

NAVAL AVIATION

NEWS



DECEMBER 1975



NAVAL AVIATION NEWS

FIFTY-EIGHTH 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

THE STAFF

Captain Ted Wilbur	Head, Aviation Periodicals and History
Cdr. Rosario Rausa	Editor
Dorothy L. Bennefeld	Managing Editor
Charles C. Cooney	Art Director
Bob Moore	Associate Editor
Helen F. Collins	Assistant Editor
■	
Cdr. Nicholas Pacalo	Contributing Editor
Harold Andrews	Technical Advisor



COVERS — Front, CPO Chip Maury filmed Lt. Col. Robert E. O'Dare at MCAS Iwakuni (see "Harrier," pages 26-27). NASA photograph on the back cover was taken last year at the Washington Cathedral during a service commemorating the fifth anniversary of the first lunar landing. Here, USS Constellation (CV-64) says it for us, Season's Greetings from the staff of Naval Aviation News.

Bruce and the Bridge. In the photo, Universal Pictures personnel load portions of the stage sets used in making *Midway*, a film scheduled for release in 1976. The Navy provided some accoutrements from stricken carriers to enhance realism in the sets. The movie tells the WW II story of the famous Pacific battle. Universal has turned over parts of the film sets to the National Air and Space Museum of the Smithsonian Institution. They will be used in the construction of the dynamic display which simulates an operating carrier in the new Washington, D.C., Museum's Sea-Air Operations Hall. George Hoover, Navy consultant for the project, and Frank Nelms, Chief of Production Design for the Museum, confer at bottom of picture. That's Bruce in the background. He is one of the three mechanical sharks used in *Jaws*.

We need help to make this exhibit a real smash. Flight suits, flight jackets, and helmets of any vintage are needed to "authenticate" the ready room. Donations will be properly identified with your name and preferred squadron or unit. Please send items to *Naval Aviation News*.



Star Performers. Top names will appear in *Midway*, portions of which were filmed aboard USS *Lexington* at Pensacola. In these views, Charlton Heston charges across the

flight deck with a fellow flyer; Larry Csonka, Heston, Henry Fonda and Robert Webber cross the deck; Glenn Ford (Capt., USNR) relaxes in the ready room with other actors.



We get letters. Tom Hollywood of Orange, Calif., wrote and said some very pleasing things about our October issue. He enclosed some photos which prompted us to conclude such enthusiasm should be recognized. One revealed a wall on which had been posted not less than 300 insignias. Another photo, far left, showed his wheeled ad for Naval Aviation. The third was the most intriguing. It depicts Tom's custom built telephone.

Retirement Berths While USS *Nimitz* was undergoing sea trials, *Eisenhower* was preparing for launch and the keel was being laid for *Vinson*, two carriers of another era were finding retirement berths.

Intrepid, now anchored at Naval Base Philadelphia (*Naval Aviation News*, September 1975, page 28), was a part of the celebration of the Navy's 200th



birthday on October 13. Events organized and conducted by the bicentennial staff of the Commandant, Fourth Naval District included tours of the Navy aircraft, ship models and other historic exhibits on the hangar deck of *Intrepid*.

And on the same day, Secretary of the Navy J. William Middendorf and Vice Admiral William D. Houser, DCNO(Air Warfare), attended the dedication of the Patriots Point Authority at Charleston, S.C. (*Naval Aviation News*, June 1975, page 23). Those ceremonies also included the rededication of *Yorktown* which is being converted to a museum by the state of South Carolina.

Viking Arrestment Test One of the last barricades keeping the Navy's newest sub killer from being fully certified for carrier-based combat operations was removed when an S-3A *Viking* sustained negligible damage following a barricade test-shot arrestment at Naval Air Test Facility, Lakehurst, N.J.



Jet-propelled down a one-and-one-half-mile track, the unmanned twin-engine *Viking* proved it could sustain barricade arrestments without injury to its crew while landing at approximately 115 mph and at weights up to 37,700 pounds.

F. Trubee Davison Trophy

The F. Trubee Davison Trophy has joined the awards presented annually in the Naval Aviation community. Sponsored by McDonnell Douglas Aircraft Corporation, the trophy recognizes the outstanding squadron in the Naval Air Reserve



Force. Selection is based on readiness response capabilities, flight hours flown and safety performance.

In 1916, F. Trubee Davison gathered 11 other eager contemporaries at Yale University and formed the First Yale Unit. These men were the first reservists to become Naval Aviators.

The Yale Unit bought their own aircraft and paid all expenses incident to flight training. They repeatedly volunteered their services to the Navy and, finally, on March 24, 1917, with the help of Lt. John Towers, they were accepted in the newly activated Naval Reserve Flying Corps.

It was ironic that Davison never earned his wings. He was injured in a crash on his final examination flight. He did, however, serve with distinction as a commissioned officer in the Navy and as Assistant Secretary for War from 1926-1932.

Vice Admiral Paul H. Ramsey presented Mr. Davison with a set of Honorary Naval Aviators Wings on the occasion of the 50th anniversary of the Naval Air Reserve in 1966. Mr. Davison passed away in 1974.

The award was presented for the first time to Attack Squadron 304, NAS Alameda, at the 1975 Annual Tailhook Reunion. In the photograph, Commander Ray Blake, left, commanding officer of VA-304, accepts the trophy from Rear Admiral Edwin Wilson, USNR (Ret.), while LCdr. Harry Stonelake, officer in charge of the reserve squadron, looks on.

Tailhook Reunion

The 19th Annual Tailhook Reunion was held in September in Las Vegas, Nev. Highlighting the several symposiums held were presentations on the F-18 program and S-3A fleet operations.

Keynote speaker for the awards banquet was Admiral Frederick A. Michaelis, Chief of Naval Material and 1974 Tailhooker of the Year.

Outstanding squadron awards were presented to VF-32, VA-97, HS-2 and VT-31, the top performers in their respective categories.

Vice Admiral Robert B. Baldwin, Commander, Naval Air Forces Pacific, was named Tailhooker of the Year for 1975.

Max Trap awards went to Rear Admiral Jerry S. Lake (607), Captain W. E. Knutson (954), Commander Norm D. Campbell (1,101), LCdr. A. J. Marks (683), Lt. R. C. Bechtel (560) and Ltjg. G. S. Seiler (181).



The Max Trap award for ensign was shared by M. D. Wall, A. R. Hutchins, J. P. Cleaveland and D. A. Undesser in a four-way tie with ten traps each. In the photograph are the winners and Master Trapper Capt. Eric Brown, Royal Navy (Ret.), who counted 2,407 during his career. A guest at the reunion, Capt. Brown was for many years associated with flight testing at Farnborough and also had a tour of duty at the Flight Test Center, Patuxent River, Md.

Fleet Marine Force, Pacific received the CNO Readiness Through Safety Award for FY 75 — best safety record while flying 190,000 hours.

The new F. Trubee Davison Trophy (opposite page) was also presented.

A Launch and a Keel Laying

On October 11, Vice President Nelson Rockefeller and Mrs. Dwight D. Eisenhower participated in ceremonies at Newport News, Va., which included the launching of *Eisenhower* (CVN-69) and the keel laying of *Carl Vinson* (CVN-70) — the third and fourth nuclear-powered carriers.

Among the largest ships ever built, the new carriers will each have two nuclear reactors, four propellers, four catapults and space for about 100 tactical aircraft. Both are over 1,000 feet long and 252 feet wide. Each displaces 95,000 tons and can accommodate nearly 6,300 persons.

Eisenhower is scheduled for delivery in 1977, *Vinson* in 1980.





grampaw pettibone

Distraction/Retraction/Crunch

A crew was scheduled for a four-hour instrument training flight in a US-2B. Both pilots were experienced Naval Aviators, each having in excess of 1,000 flight hours. Following a standard brief, weather check and uneventful preflight, the crew departed a civilian airport to commence their flight.

After approximately one hour and thirty minutes in the air, the pilot noticed a chip light and elected to land at the departure field. The primary instrument runway was closed for resurfacing so an ADF approach was begun to that runway with the intention of circling and landing on another runway.

The aircraft made an uneventful landing. The chip detector light was caused by an electrical malfunction and minor repair was made. The crew departed again. They planned to terminate the flight back at the same airport at the scheduled time in order to permit an afternoon crew to utilize the aircraft.

Nearing completion of the flight, the plane returned for landing. The airport had an unmanned tower but was equipped with VHF unicom for runway advisories. Unicom reported a certain runway was the "favored runway." Because the US-2B is not equipped with VHF, the crew did not receive this information. Approach control provided no runway advisory but gave the weather as 600 broken, wind calm.

The pilot at the controls elected to circle and land on the runway from which he had departed earlier. The actual weather was much better on the approach with 1,200 feet broken, and five to seven miles visibility.

A circling approach was commenced. On short final, with the landing checklist complete, a light civilian aircraft was observed approaching the runway apparently intending to land. The pilot initiated a wave-off, planning



to remain in the landing configuration. He set up for a left downwind to an alternate runway since the other traffic was using his runway. The copilot raised the gear after the power application and while they were making a right-hand turn to clear the traffic. The pilot did not realize the gear had been retracted.

At a close-abeam, left-hand 180-degree position, a misunderstanding existed between the two pilots. The pilot intended to land on the runway he was approaching but the copilot thought they would continue around

for another approach to the original runway.

During a dialogue concerning propeller and flap settings, brought about by the misunderstanding, the landing gear was never again considered and an unintentional wheels-up landing was made. There were no injuries; however, the aircraft required numerous man-hours to repair.



Grampaw Pettibone says:

Blubberin' bellywhoppers! Must this continue to happen like clockwork? Why?

The reasons are always the same:

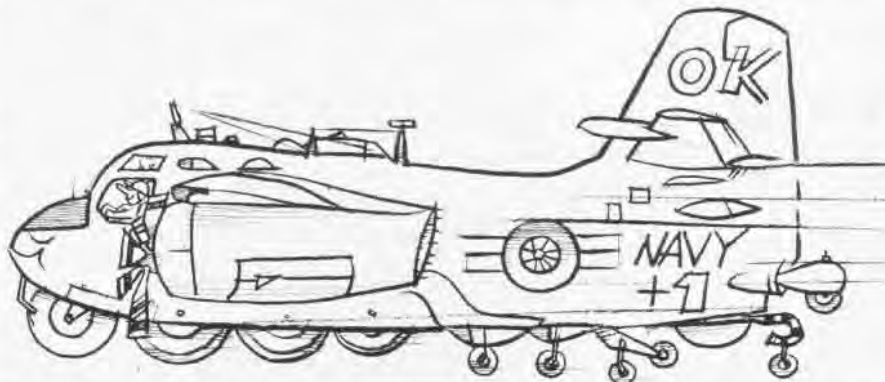
Distraction of some kind — in this case the other aircraft in the traffic pattern.

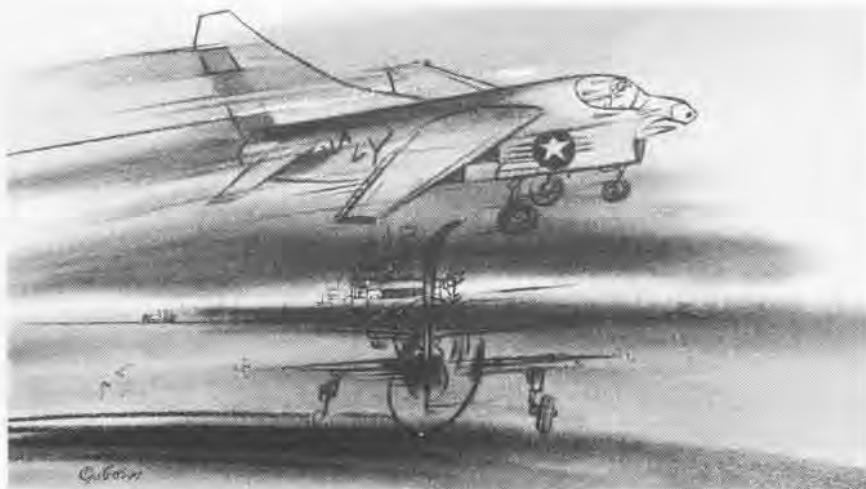
Failure to go over the checklist. The acting copilot was a lotta help by raising the "rollers" and not letting the pilot know it.

Who's in charge here!? Believe me gents, if you wanta avoid a "rollers-up" landing, go over the checklist!

Close Shave

A night duty section was to tow a TA-4J *Skyhawk* across the field to the high-power maintenance turn-up area. The area was located east of the north-south dual runways. A radio truck was dispatched by the air sta-






tion operations department to serve as escort. The crew assigned to tow the TA-4 was qualified and the aircraft was properly lighted.

The escort truck arrived and the towing process began. The escort driver requested clearance from the tower to cross the north-south dual runways. Actually, he was on a different taxiway, west of the runways. The tower operator did not see the escort truck and asked if it was on the near side or far side of the runway in relation to the tower. The driver responded, "far side."

Still not having visual contact, the tower operator again asked the same question and received the same reply. Clearance was then issued for the TA-4 and tow vehicle to cross the first runway and hold short of the second runway due to landing traffic. The towed aircraft and truck proceeded across the runway *immediately in front of an A-7 making a touch-and-go landing*. Clearance between the lifting A-7 and truck and its tow was *approximately ten feet!*

 **Grampaw Pettibone says:**

Holy Hannah! If you wanna close shave — see a barber!

Operating around an airfield, especially at night, requires the utmost care. Anyone charged with escorting towed or taxiing aircraft must be *completely*, I say again, *completely*, familiar with the airfield.

In this particular case the driver became disoriented and didn't know his location on the airfield. (I call that "ground vertigo.")

The tower operator had an oppor-

tunity to prevent this close call by knowing where the escort vehicle was *before* clearing him to cross *any* runway.

Unfortunately, things like this don't get much attention unless they wind up in a catastrophic accident.

I think it's a good idea for all air station ops officers to recheck all of their procedures and people relating to escorting aircraft. Nuff sed!

Photo Bird

A lieutenant Naval Aviator and a sailor, who was to act as aerial photographer, were to fly a T-34 to photograph a civilian canoe race. The pilot had previous low-level navigation

photography. The T-34 arrived at the scene of the canoe race and the pilot made one pass but photos weren't taken. The area to be photographed was between peaks located in a valley. On the second pass, the pilot flew between the peaks at tree-top level.

