NAVAL AVIATION

# NEWS

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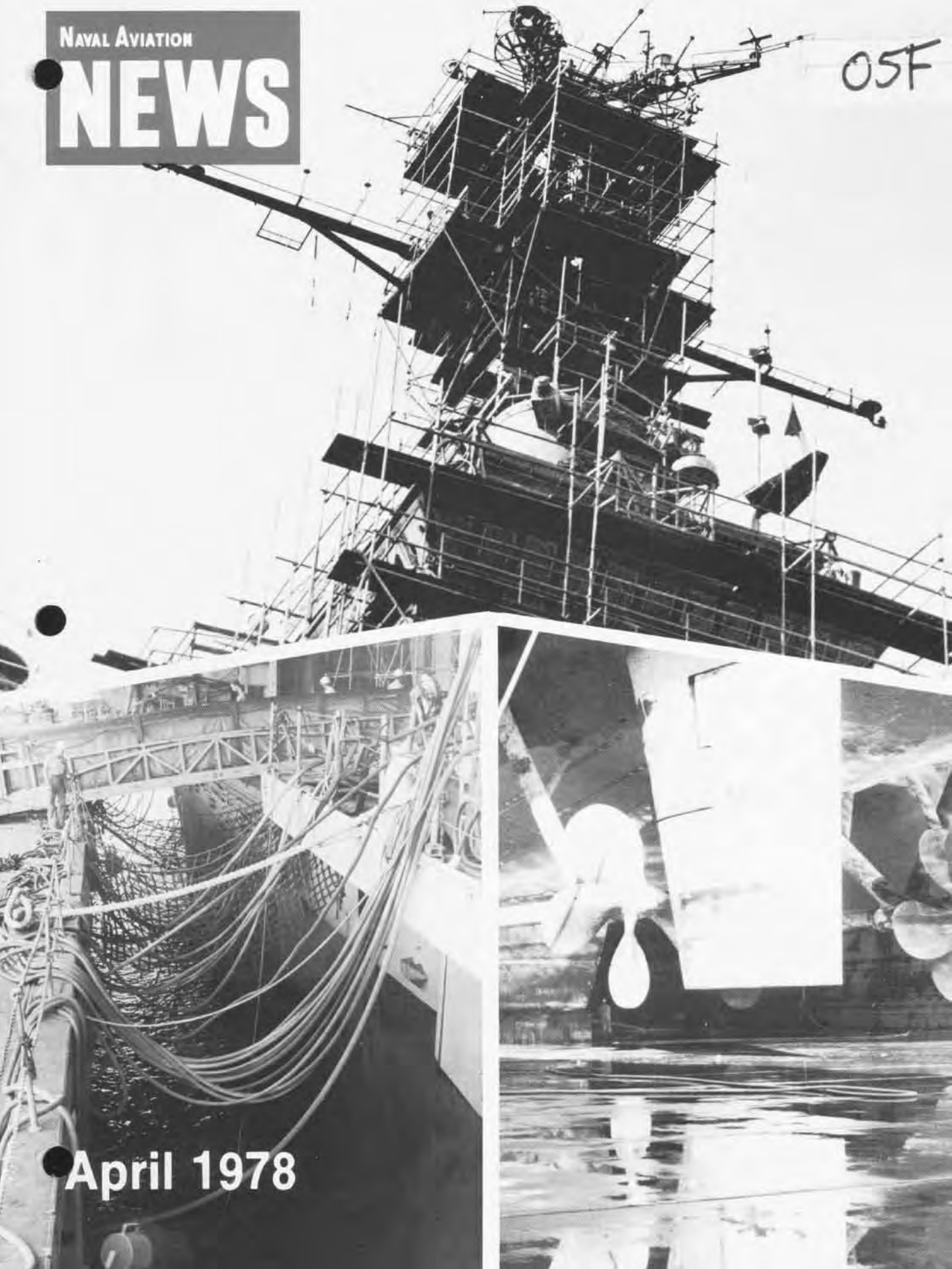


April 1978

*COVERS — Front cover montage of USS Ranger in overhaul was created by NANews' Charles Cooney from photographs supplied by CV-61. Ranger also provided the imposing view of the carrier in dry dock at Puget Sound, back, as well as pictures in the feature beginning on page 8. Here, depiction of vintage Naval Aviation activity came from our historical files and highlights CV-4, another USS Ranger, in 1943, with antisub coastal blimp in the background.*

# NAVAL AVIATION NEWS

SIXTIETH YEAR OF PUBLICATION



## editor's corner

**Tidbits.** We receive many letters featuring a variety of salutations but none can compare with the simplicity of that from Joe Vomvolakis, a 12-year-old from Santa Cruz, Calif. He began: Dear "who ever gets my letter."

**Everyone Makes Mistakes.** Quote from a Navy newspaper: "The *Tomahawk's* torpedo-shaped airframe contains the missile's guidance system, warhead, fuel and turbofan engine. A rocket booster is added for surface ship, submarine and land-based launching. After lunch, the missile's wings, tail fins and engine air inlet extend...."

**LTA.** Robert A. Albrecht is an advisor for the Navy Recruiting District in New Jersey. He forwarded the enclosed copy of a Lighter Than Air School graduation certificate discovered recently in the attic of an old house. Has anyone seen the like? Does the recipient's name, Karl Krisac, ring a bell? Please advise.

**No Slack in Light Attack.** A few flyers, the majority of them attackers, gathered in the unpretentious penthouse of an Arlington, Va., apartment building last February and executed a modest but meaningful award presentation. The event embodied the esprit de corps vital to Naval Aviation. The inscription on the plaque read:

> Invincible Light Attacker . . .
> Main Battery of the Fleet
> Mr. Light Attack 1977
> Rear Admiral Gus Kinnear
> Presented by the South Potomac and East 395 Council of "There's No Slack in Light Attack, Inc!"

George E.R. Kinnear II has been promoted to vice admiral and is now assigned as Commander, Naval Air Force, U.S. Atlantic Fleet. He was serving as Chief of Legislative Affairs, Office of the Secretary of the Navy.

The most junior attack pilot made the presentation. He was Lt. Carl Tankersley, a former A-7 driver in VA-83 with 1,200 hours and 200 traps in his log book. Carl is with NavAirSysCom.

Adm. Kinnear has commanded VA-106, CVW-2, NAS Miramar, USS *Spiegel Grove* (LSD-32) and CarGru-1. He has 5,000 hours and 832 traps to his credit.

Promoting and on hand for the festivities were five former VA-46 *Clansmen* skippers: RAdm. Jack O'Hara, Capt. Marv Reynolds, Captain selectees Jeremy "Bear" Taylor and Ron Boyle, and Cdr. Ted Bronson.

In his acceptance speech, the Admiral said, "I may have to blow my cover and pull out my glasses to read these notes." He cited the importance of Washington-based flyers in keeping the lines of communication open to the fleet. "I implore you," he added, "to help protect the assets we have and work like hell to keep them in good shape. And remember," he concluded, "in the future, it's the guys attack who will be carrying the load.

United States Navy

Lighter Than Air School

Certificate of Graduation

This is to certify that

Karl Krisac

has completed with credit the course of instruction in the Lighter-Than-Air School at the Naval Air Station, Lakehurst, New Jersey, with a mark of 3.38

December 20, 1930.

W. A. Buckley U.S.N. Instructor

G. E. C. Brey U.S.N. Executive Officer

U.S.N. Officer in Charge

U.S.N. Commanding

# NAVAL AVIATION NEWS did you know?

**Training Carrier**

The Navy's only training carrier, USS *Lexington* (CVT-16), is expected to be retired from active duty in mid-1979. It is not anticipated that another carrier will be assigned to duty in the Gulf of Mexico as a replacement for *Lex*. Future flight training-carrier landing requirements will be accomplished aboard Atlantic or Pacific Fleet carriers, depending on deck availability.

*Lexington*, commissioned in 1943, is currently in a brief dry-dock period in Bayonne, N.J., for hull inspection and repair.

During the second week in February, student pilots from Corpus Christi and Meridian were flown to San Diego for a period of carquals aboard USS *Coral Sea* (CV-43). Two other periods of student carrier training were scheduled on fleet carriers prior to *Lexington's* return to Pensacola this month.

**Naval Avionics Center**

The Naval Avionics Facility at Indianapolis, Ind., has been elevated to full naval center status under a new name, the Naval Avionics Center. For many years, the facility has performed research and engineering work in the design and development of electronic systems for the fleet, in the solution of electronics problems, and the development or certification of complex technical data used for competitive procurement of electronic systems from industry. According to technical director John D. Hague, the center's operation not only provides for the rapid buildup of production in a national emergency, but also paves the way for medium and small businesses to participate in electronics production contract work for the Navy. Commanding Officer Captain Grant F. Haggquist, Jr., says, "The low cost and high quality manufacturing capabilities of the medium and small business community is attractive to the Navy in peacetime and is vital to the Navy in time of war." The Naval Avionics Center serves as a bridge between Navy laboratories,large industrial developers and smaller concerns.

**All-Weather Helicopters**

Military helicopters are not permitted to operate in known icing conditions with visible moisture present. The Army is trying to expand the allowable limits through a flight test program involving spray rigs, inflight spray tankers and flights into natural icing conditions. The Naval Air Test Center participated in the tests, hoping to solve many of Navy's helicopter icing problems.

In the program, de-icer heaters were installed on the main and tail rotors, stabilizer bar and windshields. Several different ice detector systems were also installed, side by side, to determine which were the most effective. Instrumentation was added so that exact amounts of accumulated ice could be recorded and photographed. One of the main objectives of the testing was to determine the optimum time to allow ice to accumulate before shedding it. After four months of evaluation, many icing problems were solved. However, results indicated that more testing is needed before helicopters can fly in all-weather conditions.

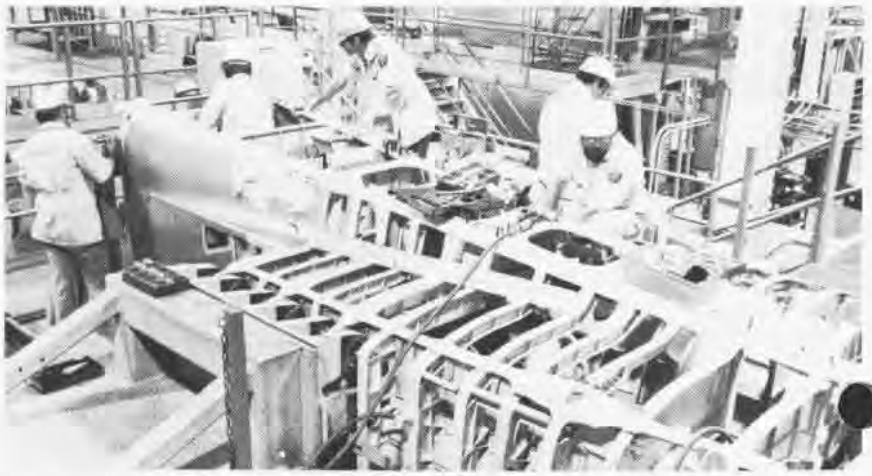
**Short-Range Missile Seeker**

Scientists at Hughes Aircraft Company have been testing a new short-range missile seeker operating on the 95-ghz (M-band) frequency. Recent tests, conducted at the Naval Weapons Center, China Lake, Calif., under joint Air Force and Navy funding, show that the seeker can penetrate fog, rain and heavy clouds better than electro-optical or infrared seekers, with better resolution than that provided by conventional radars. The missile seeker is being developed as a potential terminal guidance unit for short-range missiles, guided projectiles, or

longer-range weapons equipped with a mid-course guidance system. Because of the shorter wavelength of the new seeker, Hughes engineers anticipate that it will be small and relatively inexpensive.

