with them today.

J. M. Hoffmann, Cdr.  
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Chemistry Department  
United States Naval Academy  
Annapolis, Md. 21402

**Ed's Note: Copies are on the way.**

**Kudo**

I have been reading your wonderful magazine for two years, even though I receive them six months late. I enjoyed very much your story titled "Soliloquy" (*Naval Aviation News*, December 1974). It really gives out the spirit of your Navy air corps and makes me understand the words: Only the best fly Navy.

Thank you.

R O E S D I  
Tebet Utara Dalam 21  
Jakarta, Indonesia

**A Ford or a Burro?**

You might be interested in a sidelight to your caption on page 24 of the July 1975 issue. In the upper left corner you show a Ford Tri-Motor which was used to airlift assistance to the victims of the Managua, Nicaragua, earthquake in 1931. One of the pilots who flew the Tri-Motors was Lt. Aaron P. (Putt-putt) Storrs III, who was presented with a live burro as a token of gratitude by the local people.

It would not have been polite to refuse

the gift, although it did present some problems. He rode the burro through the mud between his quarters and the flight line, and found it a convenient way to keep his boots from becoming coated with mud.

However, there came the day when the rescue operation was over and it was time to depart. Not knowing of anything else to do with the burro, he loaded him in the plane and headed back to NAS Anacostia.

On arrival, several days later, the flight was met by the Secretary of the Navy who viewed the disembarking of the burro with some displeasure. The secretary asked the meaning of this, and the quick thinking lieutenant replied, "Sir, I brought this back as a gift from the people of Nicaragua to your grandson!"

Lt. Storrs was in VP-4 at Pearl Harbor in the late 30s when I joined the squadron as a radioman. He was a great guy and a good officer, both of which more than likely were responsible for his promotion later to rear admiral. The incident with the burro evidently didn't adversely affect his career.

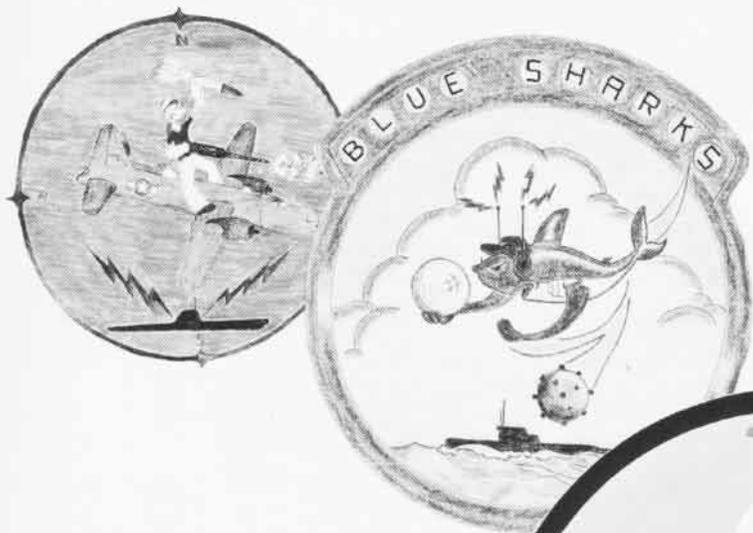
H. W. Masterman, Cdr., USN (Ret.)

**Something Special?**

Recently one of VP-56's young pilots, Ltjg. "Pappy" Boyington, became our newest patrol plane commander, which in itself is not so unusual, except for the fact that he completed the two-year P-3C syllabus in ten months. Since a patrol squadron PPC carries a great responsibility, coupled with a prodigious demand for systems and procedures knowledge, making PPC isn't something to be raced toward; however, we'd like to know if Pappy's is a first-tour record. We think him pretty special and would like to see him receive recognition as a pace-setter in the VP community.

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NAS Jacksonville, Fla.

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Evolution of squadron insignia: The first VP-6 insignia showed Popeye astride a P2V Neptune holding an aircraft rocket and a .50 cal. machine gun. King Features Syndicate gave permission to use Popeye and wired the squadron its best wishes. Later, a Collier magazine article on VP-6 called them the Blue Sharks. The squadron adopted the name and a new insignia showing a shark above a submarine sinking in the sea. This version was modified until finally, in 1962, the current Blue Shark emblem was approved. The Blue Sharks fly P-3 Orions.



NAVAL AVIATION

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