While the pilot was looking for the subject, the T-34 port wing struck some one-fourth-inch utility wires. The wire hit the leading edge of the port wing and became entangled between the aileron and the flap and then partially wrapped around the vertical tail. The pilot climbed immediately, experiencing some difficulty because of the limited aileron/rudder movement available.

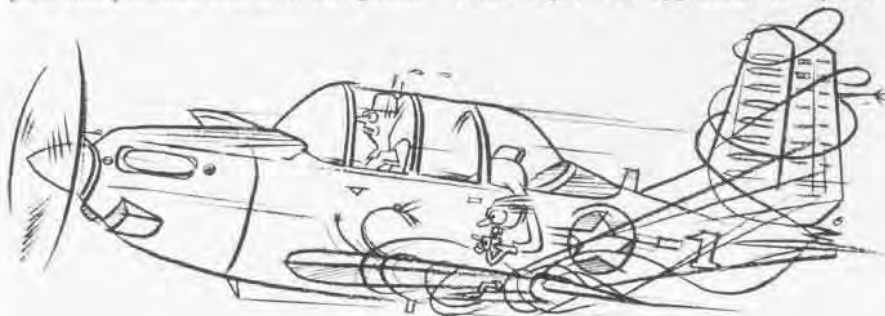
The "shocked" aviator flew the aircraft back to the civilian field and with some difficulty landed. The investigating team found that the aircraft had struck what was the lower of two "identical" wires suspended from wooden utility poles. The lower wire was located 50 feet above the ground.

The approval authority for this flight was unaware of the potential dangers involved in the mission.



Grampaw Pettibone says:

Holy Hannah!!! I can't believe it. This is the worst violation of common sense that I've seen in a long time. Using a T-34 for a photo bird is really way out. Then, once the ill-fated flight was approved, the pilot



and air-to-ground photographic experience in fleet tactical aircraft. This was, however, to be the first attempt by both the photographer and the pilot from this type of aircraft.

Following completion of routine navigation planning, passenger brief and weather check, the T-34 departed a civilian field and proceeded to the area where the crew was to do the

should at least have made a higher altitude check and a "walk-down" of the area to be photographed.

One of the gents in the chain of command called this just as it was — a direct supervisory error! If you have an aerial photographic requirement, let the pro do it with the aircraft designed for it, with the equipment designed for it, with the people trained for it. Need I go on?

SOLILOQUY



Further remembrances of the ex-Spad driver whose

I was a rookie fresh from the Rag and joined the squadron already in the Sixth Fleet. I was scheduled for practice bombing with the C.O. and a couple of second-cruise lieutenants. I recalled vaguely that Skipper Lee was quite a marksman. Unphased, I suggested at the end of the brief "How about betting a quarter a bomb?"

Teeter and McNally looked at me queerly. Skipper Lee smiled. I think I saw a trace of a satanic delight pass quickly through his eyes. He was a muscular man of medium height, and probably played linebacker in college. He had a quick smile that enlivened the weathered lines in his face. He exuded strength and confidence.

"Better not, pal," said Teeter.

"Forget it," said McNally.

I persisted. The C.O. ahemmed and we all looked at him.

"You're on," he said with finality. Teeter and McNally cringed.

An hour later we launched, dropped a smoke light in the water for a target and broke into the bombing pattern.

As number two man, I watched the Skipper tip the *Spad* over, pull the nose through, flip around and aim at the light, now marked by a column of rising smoke. He dropped his right wing quickly, brought it back. He dove, steady as a dart tossed to the ground, pressed the pickle, released a Mark 76 and pulled up. Seconds later a puff of smoke rose from the sea about 15 feet from the target.

I rolled in, took aim, released, hauled the *Spad* away and looked back.

"Two hundred fifty feet, six o'clock," announced Teeter.

Teeter was next and planted one 75 feet at 12. McNally hit 90 at 9.

On the second run the C.O. scored a bull's-eye. My next one was 300 at 12. Teeter and McNally hit within 100 feet. And so it went.

The Skipper had two more bull's-eyes and three hits inside 50 feet. My closest strike was 175 feet and that was a generous call.

We split later and practiced instruments in section. I began to notice that flying on the Skipper's wing was extremely easy. I needed few throttle corrections and when he turned or climbed or descended, he did so with such finesse and smoothness that I began to think I was actually a part of his plane. He said little, content to motion me into proper position with brief hand signals.

At the debrief, we hovered anxiously around the LSO to hear how we did on our approaches. The Skipper stood at the far end of the ready room



PART II

'Soliloquy' appeared in the December 1974 issue.

quietly removing his Mae West.

The LSO described my pass: high start, overshoot, low in the middle, rough nose, fast, little dive for the deck.

The LSO then called out to the C.O. "OK, Number Three, Skipper."

The C.O. smiled.

Reid explained it all to me later.

"Listen," he said, "nobody bets with the Skipper unless you want to lose money. He flies the *Spad* better than anybody else around. When he leads, it's like going fishing with your grandfather. He's so smooth at the controls he could turn you upside down and you wouldn't know it. He thinks about ten miles and ten minutes ahead of all of us. And last year at the Yuma bombing derby he won Top Gun. Which means he's the best attack pilot in the Navy.

Live and learn — and be humbled.

Freckmann had flare. We called him Fearless. We were on a training cruise off the California coast. He was on the number one catapult where the ship's C.O. would get a good look.

He slid the canopy back. Bound around his neck was a white satin scarf. He unfurled one end of the scarf and flipped it into the windstream. It was incredibly long and whipped furiously in the breeze as he roared the engine to full power. He flung an exaggerated salute to the cat officer and, presumably, the ship's skipper, behind and above him. With a loud firm whoop he was tossed into the sky. We watched that pilot pennant, that white symbol of aerial chivalry and were sent back to 1918. Fearless was climbing over the hedgerows of France and the Baron was up there, waiting.

They arrived on a misty day and misty eyes watched them disembark from the transport. They had come back from horror but they were home now.

There's a tradition in Navy Officers Clubs: "He who enters covered here, shall buy for all a round of cheer." Many a man has unexpectedly lost a lot of money by forgetting that tradition and wearing a hat into the bar.

This night at the Alameda Officers Club much of the conversation centered on the prisoners of war who had returned. People were three deep at the bar. Tables were packed. The music was loud.

The lieutenant commander had been a POW for seven years plus. It was his first night in the continental U.S. in nearly eight years. He wore dress khakis and, as he approached the entranceway, he carefully placed the

bridge cap on his head.

A young officer touched his elbow. "Sir," he said, "better remove that hat. It'll cost you."

The lieutenant commander smiled. "It's intentional," he said.

He then charged forward. "Hey everybody," he shouted, "look at me!"

The message passed quickly through the club. All eyes were on him. He deliberately pulled the hat down tighter on his head. "Bartender," he ordered, "set 'em up for the house!" The applause lasted for minutes.

The spirit of Naval Aviation.

After 40-plus days on Yankee Station we were resting and recuperating in Japan. I came back early from shore leave one evening and saw a cluster of officers and men sitting in folding chairs in hangar bay one. They were watching and listening to a soft-looking lady who was singing a soft-sounding song. A man played the upright piano beside her. The lady and the voice were familiar.

Good Lord, I finally realized. It was Frances Langford. I recalled Bob Hope and company, including Ms Langford, entertaining the troops of WW II and Korea. And now Vietnam. Same songs from the same voice soothing another generation of servicemen.

The Airforce base is not far from home and a few times through the years I made refueling stopovers there. The transient ramp is a few yards from visitors' parking, so the folks could get a close look at my plane as I taxied in.

I chugged into the chocks the first time with another pilot in a T-28. I was certain Mom and Dad would be appropriately impressed with our slick canary-yellow trainer.

Navbag and helmet slung over my shoulder, I fabricated an expression of fatigue. Tough work bringing those planes down from the sky.

"Well," I asked, "Whatdaya think of my T-28?"

"Nice plane," said Dad.

"Nice, son," said Mom, "but it takes two to fly it?"

Sigh.

A cruise or so later I wheeled in with a *Skyraider*. Canopy back, I neared the chocks and proudly rubbed the letters of my name imprinted below the canopy rail. Happily, I noticed that the oil slick along the fuselage glistened in the sunlight. I revved the engine a couple of times so the folks could appreciate all 18 of those mighty cylinders.

Finally, flight suit ruffled, boots scuffed, and a grease smudge here and there, I approached my parents.

"Well," I asked, "Whatdaya think of my single-seater?"

"Nice plane," said Dad.

"Nice, son," said Mom, "but isn't it awfully dirty?"

Sigh.

A transfer later I scooted in with a Charlie model *Skyhawk*. Canopy up, arm over the side, caressing the fuselage with authority, I had tightened my oxygen mask an extra hitch for the final half hour of flight. I wanted those stress lines firmly imprinted on my face. Torso harness carefully zipped, boots polished, fore and aft cap neatly in place, I said:

"Whatdaya think of my nifty A-4?"

"Nice plane," said Dad.

"Nice, son," said Mom, "it's very cute."

Sigh.

Toward the end, I breezed in with my A-7. Canopy raised, I signaled thumbs up as I neared my spot. I idled at 70 percent for a full minute, then shut down. I took an extra moment or two to unstrap and climbed out slowly. I faced the folks, breathed heavily and waved. I walked over, trying to look as if I had just personally berthed USS *Forrestal* at Pier 12 in Norfolk.

"Well," I said, "Whatdaya think of this piece of machinery?"

"Nice plane," said Dad.

"Nice, son," said Mom, "but isn't it sort of fat around the middle?"

Sigh.

Fallon, Nevada. Weapons training. Four of us were in A-1s practicing close air support. The FAC called in the target—an old fragmented tank resting in the sand at the foot of a craggy hill. We were to dive in sequence in loose daisy-chain formation.

The commander was with us for some bombing work before taking over as CAG of an air wing destined for WestPac and the war.

I rolled in behind number one and got a little steep. The commander started in behind me. We never did determine exactly how it happened. But as I pulled up, I was suddenly enveloped by a dark shadow. For a single, horrifying second I knew that it was all over—that this was what it's like the instant before a midair collision. A shadow. A frozen glance at the looming underside of the other plane.

But we missed each other by inches. Literally inches. I was glad to get on the ground. Eight years later we ran into each other. He had become an admiral.

"Good to see you, sir," I said.

"Same, here," he said.

"Do you recall that time in Fallon when . . ." I started.

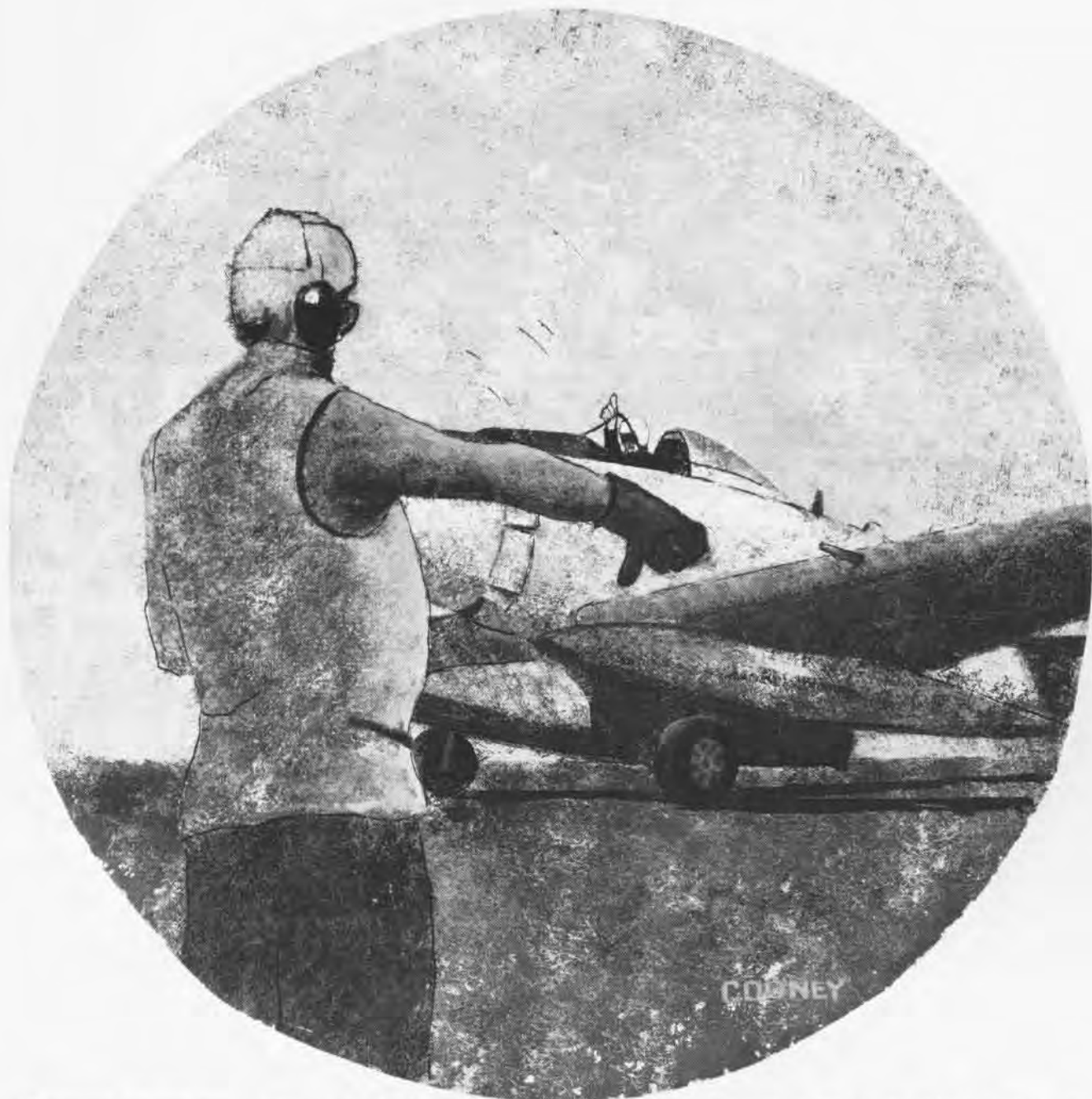
"Yes," he said without hesitation. "I remember."