### F-18 Hornet

The all-digital, multimode radar system for the F-18 being developed by Hughes Aircraft Company is designed to achieve a new level of reliability. It will provide radar information for the control of the aircraft's 20mm guns, *Sparrows* and *Sidewinders* in aerial combat, and a full range of conventional and precision



guided weapons in attacks against ground targets.

Northrop Corporation has the contract for the center fuselage, which is being assembled at the company's plant in Hawthorne, Calif. Final assembly of the F-18 will be accomplished in St. Louis, Mo., by McDonnell Douglas Corporation, the prime contractor. The first *Hornet* is scheduled to fly in late 1978.

### Motion in Airborne Radar

Dr. Tomas L. ap Rhys of the Naval Research Laboratory has applied for a patent on an antenna compensator which will counterbalance the motion in an airborne radar system more accurately than present techniques. This permits the detection of smaller targets at greater ranges. The invention could prove to be of great operational value to AEW, ASW and other military aircraft with radar systems.

Dr. ap Rhys' invention relates to radars of the airborne moving-target indication type. His system compensates for the relative motion between fixed objects and the radar system itself, and provides a means of cancelling the signals reflected back from fixed objects.

### Dutch SAR

Pilots of Royal Netherlands Navy search and rescue squadron, No. 7 Squadron, now fly the *Lynx*, an advanced Westland multi-role helicopter powered by two Rolls-Royce Gem-2 turboshaft engines. Its first rescue was carried out several months ago when two *Lynx* lifted four survivors from the 300-ton German coastal vessel *Herman Helena* minutes before she sank in a gale near the island of Texel in the North Sea.

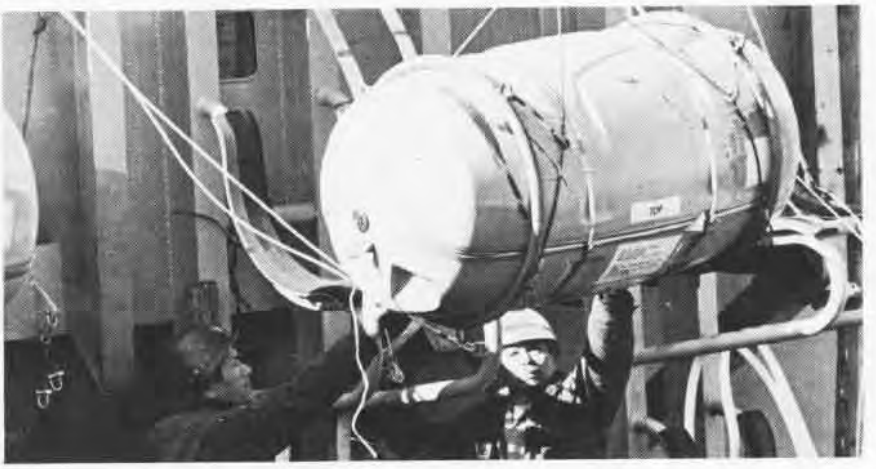
No. 7 Squadron, based at Naval Air Base De Kooy, Den Helder, north of

Holland's 280-mile coastline, is the first to perform SAR duties with the *Lynx*. Dutch pilots say the helo gives them a significant increase in range, power and capability, and enables them to cooperate more fully with SAR forces of West Germany, Denmark, Belgium and Britain. The squadron's C.O., LCdr. Jan Stuurman, says that the *Lynx* have three roles, SAR, pilot training and casualty evacuation. It is in the latter role that they are most heavily tasked.

**Life Rafts**

USS *Midway* recently received 188 new type rubber life rafts that will accommodate the entire crew if the ship ever has to be abandoned. The MK-6s, installed by the Yokosuka Ship Repair Facility, each hold 25 men.

The units replace 300 old rubber rafts, each with a 15-man capacity, which were enclosed in rubber and hung from the sides of the ship in metal baskets. The new rafts are in plastic cases which protect them from weather and jet blast. While the old units required inflation tests every six months, the new ones need a test only every two years. In the event of an emergency, if the MK-6s are not manually released, they will be automatically activated by a hydrostatic device when under 10 to 40 feet of water.



# grampaw pettibone

## Lt. Crandall Saves Pilot/Plane

Lt. Ken Crandall is a Naval Flight Officer instructor assigned to VF-124, an F-14A readiness training squadron. On January 19, 1978, he and a replacement pilot were engaged in routine air combat maneuvering training in their F-14A *Tomcat*. The offensive flight syllabus called for a split S maneuver with about 5,000 feet of vertical separation between the F-14A and an adversary aircraft.

The *Tomcat* began the maneuver with an airspeed of 325 knots and an altitude of 23,000 feet. The plane rolled inverted and pulled through the vertical but suddenly ceased to complete the maneuver, with the aircraft nose 60-70 degrees below the horizon. Lt. Crandall noticed little or no G forces on the aircraft. He encouraged the pilot to complete the maneuver but received no response. Passing the adversary aircraft altitude of 18,000 feet, Crandall again tried without success to initiate response from the pilot. He started shouting at the pilot to "pull out," and had decided to eject as the aircraft reached 10,000 feet at .92 IMN.

Realizing that every moment delayed increased the amount of flail injury he would sustain from ejection at that airspeed, Crandall still elected to try a final attempt at eliciting a response from the pilot. Yelling "pull out" repeatedly, he detected slight lateral movement of the wings and began to feel positive G on the aircraft.

Recovery from the dive pullout was accomplished at 6,000 feet above ground level. The aircrew immediately started for NAS Miramar with the pilot having no recollection of the events which had occurred in the past several minutes. Lt. Crandall felt the pilot was still incoherent and indecisive, and encouraged him to fly toward home plate.

As time passed and Crandall continued talking, the pilot appeared to grow calm and to sound better on the radio. Crandall ensured that the pilot had fully regained his senses and then worked him into a ground controlled straight-in approach at Miramar.

A squadron landing signal officer manned a radio beside the runway to talk the pilot through the final landing/touchdown phase. This coordination between Miramar air controllers, the LSO, and Crandall resulted in an uneventful landing.

Crandall's decision to remain with the aircraft despite the fact that each passing second rapidly decreased his chances for a safe ejection and his success in getting the pilot's attention (the pilot recalls only semi-consciously hearing and responding) saved the pilot's life, prevented major injury to himself and saved an F-14A *Tomcat*.

**Grampaw Pettibone says:**

**"Oh, my achin' back!" Jumpin'**




ILLUSTRATED BY Osborn

**t at that airspeed could ruin your whole posture. Ole Gramps is proud to put Lt. Crandall on the list of "pros." In my book he is a real hero – it's tough to delay that one more second and keep usin' the ole noggin'.**

**Naval Flight Officers take "pride!" Crandall again proves the real worth of two-place fighters with a "pro" in the back seat.**

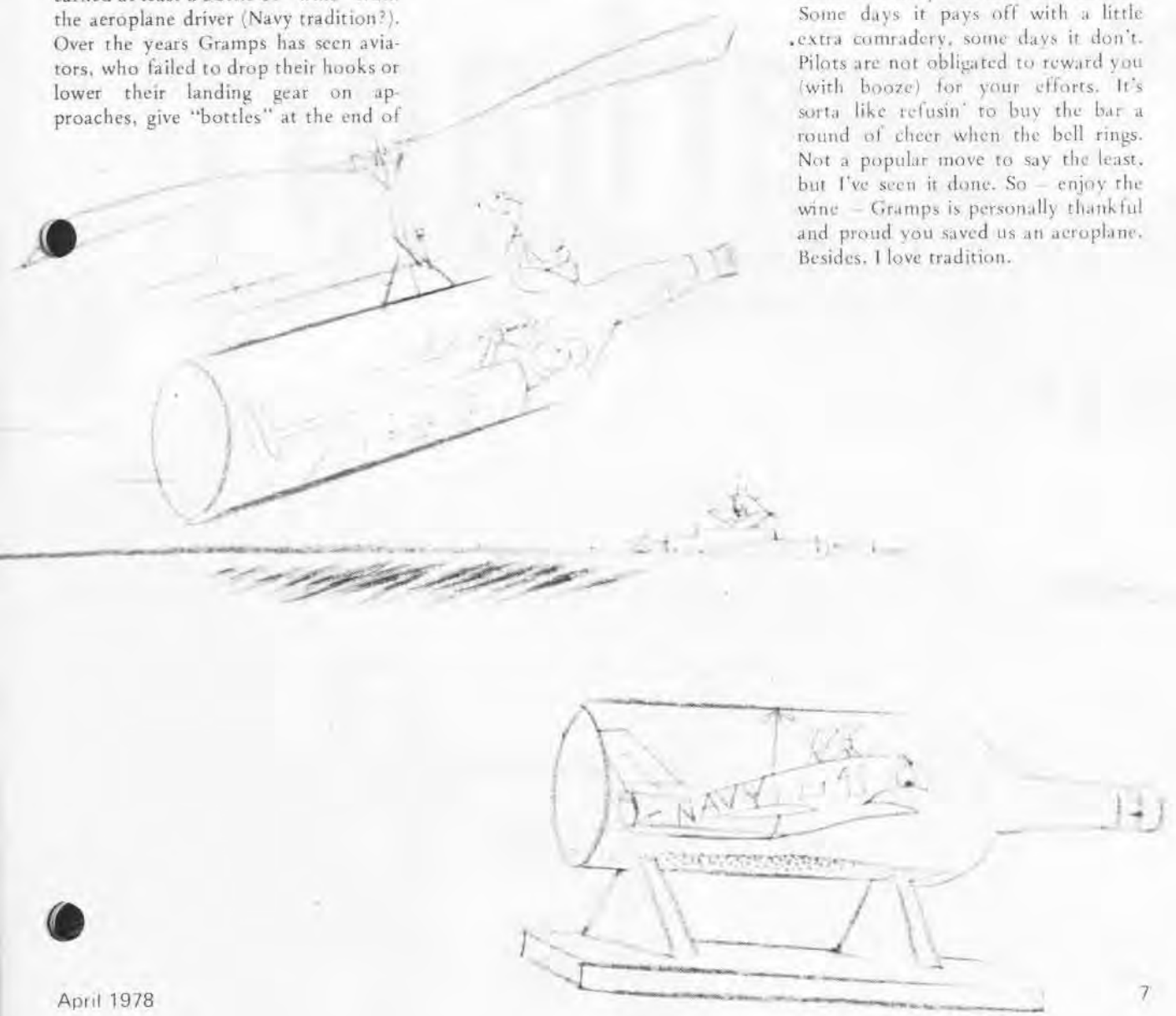
## Naval Aviation Tradition

Recently Ole Gramps received a letter from an air traffic controller who had saved a pilot from the embarrassment of a belly flopper with his helo. The controller was sure he had earned at least a bottle of "wine" from the aeroplane driver (Navy tradition?). Over the years Gramps has seen aviators, who failed to drop their hooks or lower their landing gear on approaches, give "bottles" at the end of a cruise to LSOs who "saved" them.

Additionally, pilots surviving a bail out or ejection have been known to give a "bottle" to the parachute rigger who last packed their parachute. Gramps has to think these "traditional fines" were offered, by the pilots involved, more in the spirit of thanks to the individual who saved the pilot from further embarrassment or an accident, rather than as a purely disciplinary action. At the bar tradition chimes: "He who enters covered here, buys the bar a round of cheer." There are very few moments when aeroplane jockeys really have an opportunity to confront a controller who has done him good. Saving a driver from the embarrassment of a "belly flop" probably does warrant a bottle of rosé, to be consumed in moderation, of course, as well as a note of "Thanks!"

Navy tradition? Who's to say for sure, but any pilot who makes a gear-up pass and refuses to at least verbally acknowledge the controller's alert performance ain't my kind of people.

Gramps personally votes to keep what may only be a "perceived tradition" by some and a "real tradition" by others, alive. In this case Gramps has sent the controller in question a bottle of rosé. Gramps likes controllers who have spirit and realize their importance to the team. Controllers take heart and keep the safe calls comin'. Some days it pays off with a little extra comradery, some days it don't. Pilots are not obligated to reward you (with booze) for your efforts. It's sorta like refusin' to buy the bar a round of cheer when the bell rings. Not a popular move to say the least, but I've seen it done. So – enjoy the wine – Gramps is personally thankful and proud you saved us an aeroplane. Besides, I love tradition.



# Ranger Overhaul

By Commander Rosario Rausa

USS *Ranger* weighed anchor last month after 57 arduous weeks at the Puget Sound Naval Shipyard where she underwent the dreaded necessity of an overhaul. The carrier had arrived in Bremerton on February 14, 1977, anxious to begin the ordeal. She maneuvered into dock number six, which was rapidly drained, leaving *Ranger* high, dry and ready for an evolution not unlike that of a patient in intensive care.

In short order CV-61 was adorned with scaffolding which towered up-and-around the island structure. Chambers of the ship were soon subject to the bruising blows and probing intrusions of just about every known tool in the mechanical inventory. A hundred sandblasters scoured her skin. *Ranger's* very heart, personified by the eight steam boilers, was torn out, to be replaced by a new one. The inferno-like boilers, made of sturdy brick, steel and endless lengths of tubing were rendered special attention. Within these boilers the energy is generated which powers the flattop across the seas.

In formal terms, COH – complex overhaul – has a single overriding objective. That is: to deliver the ship, overhauled to certain specified inspection and certification criteria, with minimum expenditure of funds and time so that she will meet her operational commitments within the next operating cycle with minimum down time. Vital to this


6

objective is the proper and timely compilation and execution of SARP, the ship alteration and repair package. Encyclopedic in nature, it's *the* bible for overhaul activities. As a source document it contains repair actions by category – the boilers, for example, along with man-hours required to complete the job, who will do it, and which agency will foot the bill for a particular item. So complex, detailed and far reaching is the SARP that we won't try to define it here. Suffice it to say that shipyard personnel alone expended more than 550,000 man-days of labor on *Ranger* during overhaul, while ship's company people exerted about 200,000 man-days.

Key players in the overhaul scenario for *Ranger* were, in addition to others, the ship itself, CV-61's type commander (Commander Naval Air Force, Pacific), the Puget Sound Naval Shipyard, Naval Air Systems Command, Naval Sea Systems Command (which has cognizance over the shipyard), CinCPacFlt, and CNO who made fiscal and *final* decisions which directly affected the carrier. In addition, there was PERA CV, a vital, 100-strong separate organization which functioned as an advanced planner for the type commander and NavSeaSysCom. The acronym represents planning and engineering for repairs and alterations, carriers. As its title implies, PERA CV makes significant inputs to the ship alteration and repair package during the early planning process and serves in a monitoring role throughout the course of the overhaul. Its team of experts screened work requests, established guidelines for job execution and otherwise monitored repair activities.

The ship had a sort of overhaul task force of its own, located in a trailer-like module parked in hangar bay three. Called the Ship's Force Overhaul Management Unit, it maintained liaison with PERA CV, shipyard reps and others. LCdr. R. E. Arnott, a former A-7 pilot in VA-155, mans a desk there with planning and scheduling responsibilities.

"One of the big problems," he said, "is learning the language. Not too many of us in ships company are familiar with terms like SARP and PERA CV before this evolution begins."

The shipyard force, a collection of highly trained and experienced specialists, actually accomplished the ship alteration and repair package. At the same time the ships company worked on various projects which they had been assigned. Obviously, detailed coordination of labor was required, if for no other reason than to preclude two working parties from occupying the same area at the same time.

LCdr. Arnott reported to the damage control assistant, likewise headquartered in the module. A surface warfare officer, LCdr. D. E. Long, was *Ranger's* DCA. "To be able to accurately define what needs to be accomplished is vital," he said. "And we have to be cautious of job actions which escalate the workload. We may pull a pump, for example, and determine that a new part is needed for it. The part has to be ordered. In some cases, competitive bids have to be let to industry before the part is purchased. This costs time. We have to adjust."

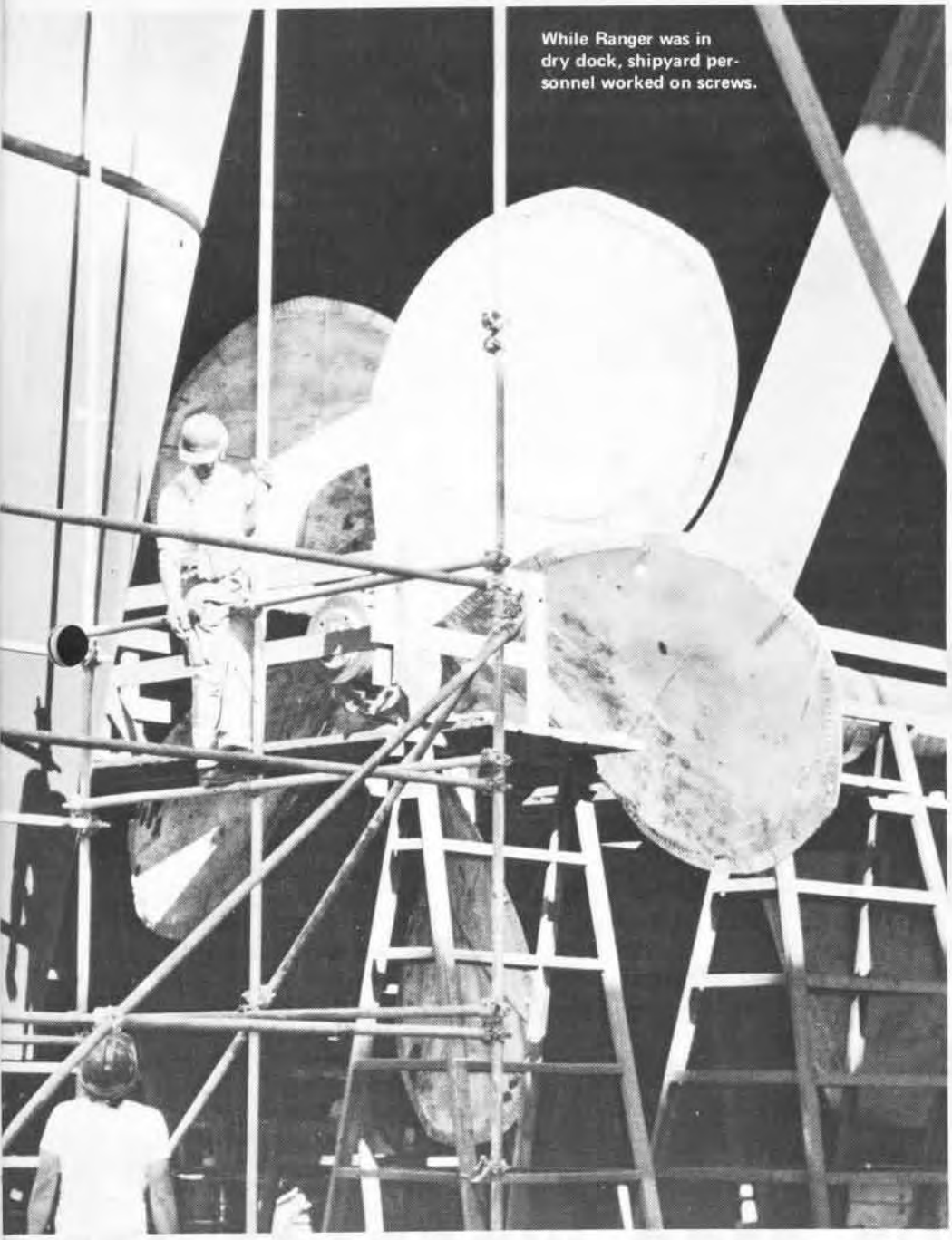
During *Ranger's* intensive care, the carrier's population swelled with the invasion of shipyard technicians. Except in hangar bays, it was nearly impossible to transit passageways or to ascend and descend ladders without stooping. A Groucho Marx stride helped. It's challenging enough hiking through the honeycombed recesses of a carrier when she's underway. What with the rambling power lines, diversified obstructions and waves of people, the premises resembled concession stands at the Super Bowl during half time.

The glow of sparks from a welder at work was visible in almost any direction. Instant conferences were held in huddles usually quarterbacked by a civilian supervisor or Navy chief, shouting directives above the clamor. Ironically, the usually noisy and hectic arena called the flight deck was tranquil compared to areas below, in spite of significant work being done on and around jet blast deflectors and the island structure.

But it was below decks where the major action unfolded. In the bowels of the ship, in labyrinthian confines, are the main machinery rooms and the boilers. Here, the lion's share of labor was expended to get the power plants in shape. Each boiler required three months just for tear down and removal.

The pressure never seemed to let up for CV-61. But that's the nature of the event. The shipyard's carrier type-desk officer, Cdr. Claus Zimmermann, explained.

"The shipyard is doing more now to a carrier during overhaul than any shipyard in history," said Zimmermann. He's an engineering duty officer who has the unenviable task of coordinating efforts among the various key players mentioned earlier. He spends an enormous amount of time on the telephone. "In the 1950s," he went on, "carriers were often overhauled in four months. Nowadays, the carriers are not only bigger and more complicated but



While Ranger was in dry dock, shipyard personnel worked on screws.

they've been through the wearying impact of Vietnam War duty. Add requirements for new installations to modernize the CVs and you begin to comprehend the hefty workload."

"Well over 50 percent of the repair package involved the machinery plants," he said. "They're rebuilt almost from scratch. There's an exceptionally impressive mother lode of talent in the shipyard force. Virtually every man and woman is a specialist of one kind or another. Material which is ripped out of *Ranger*, incidentally, is not routinely cast away as so much junk. Whenever possible, it is recycled, rebuilt, or converted for later use."

Mr. Al Queen works at NavSeaSysCom in Washington, D.C., as project engineer for *Ranger* and other ships. He and Mr. Floyd Burkett, *Ranger's* project engineer in NavSea, are with the aircraft carrier ship logistics division. Although ensconced in offices 48 states away, they know the ship like a book. They visited *Ranger* and talked to shipyard and ship personnel on a regular basis.