We gazed at each other in silence for a few seconds.

I knew I knew. And I knew he knew—that but for several precious inches neither one of us would have known the last eight years.

Rays of late afternoon sun filtered through a golden curtain of haze which hung over the Spanish countryside. It played visual tricks with the rolling, sand-colored landscape. Reid and I were in a loose cruise formation returning to the ship. The city of Granada passed below. Cathedrals, plazas and fountains rose in unison from the land. For a moment, it was like a vision from Shangri La.

Reid keyed his mike. "That's a nice lookin' town," he said. "Somebody ought to write a song about it."



Crew cut, salt-and-pepper hair. Gruff look of a stocky stevedore. Tough as a bear on the outside, gentle as a doe underneath. Wise as an owl all over.

That was Dugan.

With spare parts and ingenuity he built Dugan's Dolly. It saved many a hernia and backstrain. It permitted the troops to hoist wing tanks onto A-1 pylons with mechanical force vice human force.

And he knew engines.

I was strapped in abeam the island and turned up to 30 inches. I checked

both mags and got the proper drop in rpm. Dugan was holding his Mickey Mouse ears slightly away from his head. He signaled to repeat the check. I did, got the same results and gave him an emphatic thumbs up.

He gave me an emphatic thumbs down.

When Dugan tells you not to go, you don't go.

I shut down and climbed out.

"Hey, Dugan," I said, "she checked out O.K."

"There's somethin' wrong with that engine, sir," he replied. It was a state-

ment of fact, devoid of conjecture.

Dugan and the crew labored through the night. Finally they discovered incipient metal fatigue near one of the engine mounts. I will never know if the engine might have failed that day. But I have a lingering feeling that Dugan saved me from going into the drink. In a way it was like a doctor hearing an infinitesimal heart murmur, one that others might miss.

I was a lieutenant junior grade then and recall thinking that if the Navy had people like Dugan, I had certainly joined the right outfit.



They were going to the moon and I was scheduled to fly that day. I had a student in the rear cockpit on an instrument training flight. We headed south out of Jacksonville and climbed through a quilt-like blanket of clouds which ran full to the horizon. At a safe standoff distance we waited.

"Should have ignition right about now," I said on the intercom. After a few seconds, we saw the *Saturn* burst through the blanket. It was a ball of fire powering straight up. We watched until it disappeared, like a sparkler when it burns out.

"I believe," said the student in back, "that we have just witnessed an historic event."

I clicked the mike twice in agreement.

Zanuck was in the Med filming *The Longest Day*. Our *Spads* were the only planes available which resembled WW II birds. A dispatch came through requesting a division of A-1s for flybys of the convoy and attack runs on a simulated Sardinian beachhead. Fellowes and I collided at the doorway of Teeter's stateroom. (Teeter was the schedules officer.)

"OK, boys," he said, "if it means that much to you, you're on."

Fellowes led and three of us followed on several posterior-busting multi-hour hops. We swept back and

forth over a convoy of ships. We protected the Allied troops with devastating attacks on the Hun. Time after time we dove and, with John Wayne grimaces, pulled our *Skyraiders* up into the sky and dove again.

I liked to believe it was Zanuck himself in the whaleboat a few yards offshore directing us. "Move it over to the right a few yards this time and bring those planes in lower!"

Months later the film was released. I sat in the Virginia Beach theater savoring the fame ahead. The film droned on and the invasion began.

Here we come, I thought. It was like sitting on the catapult waiting for the stroke to kick you into the air.

Finally, there we were. Four beautiful *Spads* winging powerfully over the convoy as it plowed through the English Channel. Suddenly we were gone. There was a quick cut to General Eisenhower on the bridge. I waited. And waited. We never appeared again.

Our film debut consisted of about two and a half seconds on the screen. The rest of our labor lay on the cutting room floor. It was a long drive back to the BOQ.

Cobb was getting married in his small Ohio home town. The bride-to-be was a beautiful young lady from Sweden. She wore a flowing white dress and a stunning silver tiara. We were all in choke-collar whites.

The church was packed. The ceremony was conducted with appropriate formality — until the moment when the bride and groom knelt down before the minister.

It began with a snicker, spread to muffled chuckles and stopped short of outright laughter. Seems a squadron mate or two had gotten to the soles of Cobb's shoes before Cobb dressed that morning.

In bright red magic marker, the letters H and E were written on the left shoe followed by L and P on the right.

At the reception one of the local gentlemen, without malice, said to me, "You Navy flyers don't take things too seriously, do you?"

Not having participated in this irreverent disruption to an otherwise lovely joining-in-the-bonds-of-holy-matrimony, I avoided the question.

On that same cruise we heard about the Air Force fighter pilot who had completed a mission and was switching frequencies before landing at a South Vietnamese base. He thought he heard a Travis AFB controller.

It was a quirk that infrequently happens with the radio air waves. "Travis," he asked, "this is Railsplitter Two Oh Seven, how do you read me?"

"Loud and clear," answered Travis. The stunned flyer quickly gave his position. Seems that his wife lived near the California base. Within minutes she was summoned to the field. A rare, memorable — although not-so-private — exchange between man and wife followed. A pleasant interlude in the war.

It was a long flight in the stretched DC-8. We arrived at Travis from Japan by way of Anchorage about 20 hours after leaving the land of the rising sun. We rode a C-131 the rest of the way to Lemoore and the big, post-combat cruise reunion with wives and families. I was as anxious as anyone to see the wife again for the first time in eight months — and our daughter who arrived while I was on Yankee Station.

I was sure my wife wouldn't mind the rumpled blues and the growth of beard. I was in the back of the plane and sort of lingered there after it was shut down in front of operations. In fact I would be the last man out.

Stone, who would have his reunion back East, was near me in the plane. I tossed him my movie camera.

"How about recording this event for posterity?" I asked. He agreed and disembarked ahead of me. I came out into the warm daylight and saw the wife and that little bundle immediately. It was easy because everybody else was tangled up in embraces.

I stepped down the ladder and Stone got us on the celluloid. After a while my wife asked, in a voice tinged with anger, "How come you're the last one out of the plane? For a minute I thought you weren't aboard. Not anxious to see us, maybe?"

I made some quick reassurances to the contrary, then admitted, "Well, I saw Cary Grant do it in a movie once and . . ."

The wife liked to clubbed me. "Listen, pal," she said, "a Cary Grant you're not. Next time, you come out with the others or I'll bop you over the head with my handbag!"

"Wilco," I said, explaining that was an aviation term meaning "understand and will comply."

The movie came out well, though.

Before manning up for the return flight to my home base following one of those refueling stopover visits, my Mother issued a familiar directive.

"Now you call us after you get there so we know you made it OK."

One of my last trips was no exception. "Make sure you call," she said. "Look, Mom," I pleaded, "I'm married, have four children, a measure of responsibility in the squadron and over 15 years in the Navy. I can take care of myself. I don't really think it's necessary for me to . . ."

"Call us when you get there," she said.

Sigh. I gave up. I said I would call. I did.

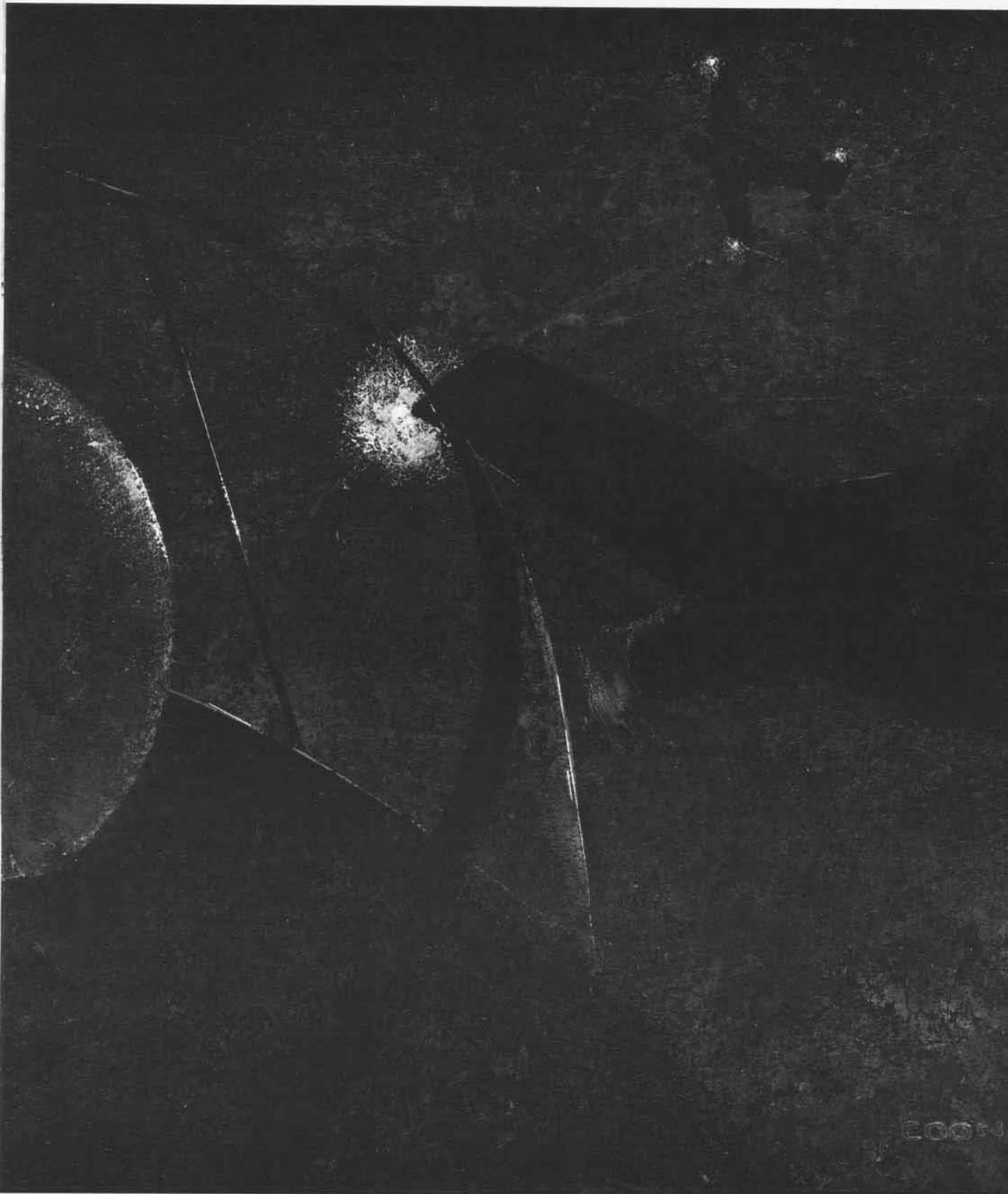


McNally and I were returning to Andrews from Jacksonville on a proficiency flight in a T-28. It was a miserable winter night. IFR most of the way. I was up front at the controls and on the gauges. We were about 20 minutes from the base.

We ran into a violent pocket of turbulence and precipitation. It was as if a truckload of heavy slush had been cast down on us with great force. The plane trembled and so did I. For a few seconds I had a classic case of vertigo. But we were out of it in a minute or so. Reassuringly, McNally said, "We're doing all right."

Closing out the flight plan at ops, we learned that, about the same time we went through that horrible weather, disaster struck. A Pan American airliner, not far from our position, was apparently hit by lightning and crashed. There were no survivors.

I remembered the title of that book by Ernest Gann, *Fate is the Hunter*.



2004



What is like a game of three dimensional chess with knights, bishops, rooks and pawns weaving wildly through space in patterns worthy of a Freudian dream sequence? Night carrier controlled approaches, of course.

We were operating in the middle of the Mediterranean on a cloudless moonless evening. Six of our *Sky-raid*ers were tiered in sections 15 miles behind the carrier waiting for clearance down out of the black. Two more jets had to land ahead of us. Finally we were cleared to commence.

Like an unraveling necklace of lights we left our oval holding patterns and, in one-minute intervals, descended toward home plate.

In situations like this you have a rough idea of who is where and in what plane, even though the aircraft are little more than a vague display of wing and tail lights. All was going well until an unsettled voice from the ship captured our attention and our imagination all at once.

"All aircraft, we have an emergency in progress, return to your holding points immediately."

Six "Oh my Gods!" were muttered in six individual cockpits.

Seems the two jets had bolted and become low on fuel. The air boss didn't want any *Spads* cluttering up the pattern as the *Skyhawks* struggled to get aboard.

Heads began to swivel like that young lady's in *The Exorcist*. Pilots turned, climbed, descended and, in some never-to-be-admitted cases, temporarily spun out in the return to our holding ovals. Hearts skipped beats, bubbles of perspiration proliferated on foreheads and other places. Patterns of lights criss-crossed in the night.

I was somewhere in the middle and saw a briefly illuminated outline of an A-1 blur by, right to left. I had the prickly feeling I was in the very depths of the ocean and a threatening shark had passed by, sizing me up.

"Is that you, Sid?" I asked meekly.

"It's me all right," Sid answered.

"Where are you, Gus?" questioned a high-pitched voice.

"As far away as I can get," replied Gus.

"Jim, are you still at my six?" asked another.


"No, but I am at somebody's three," replied a pilot.

The *Skyhawks* eventually landed, and so did we.

In the ready room a long hour later, sea stories shot across the ready room with rifle-shot velocity. We had conquered the elements but not with style.

In those days, the flight surgeons would drop by and dispense bottles of medicinal brandy to the night flyers. On this particular evening we convinced him of the need and therefore received double rations.





Bright, golden sun. Crystal blue sky. Visibility unlimited. But the entire Midwest wore a shroud of snow. Even with bunny suits and layers of thermal underwear it was brutally cold. Springer and I climbed out of the T-33 at Glenview.

"Good Lord," I said to the plane captain. "how cold is it here?"

"Chill factor is 40 degrees below zero, sir," he said. I unbuckled the nose compartment and gathered up the packages.

We were chased into the ops building by a breeze straight from Lake Michigan by way of the Yukon.