Queen described the complex carrier overhaul system, a management tool about seven years old, which is credited with sharply improving the overhaul process.

"Under the system," said Queen, "certain capital events are identified as having the most impact on the timely completion of overhaul. In *Ranger's* case the controlling work items were the boilers and machinery boxes, a new elevator for weapons handling, various aviation support gear for F-14, S-3A, A-6E and E-2C aircraft, the SPS 48C radar installation, the NATO *Sea Sparrow* installation and CHT (collection and holding tanks for the carrier's sewage system). This last item is a pollution control device now required by law for environmental protection. *Ranger* was the first aircraft carrier to have the complete system retrofitted.

Said Burkett, "Under the rules, all SARP items are listed and funding for them identified prior to the ship's induction into the yard. At that point, no other changes to the overhaul man-day, dollar and time constraints can be made without CNO approval."

Originally, money was allocated for only partial CHT installation on CV-61. Early in the overhaul, more money was made available by CNO and the total CHT package was completed. This resulted in a three-week extension to the *Ranger's* original completion date which, normally, is a very firm milestone.

Prior to the advent of complex carrier overhaul procedures there was a tendency to make mid-stream changes, a costly procedure which seriously detracted from the entire overhaul process.

The carriers *Kitty Hawk* and *Constellation* preceded *Ranger* at Puget Sound and employed the system. Many of the system's bugs were worked out with these two CVs. As a result, *Ranger* benefited from the experiences of her sister ships and had a smoother overhaul with less problems, compared to them.

Cardinal junctures in the CV's overhaul process were the LOEs – light-off examinations – one for each plant. Naval engineering specialists actually examined *Ranger's* engineering personnel who operated the plants. Once their procedures were properly certified and light off was executed the boilers were left on indefinitely. Lighting all eight power plants took place over several weeks.

Unfortunately for *Ranger*, some of the LOEs were scheduled during the Christmas holidays and it was neces-

CV-61 was in dry dock about six months.

Ranger will soon be back on the high seas, working with her air wing, as in this pre-overhaul photo.

sary to restrict leave and liberty time to press on with work. Fortunately, *Ranger's* C.O., Captain Douglas R. McCrimmon (see page 8) anticipated this potential morale problem, briefed his people well in advance and worked out leave time around the LOEs.

*Ranger* is powered by kerosene-like Navy distillate fuel. It is pumped to the boilers which provide the steam for the turbines. The turbines drive four shafts at the end of which are the super-sized screws. After boiler light offs, the boiler and other machinery systems and equipments are thoroughly tested. At that point, in CV vernacular, "the hot plant" was on the line.

What does an overhaul cost? Hold onto your wallet. One hundred twenty million dollars was spent on labor and industry furnished material like cables, bulkheads, paint and wiring for CV-61. Additionally, a significant amount was spent for government furnished equipment such as winches, oxygen/nitrogen plants, radar, laundry equipment, elevators and the like. Expensive? Certainly. Necessary and worth the cost? Absolutely.

Before her departure from Bremerton, *Ranger* conducted several days of sea trials in the Pacific to ensure all systems functioned properly. Back at Puget Sound alongside pier three (The dry-dock phase was completed in August and from then until completion, CV-61 was pierside.), final preparations were made for the journey south to San Diego.

USS *Ranger* is currently conducting work-up and training exercises off the California coast as a prelude to her scheduled deployment to the Western Pacific later in the year. When that cruise is completed, CV-61 will return to San Diego for a three-month period of restricted availability during which a sort of mini-overhaul will take place. A long-term follow-up to the major overhaul package, it is another in the various stages of a carrier's maintenance life without which that life would surely end prematurely. Around 1982, *Ranger* will again go into intensive care – for major overhaul.

When *Ranger* left Bremerton last month, she did not emerge as a spanking new behemoth. But the warship did get a rejuvenating, inside-outside face lift which will sustain her through, as a ship's life cycle goes, middle age. Captain Frank Gerow, director of the aircraft carrier ship logistics division in NavSeaSysCom, summarized: "Through the overhaul process and the talented efforts of innumerable individuals who make that process succeed, USS *Ranger* has gained the strength and endurance to fulfill her mission of projecting American sea power where and when needed."


Captain Douglas R. McCrimmon is *Ranger's* commanding officer. A highly decorated combat pilot and former C.O. of USS *Mars* (AFS-1), he took the helm of CV-61 in September 1976. He was the man in charge of, and responsible for, several thousand men and a capital warship land-locked for more than a year. To apply an understatement, his was a challenging job.

What does a carrier skipper do during the overhaul evolution?

"Morale is my prime concern," he said. "I spent a lot of time monitoring retention programs, promotions and advancements. Improving the interface between shipyard and the ships company commanded major concern. There was counseling to do, monitoring the turnover of personnel and the widespread training obligations the men had. I tried to remain intimately aware of the crew's moods, their problems, frustrations and accomplishments.

The captain toured his ship regularly and attended countless meetings and conferences to keep attuned to and help guide the overhaul's progress. "I was most pleased with the quality of workmanship of the shipyard technicians," he said. "They were real pros. I am even more proud of *Ranger's* crew. Throughout the 13 months they endured hardships, long working hours, very unfavorable living conditions, and came out of it with their spirits intact."

"To be sure," he added, "there were conflicts between yard workers and carrier personnel. But I feel they were kept to a minimum. Strained feelings are inevitable, when, for example, funding restrictions prevent the shipyard force from working weekends while our sailors and officers had to come in."

Approximately one in every five men attended a school of some sort, away from the ship, during overhaul. Instructional courses varied in length. "Needless to say," admits the skipper, "planning and coordinating the workload under such manning conditions demands tremendous effort on the part of all hands.

"One of our most hectic periods occurred during Christmas. The holiday coincided with preparations for some all-important LOEs (light-off examinations) in our engineering plant. We allowed minimum time off during this period. We had anticipated this, of course, and informed the men that it would happen. They accepted it well, much better than I expected. We gave people time off at other times to compensate for this as best we could."

Captain McCrimmon observed that "one of the subtle problems we faced was the transition in environments. We came from one which was action-oriented and featured dynamic ship/air wing operations. At the shipyard we found ourselves totally immersed in industrial surroundings and activities. I'm proud to say that our people adjusted favorably, turned to, and got the job done on time, professionally."


Captain R. C. Taylor is *Ranger's* X.O. As the carrier prepared to leave San Diego for the Puget Sound Naval Shipyard in late 1976, his job took on extra dimensions.

"We tried to accommodate the crew and their dependents in this move north," he said. "It was quite an evolution. Advance parties explored the housing situation in the Seattle/Bremerton area to facilitate family moves. Since berthing aboard is difficult during overhaul, we made all possible efforts to get families integrated into the community."

A broad range of personal vehicles, including U-Haul trailers, were loaded aboard *Ranger's* flight deck. About 300 families, ranging up to five persons per family, made the journey aboard the ship. A total of 600 or so men, their wives and children spent four nights and five days aboard.

"We had a good time," said Capt. Taylor. "There was a casino night, movies, sporting events, talent contests, games. We kept people occupied.

"There were 700 cars aboard," he added, "and, would you believe, 100 pets! The aircraft intermediate maintenance department was tasked with pet control for the voyage and did a great job. We were well packed."

"Concerning the overhaul," he admitted, "everybody goes to Puget Sound feeling they can do better than previous ships. But *Ranger*, just like her predecessors, suffered through a lot of growing pains. It didn't take long to grasp how difficult this tour in the yard was going to be.

"In addition to the work involved, it's a cultural shock. Take the simple matter of driving. We went from the four and eight lane freeways of sunny southern California and entered a kingdom of scenic but hilly roads. And some rather wet weather."

What's an X.O.'s job like during overhaul? "My duties stayed the same," said Capt. Taylor. "There was emphasis on personnel matters, keeping a keen eye on morale. Feeding and berthing the crew was tough.

"About 2,500 of our people lived ashore. We were very fortunate that the people of Bremerton and the surrounding area welcomed us. We endeavored to get involved with the community as well.

"It's interesting to note that, aside from the fact that a carrier is like a small, heavily populated city, we're dealing with a large number of quite young men. *Ranger* has about 3,000 personnel assigned. (The population blossoms to 5,300 when the air wing is embarked.) Sixty percent of those people are under the age of 21. Eighty percent are under 25! Combine those facts with a 50-percent turnover rate during this period and you get an inkling of the complexity of it all."

How difficult was it working with the shipyard force?

"Well, it wasn't easy. Nothing is in the aircraft carrier business. But there was no deep-seated resentment. As a matter of fact, we melded pretty well with the shipyard folks."

Ranger's journey from San Diego to Bremerton was, in part, a family affair, including autos.

# NPC

By JOCS Bill Bearden

Photography has the unique ability of capturing a fleeting moment in time and recording it for the future. Photography plays such an important and vital role in our daily lives that hardly a single aspect of our existence is not affected by it. Imagine for a moment a day without television or motion pictures to entertain and inform us. Or newspapers, magazines and books without pictures. No family albums for precious reminiscing. Imagine sporting events rarely, if ever, seen, only read about. The list could go on and on. Ours is a visually oriented society.

In the Navy we rely on motion picture, video and still photography for information, education and training. Commanders use intelligence photography in making decisions vital to the outcome of their missions. Photography is essential in the research and development of weapons, techniques and vehicles that are today expanding our knowledge of the sea, space and uncharted regions of our planet.

Over the past 35 years, much of this photography has been provided by the U. S. Naval Photographic Center (NPC) located aboard the old Naval Air Station, Anacostia in Washington, D.C. Its personnel are the specialists who support the Navy and Marine Corps with numerous and varied photographic services. They provide the motion picture, including television, still photography and photo technology which supports Navy forces afloat and ashore.

Today NPC is staffed by approximately 200 persons. A history of the Center over the past 35 years would be incomplete without paying tribute to the Navy photographer. Often working under dangerous and hazardous conditions, on and under the sea, in the air, in combat and in peace, photographer's mates have always produced the still and motion pictures processed by NPC.

Navy photography did not begin with the commissioning of NPC. It started in modest ways prior to WW I. In those early days, the most extensive use of naval photography was in avi[a]tion. Aerial views of ships and installa[tions]

**For 35 years NPC has been the nucleus of naval photographic services, supporting aerial, motion picture and still photographers. It has also established and maintained an extensive library of black and white and color still photographs.**

tions provided a fresh look at Navy's seapower and shore support facilities. Bomb dropping, signaling, seaplane handling, gunnery, various phases of the theory of flight and the rigging of lighter-than-air craft were standard subjects for early Navy cameramen.

An enlisted man, Walter L. Richardson (*NANews*, September 1975, page 32), whose hobby was photography, is credited with sparking official interest in the science. After he received a commission, he established and became the first commanding officer of the Navy Photographic School at Miami in 1918.

In the ensuing years a training film program was started and a few motion pictures and slide films were produced. In 1941, a training film unit was established within the photographic section of the flight division of the Bureau of Aeronautics. Three years later it was expanded and reorganized to include a motion picture branch.