Delivery mission complete, I told Springer to strap in, I'd do the preflight. Flowing with generosity I told the plane captain to stay inside. I'd handle his duties. "No sense both of us turning blue," I said. "I'll signal when we need you to man the huffer."

All went normal and we launched. We passed 500 feet accelerating through 130 knots.

Then a frightening, subtle movement caught my eye. The starboard nose compartment door had flipped open. It began to flap perilously in the windstream. My God, I thought, it's moving up and down like the wing of a sea gull.

My heart sank, the adrenalin pumped and, as if he didn't already know, I told Springer, "We've got a problem."

I turned downwind and declared an emergency. I muttered abbreviated solicitations to the man upstairs and, in terms of time, began the longest approach pattern I could remember.

As we arced onto final, the door continued to rise and fall gracefully, ominously. I feared it would tear off at any second, or cause a violent distortion in the airflow. But it didn't and we landed, sending a rooster tail of powdered snow behind us.

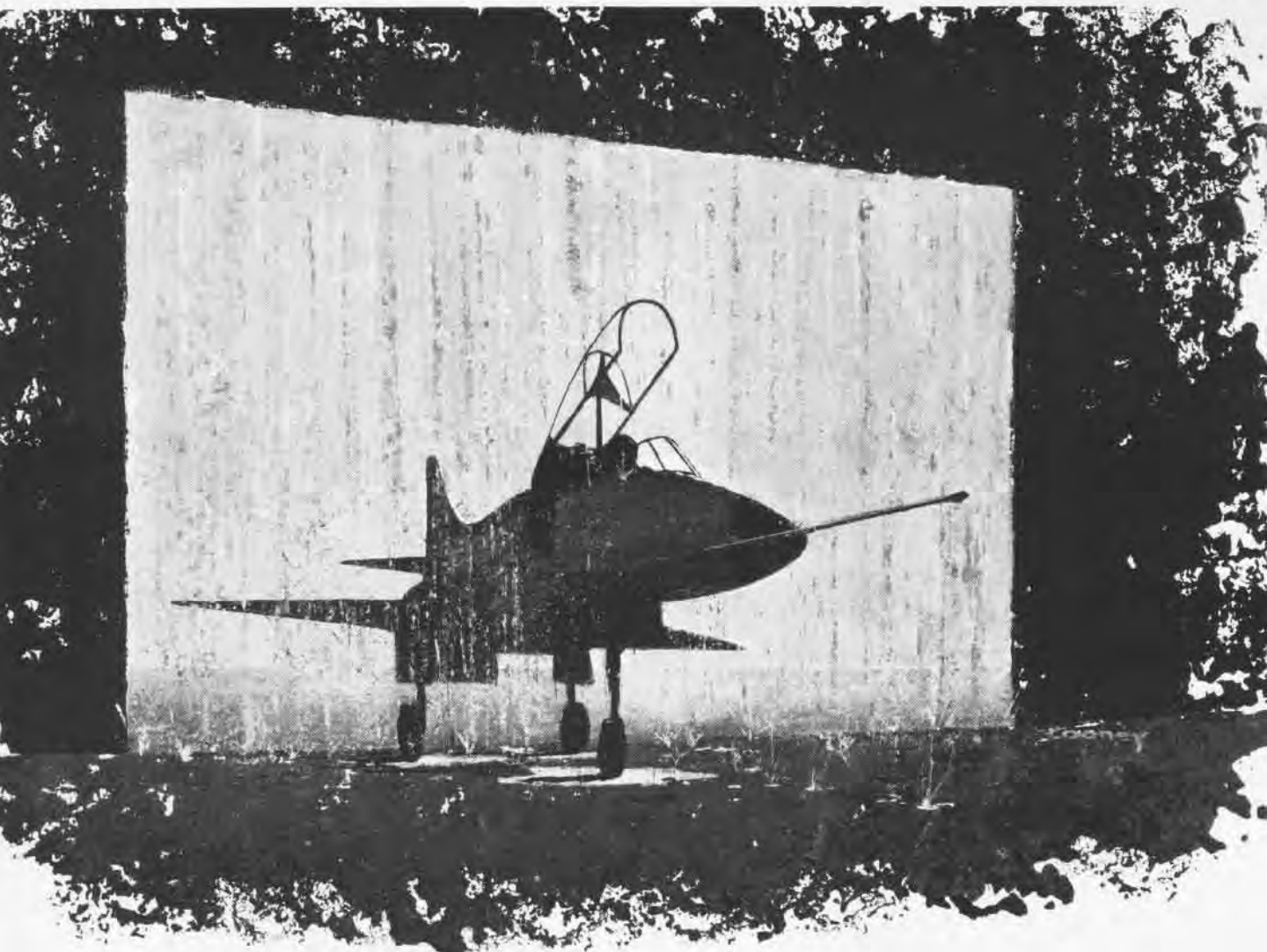
We got properly buttoned up and flew home to Detroit. All the way back I cursed my misguided generosity, the unprofessional preflight.

A few days later two flyers lost their lives in a crash in New England. Seems that the starboard *and* port nose compartment doors of their T-33 burst open in flight. The plane fell uncontrollably from the sky.

In the name of the Father and the Son and the Holy Spirit, Amen.



Canne



The Four and Twenty Blackbirds of VA-45 had class. I checked in, looking forward to instrument instructor duty. Fresh from the fleet and A-1s, I was anxious to transition to jets. I was told it was the Gentleman's Squadron. Which meant you flew one or two hops a day and tended to administrative duties in between. You were outbound from the parking lot heading for the comforts of home by 1630 each day. Infrequently we would surrender an evening and fly a night sortie to make the OpNav minimums.

On one of my first flights my student and I landed in a downpour. I checked in on base radio and was told to taxi into the barn. The rain pelted down but we were dry and cozy inside

the glass cocoon. But I was slightly confused — taxi into the hangar?

We passed the flight line. I steered the *Skyhawk* toward the hangar. With biblical drama the gigantic doors slid slowly open. A plane captain waited inside and gave us the come-on.

My student said, "Pretty neat, they don't want us to get wet."

"That's affirm." I replied with proper nonchalance. "This outfit has style."

I was still pleasantly baffled. They didn't do this sort of thing in *Spads*. I'm right up there with the tailpipe set, I thought to myself.

We moved through the curtain of rain and braked to a halt. The roar of the engine reverberated through the cavernous working space. People along

the upper walkways were watching and I felt a measure of omnipotence as I raised the canopy and gave the ground crew the old thumbs up.

Later, I caught Smith, the maintenance officer.

"A.J.," I said, "I'm impressed. That's pretty thoughtful letting us taxi in out of the rain so we don't get wet."

A.J. scowled and growled, "Hell, we don't care about the jockeys gettin' their pretty flight suits drenched. It's the cockpits I'm worried about. If we park you on the line, some of you dodos leave the canopies open so long climbing out that the seat packs get soaked. And that costs my troops extra work!"

Burst another balloon.

Pellot — we called him Pellot the Pilot — and I were on a recon mission along the North Vietnamese coast. We had been briefed that some gun positions were concealed in the thick green growth which rimmed the sandy beach. The AA batteries had been silent the last couple of days.

I rolled in from the sea and fired a pair of *Zuni* rockets. They whooshed powerfully from the pods. The wings trembled for a second. I pulled rapidly away, staying feet wet.

"Rollin' in," called Pellot.

"Roger," I said.

Silence.

I looked back. Where there had been blue sky I now saw a barrage pattern of white puffs. It was as if a batch of kernels had been tossed in the air and suddenly burst into popcorn.

"Check in, two," I said.

No answer.

"Two, ah, check in," I repeated.

Quiet.

I dove toward the surface and turned in to the beach.

"You OK, two?"

Silence.

There were no concentric circles signaling an aircraft in the water. No blossoming cloud of black, orange and white marking a crash on land.

But the sinking feeling swept through me — I've lost a wingman.

"Pellot, are you up?" I asked.

A few seconds passed. I heard a mike keyed.

"I'm awright," Pellot reported.

I then saw his *Skyraider*, a reassuring profile in gray, racing along the wave-tops a half mile away.

He said, "They're shootin' back there!"

"Concur," I said, breathing comfortably again.

basketball game of the year. The network was presenting it live.

I asked the troops in approach control if they were interested in my relaying the progress of the game. They surely were. So, with the help of the *Spad*, a touch of athletic excitement under way in Texas was passed on to some fans in a carrier in the Tonkin Gulf. My Charlie came as the half ended so we had to get the results later. But half is better than nothing. Houston won.

Kehoe, Curtis and I were in advanced flight training. At the Christmas break we went to San Antonio to catch an Air Force hop going east. (We all lived in upstate New York.) A C-130 was taxiing out as we arrived.

"Where's it headed?" I asked. "East-bound to Loring," answered the duty officer.

We were in a hurry. Could they hold a minute for us? The *Hercules* driver was generous and said he'd wait. We were hustled out to the approach end in a pickup truck and climbed aboard. It was a long, hungry flight — no time to order box lunches. About seven hours later the C-130 touched down. Everything was white. Seems a storm had blanketed the terrain with a couple of feet of snow.

As the hatch swung open, the temperature plunged and a frigid wind wrapped itself around us. We wore overcoats but they failed to ward off the brutal chill. We hurried inside to the transient waiting room and checked the wall map.

Loring Air Force Base lies in the far eastern corner of Maine, a few miles from the Canadian border. We had overshot our mark by about three states. Not too smart a move for three aspiring Naval Aviators — taking that flight.

"Well," said the sergeant behind the desk, "There's a B-25 going to Syracuse. The heater doesn't work and you'll have to ride in the cold for about three hours." We took a collective look at the arctic wasteland and the fast fading sun and piled into the B-25.

Oh it was cold, cold, cold. Cramped, restless and numb we flew west staring



at each other with blank expressions. Late in the evening we made it to Syracuse. Still, it was worth it. We were home for the holidays.

Subtle things I want to remember:

— flying tight enough on the lead jet so you hear the roar of his engine as well as your own.

— leading a division up the slot over the home field runway with all four canopies perfectly aligned. Breaking the flight and circling down in cosmetic intervals to good landings. Then hearing your plane captain say, "Hey, that was beautiful!"

— slipping from the cruise position into trail behind your wingman's A-1 and setting the rpm control to precisely match his, so that both props are identically matched, as if they were one and the same.

— flying a low level through a chain of sparsely populated Mediterranean islands and seeing the waves rush onto the craggy shores and then retreat, leaving beards of foam where sea and land meet.

— becoming senior enough to make the flyaway. Experiencing a surge of pride and accomplishment flying one of the dozen *Skyriders* in three divisions as, en masse, we cross U.S. soil for the first time since deploying seven months before.

— going up to the flight deck late at night after operations have ended, walking quietly through the parked airplanes with the carrier slow in the water and hearing the gentle creaking of the giant ship on the tranquil sea.

Among the A-1's virtues was the low frequency radio. While most other tactical planes only had UHF, we had both LF and UHF. We could pick up broadcasts on the armed forces network. These lightened the long hours in holding patterns or on endless overwater legs.

Once when I was overhead the ship, Houston, with Elvin Hayes, was playing UCLA, with Lew Alcindor (Kareem Abdul Jabbar) — the biggest

Overall, the Navy's Grumman F-14A *Tomcat* is without equal among today's Free World fighters. Six long-range AIM-54A *Phoenix* missiles can be guided against six separate threat aircraft at long range by the F-14's AWG-9 weapons control system. For medium-range combat, *Sparrow* missiles are carried; *Sidewinders* and a 20mm are available for dogfighting. In the latter role, the *Tomcat's* variable-sweep wings give the F-14A a combat maneuvering capability that could not have been achieved with a "standard" fixed planform wing.

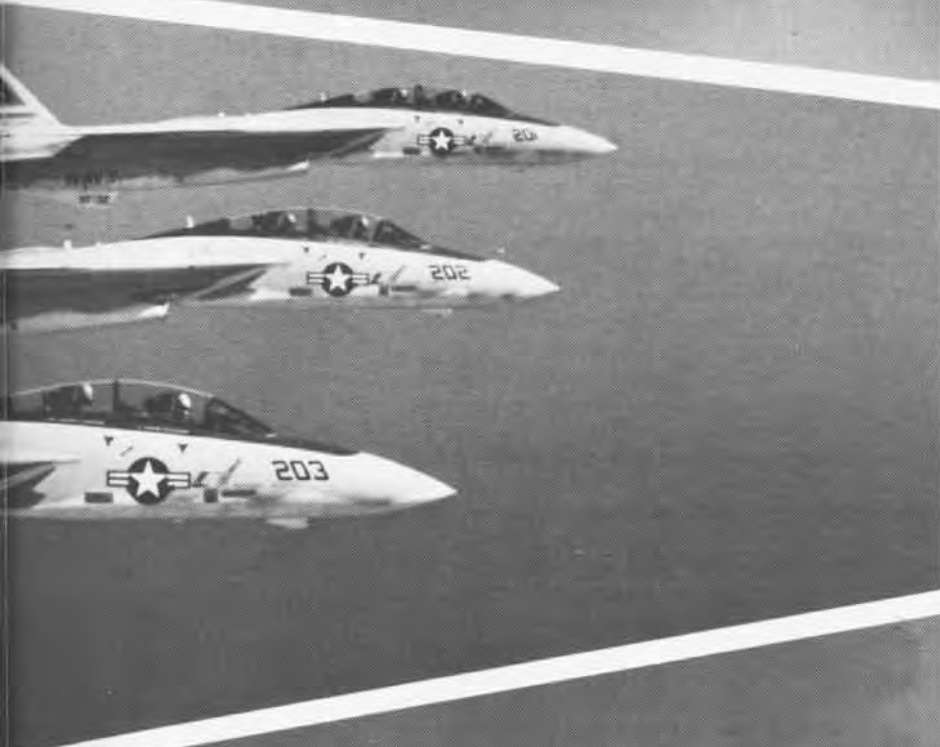
Designed in 1968 to take the place of the controversial F-111B, then under development for the Navy's carrier fighter inventory, the F-14A used the P&W TF30 engines and AWG-9 system and carried the six *Phoenix* missiles that had been intended for the F-111B. A completely new fighter system was designed around these with emphasis on close-in fighting "claws" along with standoff missile fighting. From its first flight on December 21, 1970, the F-14A has come through five years of development, evaluation, squadron training and initial carrier deployments to become the carrier air wings' most potent fighter. Technical and financial problems that received a great deal of publicity have been overcome in achieving this goal.

Originally it was planned that the F-14B with the advanced P&W F401 would be the major production version. However, performance of the TF30-P-412 exceeded expectations while development of the F401 was delayed. One F-14B was flight tested, showing that an F401-powered *Tomcat* would be a potential future option.

The *Tomcat* caps a long line of Grumman Cats. In the hands of Navy pilot/NFO teams, it will provide the carrier task force with its first-line offense and defense against any enemy air threat in the tradition of its predecessors.



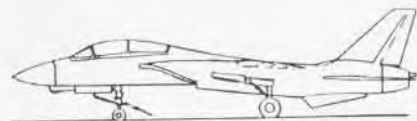
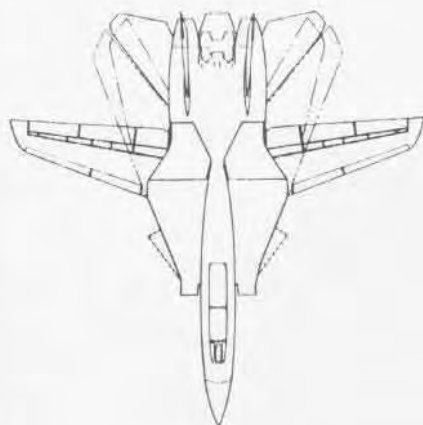
TOMCAT



F-14



Length	61'10.4"
Height	16'0"
Wing span	
Unswep	64'1.5"
Swept	38'2.4"
Power plant	two TF30-P-412A
Maximum speed	Mach 2 plus
Combat ceiling	over 55,000'
Ferry range	1,900 nm plus
Armament	one M61A1 Vulcan gun Phoenix, Sparrow, Sidewinder missiles
	Each of 4 fuselage stations can carry weapons up to 4,000 lbs.
Crew	pilot and weapons control officer



F-14B



Personnel of Operation *Deep Freeze*, the Navy program supporting America's scientific assault on the secrets of Antarctica, began their annual trek from California to McMurdo Station in October. *Deep Freeze* was first launched in 1955 to prepare for the International Geophysical Year, 1957-58, when the Navy prepared research stations for U.S. scientists.

This year, the Navy will plan and provide all logistic support and attempt to recover two aircraft damaged in an isolated area of east Antarctica last season.

Marking the first time *Deep Freeze* has launched entirely from the West Coast, *Deep Freeze '76* began in August when 150 Navy men left Port Hueneme to ready facilities at McMurdo for 600 Navy, Air Force, Coast Guard and Army personnel.

Naval Support Force, Antarctica, commanded by Captain Eugene W. Van Reeth, shuttles personnel and cargo be-



tween the U.S. and Antarctica with Air Force transports, two Coast Guard icebreakers and supply ships of the Military Sealift Command.

Antarctic Development Squadron Six, the air arm of the project, is headquartered at NAS Point Mugu. VXE-6 has been the mainstay of Antarctic transport since the earliest days of *Deep Freeze*.

The squadron flies UH-1N *Hueys* and LC-130 *Hercules* specially designed for polar service with wheels or skis. During the first six months, *Deep Freeze* uses Air Force C-141 *Starlifters* to land on the smooth ice runway at McMurdo Station until the summer weather melts the ice on Ross Sea.

The Naval Air Reserve Unit located in Hangar Six at NAS Lakehurst, was disestablished September 1, 1975. The remaining functions now come under a newly established Naval Air Reserve Detachment at NAS Willow Grove.

Commissioned in June 1947 with one lighter-than-air squadron, the Lakehurst NARU grew to five non-tactical and two squadron reinforcement units, assigned to train reserve units for mobilization and to provide administrative coordination for the local area. The commanding officer has been redesignated as officer in charge. Twenty-two civilian billets have been retained at NARDet Lakehurst while two were transferred to Willow Grove. Officer billets have been cut to six and enlisted personnel to 40.

Task Force 65, embarked in *Inchon* (LPH-12), completed assistance to the Egyptian Navy on October 10, after sweeping minefields in the Suez Canal off the Egyptian cities of Port Said and Damietta.

The five minefields covered a 35-mile area. Operation *Nimbus Stream* began August 21, with RH-53Ds from Mine Countermeasures Squadron 12 and Mine Countermeasures Unit Bravo, using precision electronic navigation techniques to detect mines. The specially-equipped helicopters towed electronically-configured mine countermeasures sleds.

Upon completion of the operation, *Inchon* visited Alexandria before returning to duty with the Sixth Fleet.

TF65 is commanded by Capt. Charles I. Stratman.



Cdr. Richard C. Knott, commanding officer of Navy Recruiting District, Atlanta, cut the first slice of a 1,000-pound cake during the recruiters' model ship and aircraft contest held on October 10 and 11. More than 75,000 people attended the contest held as part of the Navy's 200th birthday celebration.

The cake, baked in the shape of USS *Independence*, was prepared by Joseph McIntyre and MSC(SS) Jerald Schoeberl of the NAS Atlanta galley.

Bob Blaikie of the Naval Aviation Museum in Pensacola was the chief judge, assisted by LCdr. Porter Halyburton and retired Capt. Larry Day, former C.O. of NAS Atlanta.

The Aircraft Intermediate Maintenance Department's jet shop at NAS Cubi Point has completed repairs on the first of several hundred drop tanks at its new facility. Organized without any additional manpower or equipment as the only facility of its kind in WestPac, its work is expected to save the Navy \$100,000 a year.

This unit and NAS Cubi Point's energy conservation and beneficial suggestion programs have saved \$400,000 in operating expenses since June 1974.

The *Tophatters* of VF-14 conducted their second Mediterranean missile-firing exercise at a range north of Crete. LCdr. J. E. Coleman and Ltjg. D. A. Curtsinger, and Lt. J. A. Campbell and LCdr. J. H. Hawver launched *Sparrows* against an MQM-74C drone. The next day, Lt. D. W.

Janka and Lt. B. J. Recame, and Lt. T. M. Bucchi and Lt. H. P. McKinney launched *Sidewinders* as *John F. Kennedy* coordinated with *Josephus Daniels* (CG-27) and Souda Bay.



Cdr. E. F. Bronson, commanding officer of VA-46, greeted exchange program pilot Lt. Robert Feuilloy of the French Navy after his first landing aboard *John F. Kennedy* in the Med.

The Frenchman will be staying with VA-46 for two years.

LCdr. M. J. Stock, pilot, Lt. C. W. Woomer, copilot, and AMH2 J. D. Mohr, crew member, made the first helicopter landing aboard USS *Spruance* (DD-963). The aviation initiation by Naval Air Test Center pilots was part of a rotary wing aircraft test directorate project to estab-



lish wind operating envelopes for SH-2F LAMPS helicopters.

During the transit of the new class of destroyer from Pascagoula, Miss., to *Spruance's* homeport at Norfolk, 38 daytime tests and 24 night landings were accomplished.

Changes of command:

VA-176, *Oceana*: Cdr. R. H. Ferguson relieved Cdr. R. P. Ilg.

VA-46, *Kennedy*: Cdr. E. F. Bronson relieved Cdr. R. R. Boyle.

NAS Whidbey Island: Capt. R. S. Hopper relieved Capt. Arthur H. Barie.

CVW-6, *Oceana*: Cdr. C. E. Armstrong relieved Cdr. H. B. Chase.

VA-127, *Lemoore*: Cdr. A. R. Chauncey relieved Cdr. R. M. Shields.

VA-155, *Oriskany*: Cdr. R. D. Miller relieved Cdr. L. E. Kaufman.

NAS Lemoore: Capt. J. Busey relieved Capt. J. F. O'Hara.

VF-11, *Forrestal*: Cdr. R. K. Kauber relieved Cdr. R. E. Knapp.

VF-103, *Oceana*: Cdr. P. H. Lineberger relieved Cdr. J. W. Holtzclaw.

HSL-33, *Imperial Beach*: Cdr. J. R. O'Boyle relieved Cdr. L. Stoker.

HSL-36 was commissioned in September, joining the ranks of more than 25 tenant commands and 26 ships, homeported at the Mayport naval station.

Cdr. Neil R. Sparks, Jr., assumed command during a ceremony in the helicopter hangar which will serve as HSL-36's temporary home. Work is continuing on a \$2,400,000 permanent helicopter maintenance hangar scheduled for completion in April. HSL-36 is the third LAMPS squadron established on the East Coast and will eventually have 11 aircraft.

Other records and awards:

USS *Lexington* (CVT-16) has counted 350,000 arrested landings since her re-commissioning in 1955 and is still going strong. Ltjg. Ted Morandi of VA-128 set the record landing in an A-6E *Intruder* during carquals in the Gulf of Mexico.

VA-65, an A-6 squadron in CVW-7 aboard *Independence*, won the Golden Tailhook Award for the squadron with the best carrier landing grade-point average.

In October, Cdr. George H. Strohsahl of VA-65, a Vietnam veteran of 71 combat missions, made his 500th carrier landing.

In August, the *Tigers* of VT-9, NAS Meridian, completed 500,000 total flight hours since their December 1961 commissioning. Lt. Max Weber and 2nd Lt. John Wagemann flew the squadron's milestone hour. The *Tigers* also completed 40 months of accident-free operations.

VF-301 completed five years of accident-free flying on October 1, 1975; and VF-142 exceeded the 500-hour mark in a single month with an F-14 *Tomcat* flight by Lieutenants Jim Gwyn and John Seddon.

VS-33 completed 15 years of accident-free flying, topped by its 20,000th accident-free carrier arrestment flown by Lt. Richard N. Holmes.

HC-3 Det. 106 has been deployed continuously since 1971, logging 3,838 flight hours, transferring 19,119 tons of cargo and 6,000 passengers, servicing 914 units at 87 stations and medevacing 21 injured people while deployed aboard *White Plains* (AFS-4), *Niagara Falls* (AFS-3) and *Flint* (AE-32).

Coral Sea won her third straight Gold Anchor award for personnel retention. The award is presented for exceptional achievement in the management, administration and support of career motivation programs in the fleet.

Peter Rabbit 31, an EP-3B electronic warfare aircraft assigned to VQ-1 at NAS Agana, may be the Navy's high-time P-3 with 12,000 hours of flight time, averaging 1,700 hours a year.

While on a Med mission with *JFK, Tophat One*, flown by Cdr. G. W. White, Jr., and LCdr. W. J. Denning, logged the 3,000th flight hour in the F-14A *Tomcat* for the *Tophatters* of VF-14.

Kennedy's 78,000th landing since commissioning was logged by Lt. Johnsten L. Marksbury of VA-72. Since leaving Norfolk in June, 70 air wing pilots and NFOs have become *JFK* centurions — including 13 double and four triple centurions.

Hancock's commanding officer, Capt. Frederick G. Fellowes, flanked by VF-24 LSO Lt. John J. Roach, served as LSO for the carrier's 195,775th arrested landing. Cdr. Paul D. Stephenson, CAG-21, made the trap in a VA-55 *Skyhawk* during *Hancock's* final at-sea deployment before returning to Alameda. *Hancock's* 31-year career will soon come to an end as she is scheduled for decommissioning in 1976.

AMS1 Darrel Haynes of HC-3, North Island, has found a way to procure material for a CH-46D grounding wire assembly and to have it manufactured locally. This represents a total cost of \$5.25 per assembly, compared to \$35 when ordered from the contractor, or a potential saving to the Navy of over \$34,000 annually. AMS1 Haynes works in the squadron's quality assurance shop as quality assurance representative. So far he has been awarded a \$300 cash bonus and has been recommended for further awards upon Navy-wide adoption of his Benny Sug.

The oldest enlisted aircrewman regularly flying the S-3A *Viking*, AWC William D. Johnson, celebrated his 50th birthday while deployed with VS-21 aboard *Kennedy* in the Med. The 50-year-old *Fighting Red Tail* flew as a rear turret gunner on the Grumman TBF *Avenger* throughout WW II.



Cdr. Jerry Knutson, C.O. of VF-32, is the first Atlantic Fleet F-14 centurion. His 100th landing was made on *Kennedy* as



she steamed in the Aegean Sea in support of NATO Exercise *Deep Express*. More than 50 ships from four NATO countries took part.

During an interview last year, Admiral Donald B. Duncan (Ret.), recalled his involvement in history-making decisions during WW II.

"Fleet Admiral Ernest King, CNO, proposed a bombing raid on Tokyo. He called me in (at that time I was a captain and King's assistant operations officer) and told me to write the plan for a mission to bomb Tokyo.

"I wrote one and then went out to San Francisco where I selected the carrier, USS *Hornet*, for the mission. (While I was in San Francisco, Lieutenant Colonel James Doolittle was at Eglin Air Base, Pensacola, training B-25 bomber crews.)

"I sent word to Admiral Low, Adm. King's operations officer, to 'tell Jimmy to get on his horse.' That was the signal for him to get his airplanes to San Francisco. I told Low to tell Doolittle not to let anybody get out of the aircraft. When they landed, they taxied down to the dock, were hoisted aboard the *Hornet* and went right out to sea. They didn't get out of their planes until they were at sea."

Hornet delivered Doolittle and his bombers to the Pacific. The rest is recorded history.

Early in the war, Capt. Duncan was involved in another exciting plan.

"I was operating the first small

aircraft carrier, *Long Island*, a converted merchantman C-3 hull when I got word from Harry Hopkins, advisor to President Roosevelt, that the President wanted to see me.

"I found President Roosevelt in bed, eating his breakfast. He said, 'I want to talk to you about the ships that we're building in San Francisco. There are eight of them. They have just gotten to the stage where they could be readily converted into aircraft carriers.'"

He said he was thinking about these ships and he hadn't made up his mind whether to go ahead and build them the way they were or to make aircraft carriers out of them.

"I told him that, by all means, I thought they ought to be converted to aircraft carriers.

"He said, 'Alright, if that's what you think, that's what I'll do.' He reached over and picked up the telephone and called Admiral Jerry Land, Chief of Naval Construction, and said, 'Jerry, about those ships in San Francisco, make aircraft carriers out of all of them.'