In the meantime, on February 24, 1943, the Navy Photographic Science Laboratory – later NPC – was established to handle the burgeoning load of photographic work generated by the war. With the technical assistance of Eastman Kodak Company, a $5 million building incorporating the latest in photographic laboratory design and equipment was erected at the north end of NAS Anacostia. Another partner in NPC's infancy was the Hollywood U. S. Naval Photographic Services Depot which acted as liaison between the Navy and the motion picture industry.

The laboratory needed highly skilled motion picture and still photo personnel and it got them. From Hollywood, New York, Chicago, Rochester, and wherever else they could be found, came the photographers, editors, animators, lab specialists, technical experts, writers and directors. The new laboratory became an efficient, swift-moving operation. Soon, hundreds of training aids and instructional films were being turned out covering practically every conceivable subject from battlefield surgery to operating big shipboard guns.

The laboratory did what was needed to meet the challenging demands of Navy photography. It came up with advanced ideas and techniques for technical photography and production processing. To meet requirements, the research and development department either invented or modified equipment, cameras and chemistry to expand production and improve quality.

The still picture department was literally swamped with processing and printing requirements for every conceivable kind of picture. The top floor of the three-story building, sealed off, became one of the most closely guarded top secret areas in Washington. There, Navy personnel worked around the clock to produce photo mosaics of the Normandy beachheads for the impending invasion of France.

WW II was the first major conflict thoroughly documented on film. Navy photo teams entered every arena of combat. Their still and motion picture footage was rushed to the Anacostia laboratory where it was processed, edited into informational films and often released to an eager public that wanted to learn what was happening in the war. This material was also preserved in the film archives for release after the war. These events were echoed again with the Korean and Vietnam Conflicts. NPC, firmly established, met the challenge.

The increased need for Navy photography did not end with WW II: rather it continued. Renamed the U. S. Naval Photographic Center, NPC continued to be heavily involved with new techniques, materials and equipment demanded by the complex science of photography. As a science, photography is synonymous with change. It's the nature of the business.

One of the major changes that has occurred in recent years is the introduction of color television. Today a series of training films on the P-3 is being produced by NPC television while other series on the T-44 and T-34C are in the planning stages. Approximately 250 motion pictures a year are completed by the Navy either with NPC facilities or through commercial film producers.

Today, NPC's still picture department has two primary roles. As a lab, it produces volumes of prints and, as a mammoth photo library, it serves as archivist for the Navy's still pictures.

In volume printing, automation is the key. The department's many labs, darkrooms and finishing rooms are equipped with the best the state-of-the-art offers. Planned for the near future is a unique system which will allow all pictures in the still library to be stored on video disks. An individual looking for a picture of a certain aircraft need only enter a key word, i.e. F-14, into the system. Instantly, examples of each F-14 photograph on file will appear on a video screen, one at a time. Another example of new equipment soon to be available is an electrostatic dry processor which instantly prints and processes high quality color photographs without chemicals. As technology advances, the video system and the dry processor will be tied together electronically. It is conceivable that a visitor to NPC could make a selection of photographs and walk out the door with the finished product in hand.

One very important NPC service is the writing and production of technical photographic publications for the Navy. Manuals, photo technical bulletins and other photographic literature keep the fleet abreast of the latest developments and techniques.

NPC handles Navywide distribution of training and information films and video tapes. This includes the control and re-use of 888,000 prints of films now in existence. It is responsible for the introduction of about 35,000 new prints each year – under the CNO annual film program.

The motion picture film depository division contains millions of feet of film taken by Navy men over the years. The library holdings are a rich source of stock footage used in making current films and are widely used by other government agencies and commercial firms. Nearly a million feet of film are cross-referenced and filed as stock footage each year. More than half a million feet are used annually for training films, TV documentaries and industrial films.

The advances in media communications, undreamed of by the men and women in 1943, are the working tools of the modern Navy. Those pioneering personnel and the talented individuals who have followed have done their work well. Their solid foundation of professionalism and standards of excellence made possible the achievements in Navy photography that are today recognized throughout the world.

NPC, commanded by Captain R. L. Skillen, has made, and continues to make, photographic contributions which affect our daily lives. Ours is a visually oriented society.

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How does one go about ordering training and informational films and photographs from the photographic services available at NPC? For one thing, not all requests go to NPC. Where the requests are made depends on whether they are for official or private use or for publication. Requests for completed films, photographs for civilian publication or photographs of a historical nature do not go to NPC.

For example, requests for:

- photographs for publication should be sent to the Chief of Information.
- historical photographs – Civil War, World War II, Korea, etc. – should go direct to the National Archives.
- training films for official use are ordered through CNET support centers in Norfolk or San Diego.

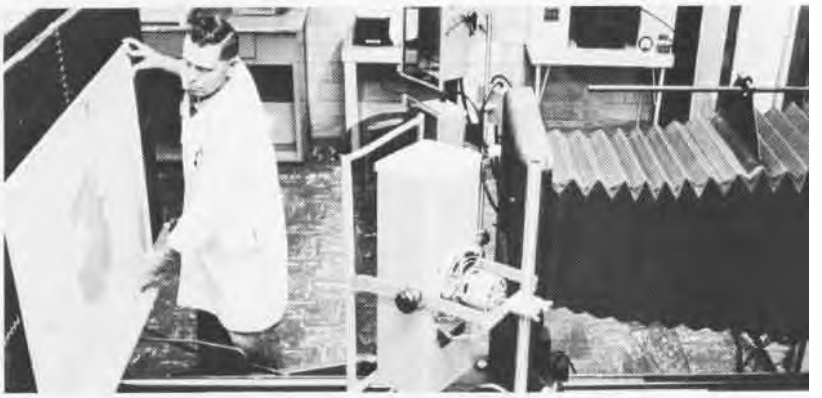
If a request is for photographs or motion picture stock footage for official purposes, a letter from the commanding officer to the C.O. of NPC (Code PC) giving the specifics is usually all that is required. NPC will notify you if it isn't. NPC maintains files from 1958 to the present. Pre-1958 photos are maintained by the National Archives.

If the request is for other than official use or publication, NPC does have a limited cash sale service. No color prints are available but color transparencies, black and white photos and motion picture stock footage can be purchased. A price list is available from NPC as well as most of the other agencies listed.

Requests should be addressed to the appropriate activity, listed below.

Requests for:

Still photographs and motion picture stock footage from Navy activities or the general public – for other



than publication:
Commanding Officer (Code PC)
Naval Photographic Center
Naval District Washington
Washington, D.C. 20374

Training and information films and video products for official use:
Commanding Officer
Naval Education and Training Support Center, Atlantic
Naval Base
Norfolk, Va. 23511

or

Commanding Officer
Naval Education and Training Support Center, Pacific
Naval Air Station, North Island
San Diego, Calif. 92135

Navy films cleared for sale or rental and pre-1958 still photographs:
General Services Administration
National Archives, Audio Visual Branch
Washington, D.C. 20409

Still photos for publication and motion picture footage from non-government agencies and the general public:
Chief of Information (OI-22)
Department of the Navy
Room 2D340, Pentagon
Washington, D.C. 20350

or

from Marine Corps film depository:
Officer in Charge
Motion Picture Archives
Marine Corps Base
Quantico, Va. 21134

Marine Corps photography from non-government and the general public:
Headquarters
U.S. Marine Corps
Attn: Code MTAV
Washington Navy Yard
Washington, D.C. 20380

NPC services include processing internegatives for color prints, producing photo enlargements and making detailed copy work and video tapes for television. To assist the Navy photographer, the Center investigates the latest in photo technology – equipment, materials and chemistry – and publishes the information.

NEWS **naval aircraft**

# SABRELINER


Regularly seen at all naval air stations and long familiar to all NFOs graduating from the training command are the attractive T-39/CT-39 *Sabreliners.* The *Sabreliner* traces its lineage to a 1956 U.S. Air Force requirement for a light twin-jet UTX (utility/trainer). The Air Force required prototypes for evaluation, along with commercial certification of whatever aircraft were selected for procurement.

From this came the North American NA-246 *Sabreliner* prototype. The *Sabreliner* was selected as the winner of the Air Force competition in 1958. Production T-39As differed from the prototype in many details, principally in having the GE J85s of the NA-246 replaced by P&W J60s. Certified by FAA, the T-39As were largely used as utility transports by the Air Force and the civilian models became successful commercial business jets. Addition of fighter-type radar for special training led to the Air Force T-39B with Navy orders following in 1961 for 42 similar T-39Ds (ordered as T3J-1s) having Navy fighter-type radar.

In 1967, the need for small transports in WestPac to handle high priority cargo and personnel led to the lease/purchase of seven commercial *Sabreliner* Series 40, which carried their commercial registration as well as Navy BuNos. By the time their purchase was completed, they were designated CT-39Es. When additional *Sabreliners* were required for Navy and Marine Corps use, the stretched commercial Rockwell (North American had merged with Rockwell and is now part of Rockwell International) Series 60 *Sabreliners* were purchased, becoming CT-39Gs. Like the Es, they are powered by P&W JT12 jet engines – commercial versions of the J60.

The T-39s continue in wide service, many of them thanks to NARF Pensacola's extensive rebuilding. In addition to their original assignments, several serve special roles for R&D and other projects. In their many roles, both military and civil, *Sabreliners* will be around for years to come.


CT-39E

CT-39G

## T-39

| | | |
|---|---|---|
| Length | | |
| T-39D | | 43'8" |
| CT-39G | | 46'9" |
| Span | | 44'4" |
| Height | | 16'0" |
| Engine | | |
| T-39D | two P&W J60-P-3A | 3,000 lbs. |
| CT-39E,G | two P&W JT12A-8 | 3,300 lbs. |
| Maximum speed | | |
| T-39D | | 482 kts |
| CT-39G | | 498 kts |
| Service Ceiling | | |
| T-39D | | 43,100' |
| CT-39G | | 40,600' |
| Maximum range | | |
| T-39D | | 1,505 nm |
| CT-39G | | 1,536 nm |
| Crew/passengers | | |
| T-39 | | 6 |
| CT-39G | | 3/7 |

# PEOPLE PLANES AND PLACES

Since March 1, 1972, when HC-4 was redesignated HSL-30, the squadron has been without an official squadron name. Cdr. B. A. Butcher, C.O. of the Norfolk-based LAMPS training squadron, decided it was time to choose one and solicited suggestions from squadron personnel. Receiving more than 50 possible names, a committee selected *Neptune's Horsemen*. Suggested by AE3 Jim Pinsonneault, who works in the squadron's corrosion control work center, the squadron insignia was inspired by the Greek mythological tale, *The Golden Fleece*.

As the story goes, after Jason's ship went aground, the tide left it stranded upon a vast desert. King Neptune sent a great horse to lift and lead Jason's ship back to sea. Just as Neptune's horse lifted the argonauts, so, too, the LAMPS helicopter acts as the eyes of the Navy's destroyers and frigates, lifting men to safety and leading the ships out of danger.

An artist's concept shows an F-18 approaching Patuxent River. Present plans call for the *Hornet* to make its first flight at NATC on September 30, 1978.


*JFK* won its second consecutive Atlantic Fleet engineering Red E and the communications Green C sweeping the aircraft carrier competition and earning the Golden Anchor Award, which is presented annually to the Atlantic Fleet carrier with the best retention record. *Kennedy's* C.O. is Capt. J. O. Tuttle.