"I remember thinking to myself, well, that's the way they conduct business nowadays."

In September, Adm. Duncan, who was DCNO(Air) from 1947-1948, died at the age of 79 in Pensacola, Fla.

By J02 Sonny Auld



Harrier

Story by Hal Drake

When Lieutenant Colonel Robert E. O'Dare, USMC (cover photo), first saw the *Harrier*, he reacted like a kid at a triple-feature horror show. "I thought it was a lethal-looking machine."

He was mesmerized by lines that were both lean and sleek, wings that curved like a well-made scimitar, a snout that looked like the head of a great insect. All dappled with brown and green camouflage. O'Dare loved "the all-business machine that was like any artillery piece."

O'Dare was C.O. of VMA-513, MCAS Iwakuni, when these photos were taken. The squadron was the first

to receive the British-built aircraft in 1971.

The jet blasts that power the *Harrier* come out of four pivoting engine nozzles that can be rotated vertically more than 90 degrees, giving the aircraft maneuverability and versatility. Like a helicopter, it can operate out of a small space, but it has the speed of a jet interceptor.

Captain Ross Hieb, who checked out in the *Harrier* at Royal Air Force Base Wittering, says, "It is a sports car of a plane, like the Maserati or Ferrari. It's really the last pilot's plane. The others almost fly themselves. *Harriers* leave the pilot something to do."





Harrier operations were filmed at MCAS Iwakuni. The umbrella, incidentally, is part of the AV-8's inventory.



Photos by CPO Chip Maury

Fat Albert



... and Company

Harry Gann

The *Blues* wouldn't be the same without him. *Fat Albert* is as important to the U.S. Navy's Flight Demonstration Squadron as the *Skyhawks* which perform aerial dramatics at air shows across the country. Although *Fat Albert* is a big bird, he shows a low profile. While eyes gaze skyward at the A-4Fs in a left echelon roll or the line abreast loop, he usually sits in the background.

And were he human, he'd probably smile. That's because *Fat Albert* is one of the reasons the *Blue Angels* have never lost an air show sortie due to maintenance problems. There's a lot

of satisfaction in being a part of this achievement.

Fat Albert, of course, is the handsome blue, gold and white KC-130F *Hercules* which carries the men and equipment needed to get the *Blue Angels* into the air. The enlisted troops in the squadron came up with the name from the cartoon character. The all-Marine crew which flies the *Hercules* is a volunteer group and, to a man, like the duty.

Captains Ron Fleming and Steve Petit are the pilots. Crew members are GySgt. Henry Morton, MSgt. Pete Christakos, Sgt. Jimmy Williams, Sgt.

Ray Oaks and SSgt. Mike Rhoades. They log about 600 hours a year, fly through all kinds of good and bad weather and quite often face the challenge of landing on and launching from a small airstrip with heavy loads on board.

Fat Albert and company, plus the Navy maintenance personnel who work on the *Skyhawks*, serve as a sort of mobile aircraft intermediate maintenance department. As Capt. Fleming puts it, "We're available for immediate support wherever the *Blue Angels* go."

An integral part of the flight demon-

stration squadron, the *Hercules* crewmen attend all meetings and briefings as appropriate. On the road, they communicate with the public and host the thousands who want to get a close look at *Fat Albert*.

Timing and coordination are bywords in any discussion of the *Blue Angels*. And *Fat Albert* is capable of keeping up with the A-4s. The *Hercules* usually cruises between 25 and 30,000 feet at 325 knots, parameters which make it compatible with the *Skyhawks*.

Explains Fleming, "We usually launch before the *Blues* and try to stay ahead of them by about 45 minutes. We're in constant contact with the flight. Should one of them have to divert or experience any kind of problem, we respond accordingly. Generally, we try to arrive half an hour ahead of the A-4s at the prospective show site. Punctuality is always a must. We've got to be ready whenever and wherever needed."

"Last year," recalls Capt. Petit, "We were heading back from Cleveland to our home base at Pensacola. One of the A-4s swallowed a sea gull

through the intake on takeoff. We had to get the engine changed. So we flew on to Pensacola, picked up a new power plant and flew back to Cleveland. The maintenance men worked through the night. By 0800 next day the plane was ready for a test hop. Not much later, that *Skyhawk* was on the way to Pensacola."

"The joy of this job," says Fleming, "is in working with a group of professionals who give 100 percent at all times while enhancing the Navy/Marine recruiting effort."

Petit says, "I like meeting people and talking aviation and the Marine Corps. It's the close contact with the public which appeals to me."

The squadron is on the road a majority of the time. That suits six-year veteran Petit. "I could go 14 more in the same job," he says.

Does the pressure of meeting precise timetables day in and day out detract from job satisfaction? Capt. Fleming thinks not. He feels his crew is fortified with excellent training and a can-do attitude which prevails on a continuing basis. He asserts, "We have great confidence in our ability!"

Although the workload is substantial and the crew members put in extra hours keeping *Fat Albert* properly groomed and polished, Hank Morton feels he has the best job he could get in the Marine Corps. "It will be a big letdown leaving the squadron."

Morton, who has accumulated nearly 5,000 hours in the air, most of them in C-130s, adds that "I will particularly miss seeing the United States. I've been stationed overseas and seen my fair share of the world. But with the *Blue Angels* we get a view of the smaller communities across the country that even well-traveled servicemen miss."

SSgt. Rhoades admits "It gets a little old packing a bag, traveling all the time. But every time the air show starts and the *Blues* begin moving, I get excited."

In their travels, *Fat Albert* and company see numerous flight demonstrations. Morton voices the collective opinion of the Marine contingent on the Navy team, "The *Blues* are, by far, the best in the world."

Fat Albert and company help make that so.



Crew members, left to right, Fleming, Petit, Morton, Rhoades and Oaks, before air show at Patuxent River, Md., last September. (Christakos and Williams are not in the photograph.)

The Fluidic Approach

By Jack Eyth

For the past 11 years, Horace Welk has been involved in a little-known method for controlling missiles or aircraft with streams of air or liquids which operate sensors, perform logic functions and drive actuators. The relatively unknown technology is fluidics.

"The working fluid flows through tiny channels engraved or etched in solid material just as electrons flow through wires or conductors," explains Welk, the man who heads the Fluidic Section of the Naval Air Development Center (NADC), Warminster, Pa.

Over the years, Welk, among others, defended fluidics against those who view it as more of a laboratory curiosity than a workable technology. He says fluidic circuits offer several advantages over electronic circuits. They have high reliability, unlimited shelf life, immunity to shock, vibration, extreme temperatures and radio frequency noise.

One drawback to the use of fluidics for computation is its relative slowness. It operates at the speed of sound rather than the speed of light. But for many applications, the response time for fluidics presents no problem.

"Fluidic technology suffered setbacks in the early years when hardware was crude and circuitry was indiscriminate," says Welk. But today, pilots can fly against each other in aerial dogfights while the fluidic buffet simulator shakes their chairs in a "pre-stall buffet."

Currently in progress is a multi-million dollar, jointly-funded effort to determine the operational suitability of hydrofluidic stability augmentation systems (SASs) in a group of Navy TH-57 and Army OH-58 helicopters. The SAS improves the stability of the helicopters with a fluidic rate sensor and feedback circuitry. The system is compact enough to be mounted on the control actuator while using the hydraulic system for its power supply.

NADC is developing a fluidic approach power compensator (APC). The electronic version of this system is used on all carrier-based aircraft to automatically control the throttle for correct airspeed during approach and landing. In the fluidic system, the

computer, amplifier and actuator are a single unit installed on the engine throttle shaft and powered by high-temperature air from the aircraft's turbine engine compressor.

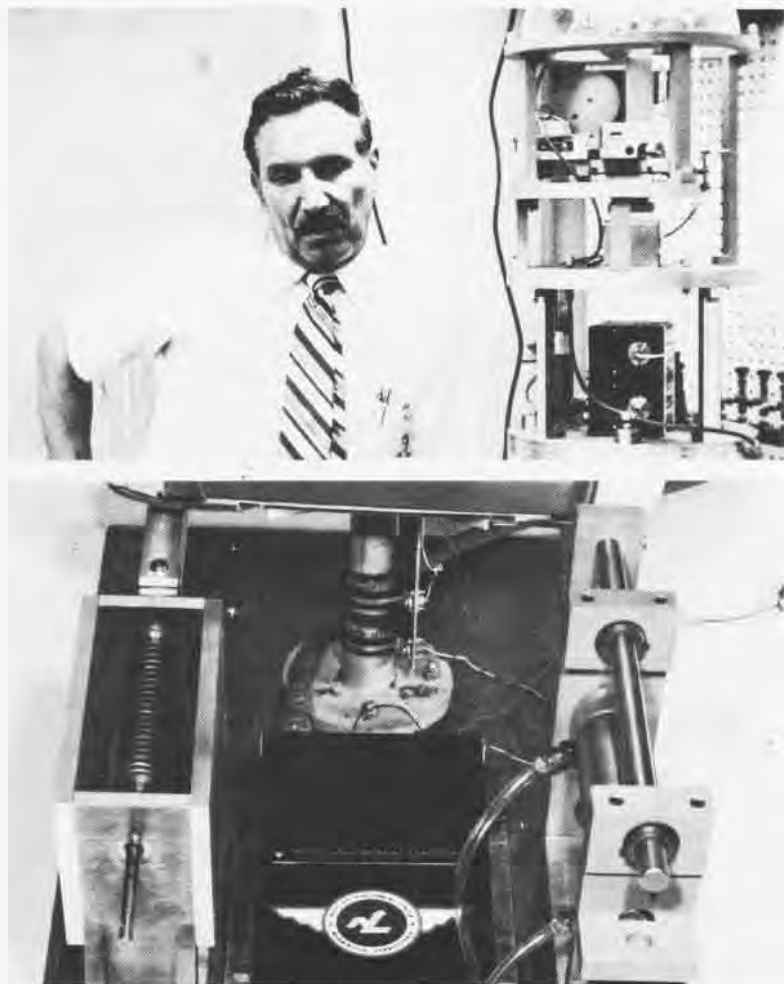
The fluidic APC system is designed for hot engine compartments where high temperatures would destroy conventional electronics. It would eliminate the need for a separate electronic computer in the cooled equipment bay.

Other joint programs include the Navy-Air Force fluidic environmental control system (ECS) and the Navy-Army fluidic laminar angular rate sensor (LARS). The ECS has a pneumatic air supply with four types of

fluidic temperature sensors, a fluidic turbine speed controller, fluidic air flow sensors and pneumatically operated butterfly valves.

LARS was developed for use in missile and aircraft control systems and has been tested in both pneumatic and hydraulic versions. Simpler and less expensive than conventional rate gyros, LARS has no moving parts.

While fluidics may never become a breakthrough for the controls industry to the same degree that the transistor was for the electronics industry, in some cases it is an ideal method. All Welk asks is that design engineers consider the fluidic approach before deciding on another technology.



Welk stands alongside rate table for laboratory testing of LARS, top. Above, an under-the-seat view of the fluidic buffet simulator.



LORAS includes (left to right) air data computer, omnidirectional airspeed sensor, display unit and control panel.

System could be retrofitted to current aircraft and provide pilot critical data at critical times — like night approaches.

NEW AIRSPEED SYSTEM

Helicopter and V/STOL pilots may soon have an additional airspeed indicator to assist them when flying at slow speeds, maneuvering their aircraft through all headings of the compass. One such system, called LORAS, is a light-weight omnidirectional all-weather airspeed system considered by its manufacturer to be ready for operational application.

LORAS provides accurate airspeed indications below 60 knots, a significant improvement over pitot static systems used in most of today's helicopters. Such a system is viewed as a significant safety feature. Pilots would appreciate having precise airspeed data while hovering on night ASW missions, not to mention when making crosswind landings aboard small non-aviation ships. Essentially the system would provide pilots with critical data during critical moments of flight.

LORAS, itself, has been under development by Pacer Systems, Inc., of Burlington, Mass., for several years, tracing back to the original development by Cornell Aero Lab for the Navy's tri-service X-22A V/STOL. Flight evaluation has taken place in the last three years.

The system includes a sensor and an

air data converter which together weigh about five pounds. Other accessories are a display unit, control panel and hardware for mounting the sensor. The sensor itself consists of two hollow rotating arms with venturi-like shrouds mounted at their respective ends. The arms are connected to a hub which is driven at a rate of 70 rpm by a constant-speed motor in the base of the unit. The two-pound sensor is 12 inches across.

It can accurately measure flight path airspeeds down to and through zero knots from any relative wind direction, 360 degrees around the aircraft. The sensor is capable of measuring speeds with less than one knot error. Its upper operating limit is above 200 knots. Such a system could be used as a backup airspeed indicator for operations up to 200 knots and as a primary instrument below 60 knots.

When the sensor is displaced through the air, the arms transmit cyclic pressure inputs to a solid-state differential pressure transducer in the hub. The magnitude of the transducer output signal corresponds with the magnitude of the pressure differential between the two arms.

Rotation angle is tracked by a sep-

arate electronic subsystem. Results are received at the air data converter 24 times a second. The converter in turn puts out the desired wind or flight path speed information which is read by the pilot in the cockpit.

The sensor is generally insensitive to moderate angles of attack and has been tested under adverse climatic conditions, including salt spray, sand, dust, heavy rain, freezing rain and snow. Tentative results of life cycle evaluation suggest that the minimum time between LORAS failures would exceed 1,000 hours.

Understandably the most demanding sensor interface involves helicopters. The installation location which has proven most accurate for helos is above the rotor on a non-rotating standpipe that attaches to the bottom of the transmission and is passed through the main rotor shaft. Referred to as a "mast mount," it has been tested on five different types of helicopters including aircraft in the 2,500 to 19,000-pound gross weight categories in a high vibration environment. It is expected that LORAS or some other low-range airspeed system could be retrofitted to helicopters already flying in the fleet.



THE AVIATION ASW OPERATOR

By Bob Moore

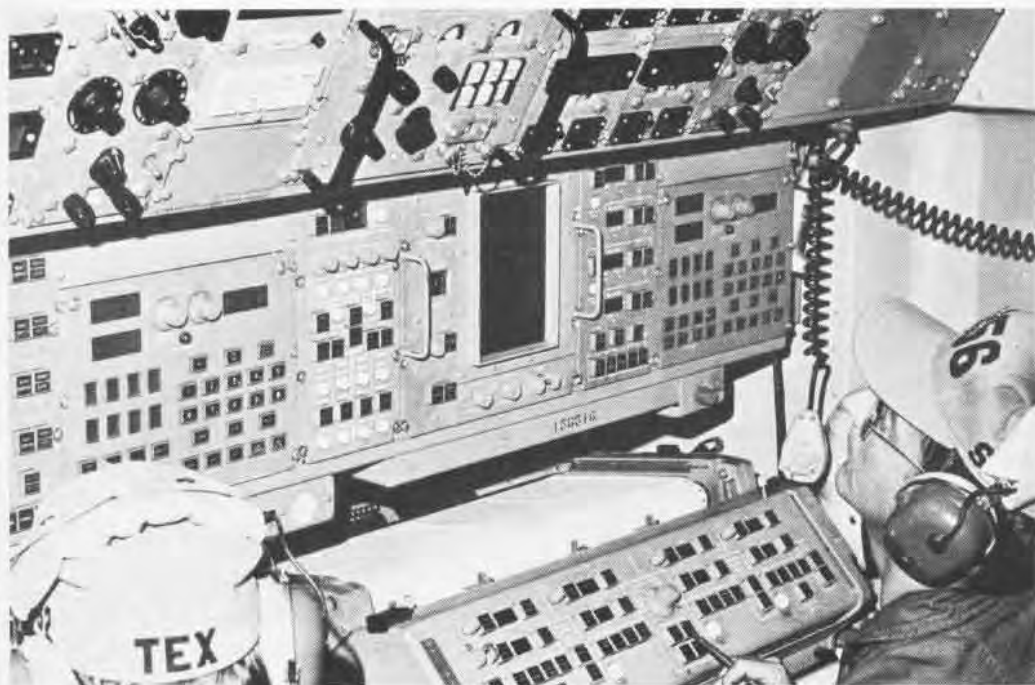
The eternal sea surged on through endless days and nights before man found lanes across the vast expanse of its restless waters. And it was 1968 before the Navy created Aviation ASW Operators to help guard these ancient ocean routes. Now a submarine sighting — by aircraft, military or commercial shipping — alerts ASW men at sea and ashore.

The contact is plotted quickly in a carrier's combat information center (CIC) and the operational control center of a naval air station. The ASW team links the contact with their potential for the sub's destruction: "Flash! Unidentified submarine contact. Position 056 degrees, 20 minutes east, 42 degrees, 00 minutes north. Prosecute!"

Onboard the carrier, flight crews have scurried to their ready room. Still too far away to deliver the first punch, these *Viking* and *Sea King* crews will follow a shore-based *Orion* to the contact. "The way we're putting on knots, we could relieve the P-3 at first light. Sure hope their operators are up to speed," says the VS squadron skipper, knowing Aviation Antisubmarine Warfare Operators (AWs) are key men in this grim game.

At the coastal air station, the ready-alert P-3C's auxiliary power unit is already screaming. "Not much info in that opcon brief. This will be a rough one." But the plane commander has

ENLISTED RATING SERIES



AWs from VP-56, left, monitor the complex ASW equipment aboard a P-3C. AW2 David G. Schwerstein, below, operates an Orion's radar.

faith. "If there's a sub there, my AWs will find it."

The *Orion* lifts off the air station runway at 2300 hours and climbs toward the contact area. "Looks like a long transit. Better get some rest."

In the *Orion's* stand-up and walk-around crew compartment, avionics gear is brought quickly on the line. Long, demanding hours lie ahead and the first touches of perspiration are felt inside flight suits.

This is the time AWs make final checks and adjustments on their sensitive equipment. They are proud of their sophisticated submarine detection and classification gear. But the equipment is no better than the operators.

AWs study basic mathematics, electronic fundamentals, data analysis and ASW sensor interpretation. After completing Aviation ASW Operator A School at the Naval Air Technical Training Center in Memphis, Tenn., they acquire 14 weeks' training in flight theory, survival, first aid, oceanography and the basic operating characteristics of their gear. Before reporting to their squadron as ASW flight crewmen, they receive 14 to 19 more weeks of training in tactics, intelligence and specific equipment.

The Navy's 2,255 AWs can look forward to career diversification. Squadron missions vary and there are ASW support facilities around the world. But now the AWs on the *Orion*





A view of the sonobuoy launch area of an S-3A Viking, top, just before the ASW plane is hurled from a bow catapult on USS Forrestal. Catching subs takes the teamwork of an Orion, USS Buck, and an HS-6 Sea King, far right.



look only for a blip on their radar-scope, a radio emission on their electronic surveillance equipment. Or they may try to glean a contact from their acoustic analyzer.

They have all played cat and mouse before. Hide and seek games between Navy ASW forces and unidentified submarines are played often. But this time it could be real. Enemy, friendly, unknown—it's the unknown factor that makes antisubmarine warfare the Navy's toughest job.

Already far from land, the *Orion* skims over rough seas whose depth and darkness shield the submarine. Gauges, scopes, panels, dials and detection devices glow with eerie light as the plane flies its pattern. This will be a rough one—bad weather, dark skies and low-level search orders.

Hours later the ICS system squawks: "Crew from flight, set condition two." Sonobuoys are launched from the belly of the plane. As the first buoys hit the water, their hydrophones come alive and transmitting antennas automatically rise to send back an acoustic profile of the ocean.

Unlike a ship's sonar, these sonobuoys are free of man-made noises. In the quiet sea where hearing is seeing, they can pick up and broadcast a target several miles away. "TC sensor one. I have a contact on buoy five." All eyes turn to the AW at sensor one. Fast-flowing contact information is fed to the computer. The AWs, tactical coordinator and pilots are a well-ordered team. Soon the presence of a submarine is verified.

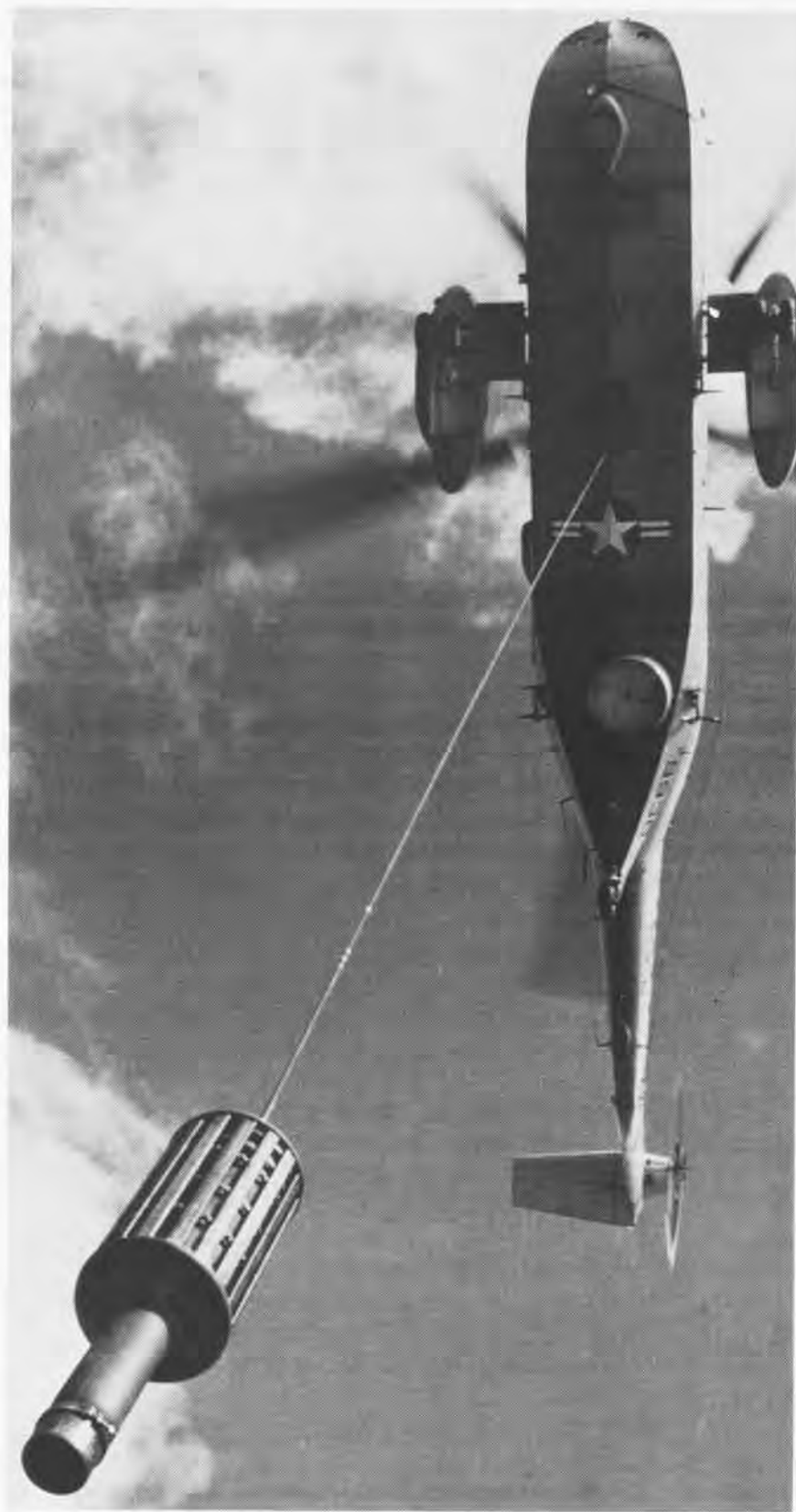
The repeating sound of the sonobuoy becomes more muted and the pitch seems to rise. The controlled excitement within the dimmed cabin pulses with each reverberation. The men watch their invisible net of sound become a tightening mesh of cathode light on an indicator screen.

But even on the long-range *Orion*, fuel time becomes a factor and the disappointed plane commander cautions: "That's it. Time to go. Let the birdfarm boys take over now."

One AW in the all-new *Viking* has the equipment to do the job of three in the *Orion*. He soon gains a fix on the underwater intruder with his sensors.

The S-3A sees in the dark with infrared sight. Its other digitally computerized senses include a high resolution radar and magnetic anomaly





detection gear in its tail boom. MAD gear in the stinger detects metal objects fathoms deeper than radar by monitoring disturbances of the earth's magnetic field. The pressurized S-3 can search for subs from 35,000 feet at speeds over 300 knots and its two turbofan engines are just as efficient at low altitudes and speeds.

The *Viking* AW is soon joined by other operators who fix and track the submarine in *Sea Kings* from the carrier and SH-2 LAMPS helicopters from smaller, non-aviation ships. While fixed-wing ASW aircraft have longer range, helicopters, dipping their tethered sonar, can most accurately detect subs close to the carrier where the quickest attack is needed.

Following the ocean's surface, the helos swoop down to lay a pattern of sonobuoys or dunk a sensitive sonar ball. After their sonar devices unwind silently into the sea, sound energy pulses back to the AW's earphones.

Data from the target area is channeled quickly to the carrier's CIC. All reports go to the flattop for immediate evaluation and command decision.

The carrier relays information back to the helicopters. As data comes through their UHF channel, *Sea Kings*, armed with torpedoes, descend again. They level at 150 feet and turn to the wind line. Then they drop to 45 feet and hover expectantly.

But the contact echoes are becoming confused. Seaweed? Fish? A wall of cold water? All will affect the signal. The wily sub can glide to the bottom and cut its engines to elude a thunderous assault of depth charges and aerial torpedoes. It can find a surface ship and follow its wake. Or it can release a bubble of air to send aircraft on a futile chase.

Hovering so close to the surface that their whirling rotors ruffle the ocean into great circles, the helicopters continue sonar dips in intricate hummingbird patterns. But this time their pulses find nothing and the submarine is lost in the eternal sea.

Average on-station time for a *Sea King* is four hours and the crewmen are soon entering the rear of a low-ceilinged room for debriefing. They are almost too tired to hang their garish helmets on the bulkhead hooks. They slump into their seats, three abreast on either side of a passage-



An SH-3A lowers a sonar dome, far left, during an antisubmarine warfare mission from USS Hornet. AW3 David E. Bartz of HS-15, right, serves as a crewman aboard an SH-3 Sea King.

way dividing the narrow room.

Leaning back, the Aviation ASW Operator unzips the collar of his rumpled flight suit. Closing his eyes for just a second, he can still see the sweeping soft glow of the radar beam. He can still hear the echo of the long-range sonobuoy.

His debrief over, the AW bunks down. He yawns, adjusts his pillow and switches off the light. Soon he is asleep and dreaming:

The bird swoops low in the morning sun. Its keen eyes are on a fish swimming lazily near the surface of the sea.

The bird dives suddenly, its feathers tight against its body. Head down, it plunges.

Too late the fish senses danger and begins a frenzied dive for deeper water. The bird's talons are too quick, its beak too strong. The sea churns red spray and only a feather marks the battlespot.