VA-174, NAS Cecil Field, recently had a French Navy pilot check onboard for A-7E flight training. Lt. Jean Pierre Rageau came to VA-174 under the personnel exchange program, which enables foreign navies to exchange personnel with the U.S. Navy. It is open to enlisted as well as officers.

After two years of sea duty, Lt. Rageau began flight training with the French Air Force and upon completion, went back to the French Navy for carrier operations instruction, flying the *Etendard*, a light attack single-seat jet. After completion of training at VA-174, Lt. Rageau will report to VA-87.

AA Silvester Delrosario was assigned unusual duty recently on his day off. He normally works at the NS Keflavik operations department passenger service desk but this particular day he was asked to become an air controller at the Keflavik airport.

The control tower received a message that four Peruvian aircraft and one C-130 would be landing. Not an unusual occurrence, except that four of the planes didn't have anyone onboard who could speak English. Because Silvester spent his early life in the Dominican Republic and spoke fluent Spanish, the problem seemed to be solved. Only one little detail remained: Silvester had never been inside a control tower and knew nothing about landing an aircraft.

After only 4½ hours to familiarize himself with terminology and procedures, he got a chance to test his brief air controller training. The regular controller brought in the one plane whose pilot spoke English. Then, one by one, Silvester cleared the other four planes to land, making sure that he translated to the pilots exactly what the controller told him.

The planes all made it down safely and the job was over. But after he put the microphone down and put on his coat, Silvester was heard to say, "Man, I'm glad that's over."

The F-14A/missile interface team at Point Mugu recently completed flight tests by launching AIM-7E and AIM-7F *Sparrows* during one flight. This test concluded a two-year program which was directed by PMTC's fighter weapons branch. Support was provided by Grumman, Hughes and Raytheon. The program identified F-14A/missile interface problems, developed and evaluated hardware and software solutions, and recommended corrective actions.

Several squadrons have recorded milestones in accident-free flight hours. They are: HMT-204, 30,000; HML-167, 25,000; VS-30, 20,000; and VA-75, 10,000. Some other units marked their accident-free records in years: VF-74, three years; RVAW-120, three years; VA-146, five years; and VS-31, seven years.

Four *Ravens* of VA-93 celebrated their landing accomplishments aboard *Midway*. Cdr. John Patterson, C.O., completed his 300th Midway landing. Ltjgs. Tom Surbridge, Jeff Merrill and Chuck Kurella each made their 100th.

Two T-34C *Mentors*, Navy's new basic trainer, have started BIS trials at NATC Patuxent River. One will be tested for flying qualities, performance and propulsion, and the other will be used to evaluate electrical, avionics and mission systems. RAdm. Burton H. Shepherd, CNATra, accepted the first T-34C late last year, but a final operating envelope will not be determined until the evaluations have been completed.

Beechcraft's representative at Pax feels that flight students will find a much less frightening set of controls in the T-34C. "Where the old T-34B had three levers for the young student to worry about, the T-34C has one which is of prime concern," he said.

The T-34C is designed to replace the T-34B and the T-28B and C. The *Trojans* were used to provide the students with aerobatic instruction and their first carrier flights. Aerobatics will now be taught in the T-34C.

The *Mentor* brings turbine power to primary training, offering an engine that develops 550 horsepower (torque limited to 400), compared to the T-34B's 225 horsepower. It has a design ceiling of 30,000 feet but normal operating ceiling will be around 20,000 feet. A two-place tandem trainer with dual flight controls, tricycle landing gear and duplicate cockpit instrumentation for both the instructor and student, it is 28 feet long with a wing span of 33½ feet.

In the photo, the *Mentor*, Navy's smallest plane, and the NKC-135, Navy's largest plane, look like Mutt and Jeff.

The NKC-135, from ComFltEWServGru in Norfolk, was at Patuxent River for antenna pattern evaluation.

VF-171 was commissioned August 8, 1977, at NAS Oceana. Nicknamed the *Aces*, the squadron is the first Atlantic Fleet fighter squadron to be commissioned since VF-102 was commissioned at NAS Jacksonville on July 1, 1955.

The *Gunslingers* of VA-105 have won the ComNavAirLant Battle E, for the second time in three years, as the best A-7 squadron on the East Coast. The squadron also took first place in both competitive cycles' bombing derbies, resulting in the command's being selected as the ComLAtWing-1 Attack Weapons Squadron of the Year.

After a highly successful Med deployment aboard *Saratoga*, C.O. Cdr. Franklin H. "Pinky" Saunders and the *Gunslingers* returned home to Cecil Field last December.

Two other squadrons received Battle Es for the last competitive cycle. VP-23 C.O., Cdr. Don W. Medara, accepted the award during a ceremony at NAS Brunswick from RAdm. Ralph R. Hedges, ComPatWingsLant.

Moffett Field's VP-19 won the Pacific Fleet Battle E. RAdm. Charles O. Prindle, ComPatWingsPac, made the presentation to VP-19's C.O., Cdr. Andrew Jampoler. The Battle E ribbon was presented to the squadron men for their outstanding performance and uncompromising excellence in ASW readiness. VP-19 also represented the P-3 community at the Abbotsford International Air Show in British Columbia, which features aircraft from all over the world.


In every Navy squadron there is interaction between the flight surgeon and t pilots. At the weekly all-officers meeting, the doctor can be heard saying, "Watch your diet, don't get sunburned and don't let your children sleep in P.J.s treated with Tris." The main difference with the *Hellrazor* flight surgeon is that he is a fully qualified attack pilot who also instructs in VA-174 at Cecil Field.

LCdr. "Hawkeye" Hughes, better known to squadron personnel as the "Attack Quack," goes through his preflight check a little differently than other pilots. He seems to be saying, "Open wide, please," and "Let me take your pulse."


VF-191 hauled down its colors in a ceremony at Miramar on March 1 after 35 years of service. Originally commissioned as VF-19 in 1943, *Satan's Kittens* have seen combat in three wars and flown eight different aircraft models — from the F6F *Hellcat* to the F-4J *Phantom II*. Last commanded by Cdr. Dennis A. Moore, VF-191 leaves behind a proud tradition of professionalism, spirit and aviation excellence.

BuNo 152217 was one of the last F-4Bs in service in an operational Navy or Mari Corps squadron. It made its final flig

Recently from MARTD Andrews to NARF North Island, where it will be converted to an F-4N. The pilots of VMFA-321 remember it fondly as an aircraft that got the job done, whether the mission was close-air support, air-to-air combat or all-weather intercept. Induction of the last squadron F-4Bs into the conversion program marks the end of a proud era of service for the first deployable model of the famed *Phantom II*.

Aviation Officer Candidate School, Pensacola, was the site of another important "first" for Naval Aviation recently. On February 3, Ens. Beth E. Hubert received her commission after serving as AOCS's first female regimental commander, a rank awarded to the candidate in each graduating class who achieves the highest military, academic and physical fitness grades. The honor graduate also earned the highest grade-point average.

After graduation, Ens. Hubert reported to NAS Whiting Field for flight training. She considers her days at AOCS a "unique experience," but she also believes that "What's ahead will be even more unique and challenging."

They either break out laughing or ask themselves, "Now why didn't I think of that?" These are the two most common reactions when people notice that one of the F-14A *Tomcats* at Patuxent River wears sporty little fenders on its nosewheels. The fenders are designed to keep debris from being flipped up into the engines by the tires and causing FOD.

Project engineer Gary Rasponi, assigned to evaluate the fender idea, is aware that the *Tomcat* engine is very susceptible to foreign object damage. FOD recently accounted for 26 percent of all unscheduled engine removals and eight percent of all mission aborts. He feels the fenders will be a good way to document just how much FOD is tossed into the engines from the nose gear.

The fenders do not interfere with wheel changes and fit smoothly into the wheel well when the gear is retracted. All this has been demonstrated on a stationary aircraft, but Mr. Rasponi knows that someday the F-14A may have to taxi through a pile of trash as final proof. So far the new additions are saving 1,000. Even if the fenders prove that the FOD doesn't come from the nosewheel,

they will be helpful in solving the problem.

It cost NATC approximately $3,500 to design and build the first set of 15-pound aluminum fenders, but it costs about $350,000 every time an F-14A engine suffers FOD.

In photo, Rasponi checks wheel clearance on the fenders.

Changes of command:

ComFltTraGru, WestPac: Cdr. John D. Roper relieved Cdr. Robert M. Woolnough.

ComMAtWing-1: Capt. Gerald H. Hesse relieved Capt. Thomas F. Shanahan.

HAL-4: Cdr. James L. Poe relieved Cdr. Theodore G. Sholl.

H&HS, MCAS Beaufort: LCol. J. E. Strawn relieved Maj. H. A. Robertson III.

H&MS-31: LCol. L. B. Hannah relieved LCol. F. H. Menning.

VMA-134: LCol. W. Neal Dyer relieved LCol. Jacques C. Navioux.

VA-15: Cdr. Robert S. Smith relieved Cdr. Kelvin W. Huehn.

VA-305: Cdr. Louis E. Jones relieved Cdr. Ronald V. Boch.

VA-1074: LCdr. Timothy J. Lynch relieved Cdr. Clinton B. Johnson.

VF-101: Cdr. Tommy L. Sanders relieved Capt. John T. McHugh.

VMFA-122: Maj. C. T. Huckelbery relieved LCol. D. C. Escalera.

VMFA-312: LCol. D. J. Kiely, Jr., relieved Maj. C. T. Huckelbery.

VP-8: Cdr. Earl R. Riffle relieved Cdr. William E. Jackson.

VP-40: Cdr. Michael W. Gavlak relieved Cdr. Thomas J. Leshko.

VP-91: Cdr. John H. Mascali relieved Cdr. Jerry D. Lambden.

VT-2: Cdr. Roger K. Runkle relieved Cdr. John K. Taylor.

*Saratoga:* Capt. Edward H. Martin relieved Capt. Charles B. Hunter.

# touch and go

## TSC

Operational responsibilities of Patrol Wing 11's ASW sector span an area from Norfolk to Bermuda, down through and including the Gulf of Mexico and a major portion of the Caribbean.

Although much of the work done by the wing's tactical support center (TSC) in Jacksonville is classified, one of its major functions is the briefing and debriefing of operational patrol squadron crews. Through the use of computers and related equipment, TSC personnel are able to transmit vital information to P-3s in flight, as well as extract intelligence data for selective dissemination.

To assist in accomplishing its tasks, TSC has made Tactical Support Center Reserve Units 374 and 574 an integral part of its team. The primary mission of the reserve units is to augment the regular TSC forces in case of mobilization.

In order to instruct these units, TSC has initiated an extensive training program. The curriculum is the same as for regular staff members. The only difference is that the regulars get more on-the-job training because they work in the center every day. The reserves drill on weekends and in some cases are able to spend their annual two-week active duty periods in TSC activities.

According to Capt. Ronald E. Narmi, Commander, Patrol Wing 11, the reservists perform the same kind of operations on weekends that the regulars do during the week. "They have the confidence and ability required to handle the responsibilities at the center. We have a wonderful example here in Jacksonville of how the reserves can be fully integrated with the regulars." **JO2 Jan Mercurio**

## Good Bad Guys

Only a certain amount of combat training can be given in classrooms or with simulators. Eventually real ships, real airplanes and real bullets must be used. This scenario requires good guys and bad guys.