Subject	Issue	Page	Subject	Issue	Page	Subject	Issue	Page
A — B								
Above and Beyond			<i>Ark Royal</i> , Yank in the			<i>Midway</i> ,		
Ltjg. Brian Westin	Jun	19	Royal Navy	Mar	22	air boss	Mar	30
Aercab, escape system	Jun	29	Association of Naval			rescue	Jul	32
Aerographers mate	Oct	37	Aviation	Jul	4	<i>Nimitz</i>		
Air boss, <i>Midway</i>	Mar	30	Atlantic fleet weapons			commissioned	Jun	3
Air controlman	Jul	34	training facility	Jun	36	test flight deck gear	Sep	22
Air shows			Aviation boatswains mate	Aug	30	<i>Yorktown</i> ,		
Flying circus	Nov	16	Aviation medical officers,			to Patriots Point	Jun	22
Ottumwa reunion	Nov	8	new designer	Oct	5	<i>Vinson</i> , keel laid	Dec	3
Patuxent River	Nov	20	Aviation ordnanceman	Apr	10	Caterpillar club	May	26
Air stations (See Naval			Aviation Physiology			Computer, oceanographic		
air stations)			Training Unit, Norfolk	Feb	24	research	Aug	5
Airboat	Mar	5	Aviation support			Corrosion control	May	32
Aircraft			equipment technician	Jun	32	<i>Deep Freeze</i>		
A-4F, <i>Blue Angels</i>	Apr	3	Awards			downed aircraft	Jan	36
AV-8, at Iwakuni	Dec	26	Air controller of the year	Nov	27	experience (pilot)	Jan	34
C-2, new propellers	May	28	Battle Es	Nov	3	film available	Jan	2
C-9, reserves	Apr	29	Britannia	Jul	19	geographic names		
Nov	Nov	25	Clark, Sheldon	Apr	4	(VXE-6)	Jan	22
C-130, <i>Blue Angels</i>	Dec	28	Clifton	Nov	4	man for the seasons	Jan	24
CH-46E, test flight	Aug	4	CNO Safety	Nov	3	pararescue team	Jan	28
E-2, new propellers	May	28	Conway	Apr	4	VXE-6	Jan	10
E-2B, training	Jun	5	Daedalian	Aug	5	Drones		
EA-6B, maintenance			Davis, Noel	Apr	4	Atlantic Fleet weapons		
vans	Oct	3	Davison, F. Trubee	Dec	4	training facility	Jun	36
F-4H, Marine reserves	May	16	FAA mechanics safety			multilauncher	Nov	24
F-4J, visual target			award	Jun	37	RPV configuration (new)	Aug	3
acquisition	Sep	5	Flatley	Oct	3	Enlisted rating series		
F-5E, Fighter weapons			Golden centurion	Mar	36	Aerographers mate	Oct	32
school	Jan	39	Gray Eagle (Adm. Noel			Aircrew survival		
F-14, to VAs 142 and			Gayler)	Oct	3	equipmentman	May	22
143	Jun	31	Hanson	Nov	3	Air controlman	Jul	34
F-18, to be developed	Jul	5	Honorary Naval			Antisubmarine warfare		
H-2C, <i>Big Mothers</i>	Aug	22	Aviator	Oct	4	operator	Dec	32
HK-1, flying boat			Aviator	Oct	4	Aviation boatswains		
(Hughes)	May	5	Isbell	Nov	3	mate	Aug	30
KC-130R, first delivery	Nov	5	McClusky	Feb	3	Aviation ordnanceman	Apr	10
P-2, to Dept. of Interior	May	4	Oct	Oct	4	Aviation support		
P-3B, modernized	Sep	5	Navy Cross			equipment technician	Jun	32
P-3C, updated	Mar	4	(Ltjg. Westin)	Jun	19	Photographers mate	Sep	32
S-3A, Atlantic Fleet	May	28	Pirie, VAdm. Robert B.,			Tradevman	Nov	34
barricade test	Dec	3	first	Nov	27	Escape system, aercab	Jun	29
environmental testing	May	3	Sledge maintenance			Exchange program	Mar	22
<i>Vikings</i> are coming	Mar	34	memorial	Jul	3	Jun	Jun	26
SP-2H, to Naval			Wright, Orville	Dec	5	Exercise, <i>Unitas XV</i>	Mar	35
Aviation Museum	Jan	3	<i>Big Mothers</i>	Aug	22	Fire, filming of		
<i>Sparrowhawk</i> , to Navy			<i>Blue Angels</i> , <i>Skyhawks</i>	Apr	3	<i>Towering Inferno</i>	Sep	30
Museum	Feb	36	C-130	Dec	29	Fires and toxic gas	Mar	4
T-34C, tested	Jan	38	<i>Blue Blasters</i> , VA-34 ops	Jun	8	Flying boat (Hughes)	May	5
UH-1N, flies in			Byrne, "Pappy"					
<i>Towering Inferno</i>	Sep	30	(dining hall)	May	29			
WP-3D, to NOAA	Aug	4	C — F					
YA-7H, two-seat A-7	Mar	3	Carderock	Aug	8	GCA at NAS Fallon	Jan	4
YCH-53E, evaluation	May	5	Carquals, helicopter	Oct	24	Heinemann, Ed	Aug	40
ZRS-5, <i>Macon</i>	Sep	8	Carriers			Helicopter carquals	Oct	24
Aircrew survival			<i>Constellation</i> , overhaul	Apr	28	<i>Hurricane Hunters</i> ,		
equipmentman	May	22	<i>Eisenhower</i> , launch	Dec	5	VW-4 history	Jul	12
Airship, <i>Macon</i>	Sep	8	<i>Independence</i> , with			Insignia		
Annual review	Feb	9	<i>Ark Royal</i>	Jun	5	Agana, NAS	May	C3
Antarctica (see <i>Deep</i>			<i>Intrepid</i> , to NB			Bermuda, NAS	May	C3
<i>Freeze</i>)			Philadelphia	Dec	3	CVW-3	Mar	C3
Antisubmarine warfare			Bicentennial exhibit	Sep	28	FitAEWWingPac	Sep	C3
operator	Dec	32	<i>Kennedy</i> , VA-34 aboard	Jun	8	FitWing-1	Sep	C3
						HC-3	Dec	C3

Subject	Issue	Page	Subject	Issue	Page	Subject	Issue	Page
HCT-16	Aug	C3				aviation and surface		
HM-12	Apr	C3				effects	Aug	8
HMM-774	Feb	C3				casualty bag	Mar	3
HS-7	Mar	C3				circulation control rotor	Aug	8
HS-15	Jan	C3				collision avoidance		
HS-74	Jun	C3				systems	Apr	4
HSCW-1	Apr	38				conformal carriage	Aug	8
HSL-30	Apr	40				corrosion control	May	32
HSL-32	Apr	40				cruise missile	Apr	5
HSL-34	Apr	C3				fiber optic communication	Sep	4
HSWing-1	Sep	C3				fire involving polymeric		
LA/Wing-1	Sep	C3				material	Mar	4
MA/Wing-1	Feb	C3				fluidics	Dec	30
	Sep	C3				ground proximity		
Misawa, NAF	Nov	C3				warning system	Sep	5
MWHS-1	Dec	C3				jet noise facility	Oct	5
National Parachute						lightning danger	Nov	5
Test Range	Feb	C3				Mark IV arresting system	Apr	4
New Orleans, NAS	May	C3				minicopter	Feb	3
North Island, NAS	May	C3				noise suppression	Jul	3
Oceana, NAS	May	C3				oblique wing concept	Sep	4
Point Mugu, NAS	May	C3				oceanographic computer,		
RVAH-11	Mar	C3				portable	Aug	5
RVAH-12	Jul	C3				PACER	Dec	31
TraWing-6	Aug	C3				propulsion control		
VA-37	Mar	C3				system	Nov	4
VA-75	Mar	C3				radar tracker and		
VA-93	Dec	C3				recorder system	Feb	4
VA-95	Jan	C3				ram jet	Mar	5
VA-105	Mar	C3				radar tracker and		
VA-128	Jul	C3				recorder system	Feb	4
VA-203	Feb	C3				real-time radar	Nov	4
VA-305	Jun	C3				recon pod	Feb	5
VAQ-129	Jul	C3				RPV configuration	Aug	3
VAW-78	Jun	C3				Sea Echo	Sep	4
VAW-111	Feb	C3				Sidewinder test system	Mar	5
VAW-123	Mar	C3				sonobuoy, dwarf	Nov	24
VC-1	Jul	C3				SES high length to beam		
VF-31	Mar	C3				ratio	Aug	8
VF-103	Mar	C3				television for pilots	Apr	5
VF-201	Jun	C3				Timation III	Mar	3
VMFA-531	Dec	C3				TRAM	Nov	5
VP-6	Oct	C3				voice recognition and		
VP-60	Jul	C3				synthesis computer	Sep	3
VP-65	Jun	C3				weapons stowage	Jul	4
VP-68	Dec	C3				Reserves		
VP-90	Feb	C3				awards	Apr	4
VQ-2	Jan	C3				C-9	Apr	29
VR-24	Jan	C3					Nov	25
VR-53	Jun	C3				CVWR-20	Sep	38
VS-24	Mar	C3				engine reclamation	Apr	16
VSWing-1	Sep	C3				F-4H to Marines	May	16
VT-1	Aug	C3				training, VFP-306	Feb	32
VT-4	Aug	3				VP-67	Feb	30
VT-5	Aug	C3				VP-68	Feb	30
VT-10	Aug	C3				VC-12, to Oceana	Jun	29
VT-26	Jul	C3				VMFA-321, F-4s	May	16
VT-86	Aug	C3				Review of 1974	Feb	9
Iron bottom club	Jun	2				RPV, new configuration	Aug	3
Joint munitions						Safety, collision avoidance	Apr	4
effectiveness manuals	Aug	38				Schools adoption program	Aug	24
Karr, H. H. (NAP #1)	Jul	38				Sea control	Apr	38
Low volume ram jet						Sea Echo	Sep	4
propulsion system	Mar	5				Search and rescue		
						Big Mothers	Aug	22

M — Q

R — S

casualty bag	Mar	3
global rescue alarm net ..	Apr	4
HCT-16	Oct	31
history	Jul	22
Midway	Jul	32
school at Jacksonville ..	Jul	17
underwater support team ..	Mar	35
Soliloquy, Part II	Dec	8
Squadrons:		
<i>Blue Angels</i>		
get A-4F	Apr	3
C-130	Dec	28
HC-7, disestablished ..	Aug	22
HCT-16, rescue	Oct	31
HMH-463, <i>End Sweep</i> ..	Mar	37
HSL-34, commissioned ..	Jan	4
VA-34, <i>Blue Blasters</i> ops	Jun	8
VF-21, weapons		
deployment	Oct	26
VF-142, gets F-14As ..	Jun	31
VF-143, gets F-14As ..	Jun	31
VFP-306, AcDuTra	Feb	32
VP-67, AcDuTra	Feb	30
VP-68, AcDuTra	Feb	30
VR-24 Det Rota,		
Suez minesweeping ..	Mar	36
VR-52, <i>Unitas XV</i>	Mar	35
VW-4, decommissioned ..	Jul	8
VXE-6, Antarctica	Jan	10
Stations (See Naval Air		
stations)		
Swingwing, advanced	Feb	5

T — Z

Tactical support centers ..	Jun	4
Tailhook reunion	Dec	4
Tallman, Frank	Mar	8
Tarps, recon pod	Feb	5
Technical manuals review ..	Jun	4
<i>Timation III</i> in orbit	Mar	3
<i>Towering Inferno</i> ,		
Navy flies	Sep	30
Tradevman	Nov	34
Training		
flight and navigation		
simulator	Mar	4
fuels course	May	4
physiology training unit ..	Feb	24
proficiency flying	Apr	22
Training refresher (humor)	Nov	22
Truk revisited	Feb	28
TRUMP	Jun	4
Underwater support team ..	Mar	35
VAST	Oct	5
Visual target acquisition ..	Sep	5
Warning system	Sep	5
Weapons deployment,		
VR-21	Oct	26
Weapons stowage	Jul	4
Yank in the Royal Navy ..	Mar	22

Superstitions

Everybody knows that aviators "kick the tire" to check to see if they have their flying boots on.

When I was aboard USS *Ranger* in 1968-69 in Vietnam, we lost five different aircraft: all No. 13, i.e., 213, 413, 513, 713, 813 — five different squadrons. Check it out.

Clifford L. Franks, LCdr., USNR
RR 1, Box 307
Palatine, Ill. 60067

Back in 1949, we students in flight training at Pensacola had a superstition about laundering our cloth flying helmets (the kind with the goggles). We just knew something terrible would happen to us if we did wash them and that bad luck would descend upon us in a fury. You know Pensacola gets pretty warm in the summertime and perspiration could flow pretty freely up in those SNJs what with an irate, frustrated instructor chewing on you from the rear cockpit. The khaki-cloth helmet would almost make one sick as you smelled its vapors when you donned it, but you never, never washed it.

Incidentally, I still have my original cloth helmet intact, unwashed, loved and treasured, and as fragrant as ever. And I'm still leery of washing it.

Lewis L. Dobbs, Cdr.
Naval Science Instructor
Parkview High School
2501 Barrow Road
Little Rock, Ark. 72204

Ed's Note: The above letters are in response to *NA News*' September '75 issue ("Editor's Corner") in which we asked to be enlightened on superstitions in naval air. Keep them coming, please.

Airship

The article "Airship" in the September 1975 issue of *Naval Aviation News* resulted in a number of people writing and phoning me. I have passed out several copies of the issue to my close friends and retired Naval Aviators.

The comments are all very good, such as "The best issue of *Naval Aviation News* that I have seen in a long time." Keep up the good work.

George Carroll
1302 Marilyn Drive
Mt. View, Calif. 94040

Markings and Camouflage

I am trying to compile all available information on the different camouflage and markings of P-2s and P-3s, and all available information on the markings of the units they were assigned to.

I would like to illustrate, by photographs and drawings, all the above information and at the same time to list the complement of each unit. Such a list will include the bureau number, and individual number of all airplanes during, for example, each six-month period.

I am contacting many persons and agencies, both private and official, such as spotters, photographers, historians, military personnel, both former and present, magazines and societies.

I already have some data, collected over the past few years, but the gaps are many and every little piece of information, be it the spotting of a single airplane with the time, location and markings known, or photographs, is valuable in this respect.

Baldur Sveinsson,
President, IPMS Iceland,
Asparfelli 2, c.6,
Reykjavik, Iceland

Published monthly by the Chief of Naval Operations and the Naval Air Systems Command in accordance with NavExos P-35. Offices located at 801 North Randolph St., Arlington, Va. 22203. Phone: 202/692-4819, Autovon 22-24819. Annual subscription: \$12.85 check or money order (\$3.25 additional for foreign mailing) sent direct to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Single copies are \$1.10, ordered from GPO.



Attack Squadron 93 flies A-7s out of NAS Atsugi and aboard Midway. North Island is home base for Helicopter Combat Support Squadron 3 and its CH-46Ds. At Patuxent River, Patrol Squadron 68 flies P-3As. Marine Wing Headquarters Squadron One at Iwakuni operates C-117s, while El Toro's Marine Fighter Squadron 531 flies the F-4B and F-4N.





NAVAL AVIATION

NEWS