Many times the men of Fleet Composite Squadron 12 are cast as the bad guys. Most of the squadron's 17 officers and 127 enlisted men are drilling naval air reservists. Led by Commander Jim Karg, they come from all areas of the civilian community. Several of the pilots work for airlines. One owns a lumber yard. One sells and installs swimming pools. One is a real estate agent. And one is a judge. Many had combat experience in Vietnam; others have been Navy flight instructors. They all take time from their regular civilian professions to do the one thing they all love . . . fly.

VC-12 flyers provide air-to-air refueling training, banner-towing for air-to-air gunnery and towing for surface-to-air missiles. They also provide air intercept training for controllers, acting as hostile aircraft for ships and adversaries for fighter aircraft.

"In the adversary program the squadron's A-4 *Skyhawks* simulate MiGs," says VC-12 pilot and public affairs officer LCdr. Charlie Dickinson. "The A-4 can turn in a smaller radius at speeds similar to the MiGs, making it harder for the good guys to track you and shoot you down.

"We do two-on-one – two F-4s against one A-4. This trains the pilots to handle one 'bandit' by using teamwork. Then it's two-on-two and that's a real hard fight. More teamwork is needed."

During a deployment to NAS Dallas, VC-12 played the bad guys for Reserve Fighter Squadrons 201 and 202. The instruction was climaxed by a mock attack on an airfield. Four VC-12 *Skyhawks* defended the field while six *Phantoms* made the attack.

Towing target banners for the F-14s of VF-101 and Marine *Harriers* at Cherry Point, N.C., is a good guy role for VC-12. "We tow the banners 1,500 feet behind us at about 250 knots," explains Dickinson. "They come in on individual runs, fire their 20mm cannons, then go around again." Because real bullets are used, VC-12 pilots keep a close eye on the plane making the run.

During air intercept training for air controller students at Dam Neck, Va., the squadron plays both good and bad guy. Two A-4s fly to the working area together, then turn 180 degrees away from each other. Using radar, the student controller has to guide one plane to the proper

attack position by tracking both aircraft. Properly done, the good guy will end up about a mile behind the bad guy, headed in the same direction.

Using the A-4 as an aerial tanker, VC-12 also provides air-to-air refueling training for pilots in replacement fighter squadrons VFs 101 and 171. These squadrons fly F-14s and F-4s, respectively.

Based at NAS Oceana, Va., VC-12 with its nine TA-4J *Skyhawks*, is just over four years old. Recently the unit counted its 10,000th accident-free hour. Most of its pilots have logged well over 2,000 hours in jet aircraft, some have 4,000.

Cdr. Karg is quick to assert that the squadron's success hinges on the dedicated technicians who maintain the aircraft. **LCdr. T. R. Hegele**

# Mining Exercise

Cecil Field members of Carrier Air Wing 17 – VA-81, VA-83 and VS-30 – experienced the thrill of victory recently when they "planted" an almost perfect mine field during their mine readiness certification inspection. Capt. Don Brown, senior inspector, called their tally "the best attained of the 24 air wings I've inspected. The hits scored by VA-81 and VA-83 have not been matched since the program started."

In any weapons exercise, precision is the key to effectiveness. It is especially so with mines. Each functions in a special way and must be planted in its own particular place. Mines can be set to do different things: respond to different sensors, count the ships in the area, or lie dormant for days or weeks before activating their sensors and firing mechanisms.

In most forms of bombing there is some kind of visible target. In a mining exercise or wartime mining mission there is only open water. In this exercise it was the Atlantic Ocean. The target, well-defined and known to the inspectors, was only a pencil mark on the pilots' charts.

On a wartime mission, precision is difficult to measure, but in an exercise the practice weapons release small buoys and activate radio beepers. The mines are then "swept" and their positions accurately calculated as they are picked up. Arming wires, brought back in the airplane racks, indicate if the mines would work properly in combat.

"Though it looks easy, accurately planting mines is tough," says VA-83 skipper Cdr. R. J. Naughton. "We do it quite nicely with the A-7E, but the sophisticated inertial navigation hardware, digital computer and complex weapons release system require top quality maintenance. From AIMD which rebuilds the electronics gear to the plane captain who checks the oil just before launch, everything must be just right if the hits are to count. I believe these evolutions provide the single best non-combatant test of our weapons capabilities."


# NAP JONES

**Story by JO1 John Petersen**

Flying is a business with me. It's not exciting, but it's interesting. I don't go along with the theory that flying is hours and hours of boredom punctuated by sheer terror. It's a good life . . . a good way of life," so said Master Chief Air Controlman Robert K. Jones, the last Naval Aviation Pilot (NAP) on active duty. He had just completed the last lap of a circumnavigation of the globe which began in 1952 when he flew his first C-47 *Gooneybird*.

It was in 1973 while stationed in Rota, Spain, that Master Chief Jones realized he had flown *Gooneybirds* completely around the world in stages, except for one leg between Hawaii and the West Coast of the United States. He secured permission to fly the next available *Gooneybird* going east from Hawaii, but his chance didn't come until March 1977 when an old C-117 at Midway became eligible for the boneyard. Jones picked the plane up in Midway, flew it to Hawaii, on to Alameda and finally to Tucson. The circumnavigation was completed and another milestone added to a unique career.

This March the master chief passed the 35-year mark of continuous service with the Navy. (He is going to request to stay until he has 40.) He joined the Navy in 1943 and spent two years as a snipe aboard *Auscilla* (AO-56) in the Pacific before being accepted for flight training. In 1947 he was designated a Naval Aviation Pilot/Aviation Pilot First Class.

The term NAP became the official terminology of the program in 1919, although there were enlisted pilots during WW I. The program reached its peak during WW II. Master Chief "Nap" Jones – the nickname comes from his habit of napping during slack time on a flight – is the only NAP still flying for the Navy. The only other NAP on active duty in any of the services is Coast Guard ACDM/AP John P. Greathouse.

The first duty station for Jones was as a ferry pilot at NAS Akron where he flew TBMs, F8Fs, SNB Beechcraft, J-Birds – and *Gooneybirds*. He deployed with the first reserve VA squadron and qualified in bombing and rocketry. He was with the first reserve VA squadron qualified to fly aboard a carrier, in 1952.

After duty at Quonset Point and Corpus Christi, he went back to the ferry command and by 1960 was qualified in 26 different types of aircraft ranging from the JD, FJ, [illegible] and A4 to the P5M. He had taxied th[illegible]

P6M when the program was cancelled.

From 1960 until 1963 he was stationed in Blackbushe, England, flying R4Ds/C-47s. The Jones family — wife, Betty, and two sons, Wenzel and Paul — next journeyed to Barbers Point, Hawaii. In 1967 it was back to the States for the family and off to Vietnam for Jones. At NSA Saigon he flew C-47s and US-2Bs.

On the first day of the Tet Offensive (February 1968) he was riding shotgun in an H-34 when the tail rotor was shot off. The chopper crash-landed on the NSA building in downtown Saigon. Jones was not injured.

In 1968 his family rejoined him in Rota for a 15-month tour and then it was back to England. At NAF Mildenhall he taught *Gooneybird* pilots for two years. He went back to Rota again in 1972 where one of his jobs included ferrying a C-47 to Djakarta, Indonesia. At Rota he was the European area Natops evaluator for R4Ds. In July 1976, he returned to Mildenhall where he was quality assurance officer and a line pilot flying C-131s.

Speaking in a soft, southern accent the chief tells of the closest he ever came to "spinning in:" "It was my own fault. I almost wiped out a whole P5M crew during a night landing in San Diego. The copilot figured I knew what I was doing but, in fact, I was napping. The visibility was zero; the ceiling was zero. Suddenly I woke up and saw that my altimeters were reading below sea level. I pulled the yoke back and firewalled it. The copilot looked over and said, 'I see some green haze down there.' That's how close we were to the water!"

Over 11,000 flying hours have given Jones experience and insight into the Navy's flight program perhaps unmatched by any other individual. Asked if officers have difficulty accepting advice from him as an enlisted man he replied, "They normally don't." He thinks flying is "a matter of experience and qualification, not of rank."

The master chief would like to see the enlisted pilot program back and makes a pitch for it every chance he gets. "The old NAPs I knew," he says, "took off their flight suits when they landed, put on dungarees and went to work on the aircraft. That gives you a better pilot than a man who lands,then goes to work in an office. Living with the aircraft the way we did and working on it ourselves we knew what the penalties were if we goofed."

NAP Jones is the last of a special breed of Navy flyers. The Navy trained 3,700 enlisted men as Naval Aviation Pilots between 1917 and 1947. They have been overtaken by events, but their usefulness and dedication are hallmarks in the annals of Naval Aviation.

Master Chief Jones is currently flying from Pensacola where he has a home and would like to retire someday. But his retirement won't be the end of the Jones family in the Navy. Nap's son, Paul, is in his second year at the Naval Academy and expects to soon be flying the same skies that are so familiar to his father.

**Bob Jones, previous pages, clearly thrives in the air as the last NAP. At the other end of this richly populated spectrum is Kiddy Karr, the first Naval Aviation Pilot. Kiddy thrives in a different way – with pen and memory book. This time he takes us back to the 20s and tells the tale of a . . .**

# Taxi Up the Lobster Coast

Late one autumn afternoon in 1923 I was in my quarters on USS *Wright*, a seaplane tender for Aircraft Squadrons, Atlantic Fleet. We had been anchored in New York's North River for 10 days of R&R and were scheduled to leave the next day for several weeks of bombing practice and operations with the fleet off the New England coast near Newport, R.I.

A messenger found me. "Sir," he said, "You're to report to the quarterdeck in flight gear immediately." I hustled into my clothing, went topside and found my aircraft commander, Lt. Rodd, our plane crew and an admiral from the supply fleet wearing coveralls and helmet. He had been granted permission to be flown to his Newport home a day ahead of schedule and we were to get him there. (Lt. Herbert C. Rodd, incidentally, was an ensign and radio operator on the famous NC-4, first-across-the-Atlantic flight.)

Our F5L flying boats were powered by two Liberty engines. The crew consisted of two pilots, Rodd and myself, and three crewmen. We had open cockpits, of course, fabric-covered wings and hull bottoms which consisted of thin cedar laminations.

The normal procedure for getting underway when anchored in a river or tideway was to remove the engine covers, start one engine and run it at low rpm for warm-up. Then we would secure it and warm the other power plant before pulling in the anchor. We would restart the first engine and slowly walk-up on the anchor to avoid drifting down river out of control.

With battery ignition, the well-tuned Liberties idled so slowly and smoothly you could almost count each revolution. Chick Curran was our chief mech, a superb man with a wrench and screwdriver. He and those Liberties got on just fine.

Another plane had been ordered to accompany us. After arrival at Newport we were to secure our own accommodations and wait for the rest of the squadron to arrive.

The Admiral climbed into the observer station in the bow and we started up. Since we had the SOP (senior officer present) aboard, we launched first and headed down river for Long Island Sound. There was a low ceiling and the windshields misted over shortly after we got airborne. We were uncertain about the weather which awaited us.

It was chilly and uncomfortable flying over the water. We ran into a fog bank which forced us down to 50 feet where it was clear except for a few fog patches. I mentally calculated our reverse compass course, just in case.

I looked rather ominously at Rodd. He held up one finger, which meant we'd fly one more minute and then turn back if weather didn't improve. Happily we broke into the clear. The ceiling was up to 500 or so feet. We set up a circling pattern to await number two but after a few turns decided to proceed alone.

We hit patches of fog and could barely see the instruments, the main ones being turn-and-bank and airspeed indicators. Rodd and I alternated flying and, when it was my turn at the wheel, I concentrated on airspeed which, to me, was the most important factor. Without speed you don't fly. In our case, if we ran out of airspeed we surely would run into the drink.

We tried hugging the coastline but the fog pushed us lower. The moisture from it soaked the outer layer of our flight suits. The icy air seemed to penetrate through our bodies. Above the cacophony of the engines' roar I yelled to no one in particular, "Oh, for the life of an Naval Aviator!"

We hit a clear area east of New Haven and, spirits up, Rodd shouted in my ear, "New London next!" We were down to 300 feet now and eased closer to the shoreline which we could see a few seconds at a time through the frosty haze. Rodd's goggles were fogged over, the windshield was fogged over and, as far as I was concerned, the entire F5L was fogged over. I remembered a flight some time before. There was heavy rain and I held my hand across my face and looked through cracks between my fingers to see. This method worked now and I could see fairly well using it.

I glanced at the dash. The ball was wedged in one corner. The compass card was spinning clockwise. We were out of trim and turning wildly. I prayed with the intensity of those who go in harm's way and have a moment to do so. "Please, Lord," I said, "Get us out of this weather and please don't let New London be fogged in."

As it in answer to my supplication we broke into a clear spot. Joy! We were in a bay. I could see an old, red brick lighthouse rising from its center. We could land and get our bearings. Since I would be making the subsequent takeoff I pre-cautioned myself to give the lighthouse plenty of room.

"Rig the anchor!" ordered Lt. Rodd after we stopped. "Drop it and let out about nine fathoms of line. We'll wait a bit for better weather."

I looked at the Admiral in his bow station. He was soaked from the waist up, that part of his body having been exposed to the fierce wind and moisture. He looked back and grimaced at Lt. Rodd. Lt. Rodd grimaced in return as if to say "I know how you feel, sir."

The Admiral was a very unhappy man but those of us in the crew were ecstatic. We were down out of the fog, if only temporarily, and had achieved sanctuary on the water.

It was dusk now, about 1800, and the sky had a murky, translucent look to it. The early moon seemed to be shining on top of the fog layer. Our stomachs told us it was supper time.

"Shall we open some emergency rations, gentlemen?" Lt Rodd asked, referring to canned brown bread and baked beans. We had no box lunches. An emphatic "No!" resounded in the collective voice of the crew. We weren't that hungry yet.

So we sat where we could and stared at each other and the surrounding sea, waiting for the fog to lift. The smoking lamp was out and there was a noticeable restlessness among us. A half hour passed. We rocked gently on the water.

"Lt. Rodd," called the Admiral, finally. "The fog is lifting. It is much brighter out there." Lt. Rodd looked in all quadrants of the sky and, with measured courtesy, said, "Can't agree with you Admiral. I am afraid the wish is father to the thought." Which I thought was a bit presumptuous, but eloquent.

It grew colder as we waited. I wished I had worn my French fur-lined coveralls. Fifteen more minutes passed and I could tell the Admiral's desire to get home was accelerating. Visions of cocktails by a cosy fireside may have been dancing in his head.

"Lt. Rodd," announced the Admiral, "I am *certain* that the fog is lifting. Let us proceed."

Our aircraft commander shrugged wearily. "Yes, Sir," he said.

"Oh, Admiral, Sir," he added, "Would you assist us please and haul in the anchor while we start engines. Which he did. And which we did. Our blood began circulating again. The Liberties hummed as we walked-up the anchor line. The Admiral pulled the heavy, wet rope while I jockeyed the throttles. Rodd checked the course on his plotting board map. Soon we were ready for another takeoff.

I revved the engines and the flying boat churned mightily across the darkening water. We gathered speed and lifted off. I began a gentle port turn a few feet above the waves.

All at once it was there. The red brick lighthouse. In front of and looming down on us. Horrible visions raced through my mind while I wound down the left wing and raised the nose. The flipper turn was clumsily but safely executed. The lighthouse slipped precariously beneath us. Thoroughly embraced by the fog I continued turning back to the clear spot over New London harbor. We alighted on planet earth again, breathing rather heavily.

Frustrated, uneasy with the mission's progress, Lt. Rodd looked around eagerly for a fishing boat. There were none in sight. (Later, he told me he wanted desperately to find a boat which could tow us to a safe anchorage for the night.)

After silent cogitation, the Admiral asked, "Lt. Rodd, won't these machines make fair speed on the water?" Rodd replied hesitantly, "Well, yes, Sir . . . that is . . . but only to taxi from ramp or anchorage to takeoff area." The Admiral had stopped listening when he heard the word yes.

"Well then," he said, "let's start for Newport."

Rodd later confided to me that he, Rodd, was legally, captain of the ship, but at that moment he rapidly reviewed his future naval career pattern, recalled his orders, albeit verbal ones —

Kiddy Karr displays his NANews press card.

Take The Admiral To Newport – and concluded it was worth the effort to press on.

"Right you are, Sir," said Lt. Rodd to the Admiral.

"Start engines and let's get underway," directed Rodd.

"Sir," I said to Rodd, "this is the lobster capital of the world. From here to Newport, pot buoys for the traps below will be all over the place. They're made out of anything that will float. We have to dodge them."

"Concur," he said, probably wondering if this episode was really happening to him.

I went on. "Let's devise signals. A tap on the shoulder means turn that way. A hard tap means full speed, turn that way. A tap on the head means kill the engines."

He agreed and we moved forward. We passed the lighthouse in more tranquil fashion this time. I tossed it a jaunty salute as we droned by. Visibility and fog remained our enemies. Rodd didn't dare take his hands away from the throttles because I was tapping his back constantly. We glided by buoy after buoy. In one instance I nearly toppled overboard as we coasted by a sneaker, a low flat buoy.

I glanced aft. Something was wrong with Chick, the mechanic. In the milky gloom he looked white as a ghost. His hands were locked on the interplane wires as he stared down past the stub wing alongside the hull. I leaned over the side.

Then I turned white! It was grotesque. Monstrous. There, in the water, was a huge fish, its mouth opening and shutting like a gargantuan trap. It was hugging the hull, glaring up at us with dish-sized eyes. A sea bass, perhaps. I read somewhere they can run to 600 pounds. I had the feeling that my 135 pounds, wringing wet, would make a fine culinary delight for him.

The fish seemed to skim along with us without moving a muscle. Eventually he slid away and we sailed on, zigzagging off in the last glimmer of daylight. Standing up in the pilots' seats was difficult because we didn't have restraining devices or hand rails. Since there was only a four-foot space between the bottom of the prop arc and the sea, we had to avoid overcontrolling the craft as much as possible. It was my turn at the controls. Waves crested on our starboard bow, lifting us up before we coasted down on the back side of them.

Rodd smacked me two hard cracks on my right shoulder. I shoved the port throttle open. The right wing dipped and we made a frenzied turn, narrowly missing two buoys in our path. I grabbed Rodd's coat a moment later when it looked like he was going into the drink. After we settled back on course, I studied my aircraft commander's face. He was wiping his brow. I could almost feel him aging.

The buoys were fewer and farther between now but the waves were greater, smashing up against the F5L. I figured we had moved east of Fishers Island and were in the open Atlantic. I imagined the denizens of the deep. The vision of green-grey crustaceans pacing awkwardly along the ocean floor was unsettling. Throw in a big-mouthed fish or two and I was instantly appreciative of my vocation in the sky.

Lt. Rodd examined his chart with a flashlight and ordered a course change to 80 degrees which would lead us, hopefully, on to Newport. In all the excitement I had forgotten the Admiral. Only his head and shoulders showed now. He must have found a bucket or something to sit on. He was a lonely sight, riding there in the nose of the flying boat. He was suffering, surely, but betrayed no discomfort. Still I wondered: would he trade places for the back seat of a yellow cab right now?

"Have we passed Newport, do you think?" Rodd asked.

I tossed my hands up. "Your guess is as good as mine. I think we've been driving long enough to be past Cape Cod."

"OK," said Rodd. "Turn direct toward the beach. We'll take a look."

We did so and soon could hear waves breaking on the shore. Rodd idled the engines so we could weathercock and "back" in. As we drew close to land I saw some trees. Odd, I thought. Don't recall trees standing this close to shore around here.

One of the trees moved. They were people! They must have heard our engines and rushed down to see what was up.

"Which way to Newport?" Rodd shouted.

We were a sight, all right. A huge, lumbering silhouette, engines growling in the darkness. The trees yelled back but we couldn't understand them over the clamor. They pointed eastward, though, so we waved our thanks and surged ahead.

By now every one of us wanted this hop to end. A fog horn blared in the distance.

"Must be Point Judith Coast Guard Station," said Rodd. "off to our port side." We eased in left rudder. Each minute dragged like an hour.

All at once we entered into a calm sea. We were in sheltered water. Through the fog I could see a lighthouse beam poking through the grey-black mist. Point Judith!

"Let go the bow anchor," ordered Rodd after we stopped. It splashed reassuringly into the water. Our trip was over. We secured the engines, covered them with tarps and prepared to stay the rest of the night with our aircraft.

A chug-chug-chug sound approached us, signaling the arrival of a small fishing boat. A man in oilskins said, "You're right in the middle of the channel. You're gonna get hit by another boat. Toss me a line and I'll tow you to a safer place!"

We did, and he did. Then we piled into his boat, abundantly filled with fish, and rode into the station dock. The fisherman took the Admiral in tow and found him a car to get home in. As he was departing, the Admiral turned back. "Lt. Rodd," he asked "Where will you fellows be staying?"

"I don't know, Admiral," replied Rodd quickly with a bite in his voice, "but we are going to be right here tomorrow morning. I'll promise you that." Which was his way of saying there sure as hell wasn't going to be any more flying or taxiing on the high seas tonight!

A little later an officer from the station took us in tow, fed us a warm meal and bedded us down for the night. Turned out our wingman chose discretion over valor and, after confronting that fog bank, returned to the North River.

# South Pole Approach

**Story by Lt. Jim Calhoun**

**Photos by PH3 Frank Bair**

The sound is heard long before the aircraft is seen. It's the loud droning of a ski-equipped LC-130 *Hercules* of Antarctic Development Squadron Six (VXE-6), coming in for another resupply mission. The pilot radios for instructions as he would at any other airport or landing facility. The calm, reassuring voice of the air traffic controller over the UHF tells him, "You're on glide path and on course."

You'd think the pilot was landing at O'Hare Airport instead of the air landing facility at the South Pole Station, Antarctica, over 9,000 feet above sea level with temperatures that average -50 degrees.

Barely 65 years ago, the fateful race between Roald Amundsen and Capt. Robert F. Scott to the Pole was completed – in dogsleds. Now, by comparison, the people at the South Pole live in relative luxury. They have their own lighting and water systems, recreational and berthing spaces and their own airport, complete with air traffic controllers.

The total complement of the Air Traffic Control Facility at the Pole is two men, one air traffic controller and one electronics technician. Selection for such an assignment represents the highest form of respect for a man's ability to work without supervision.

Due to the location and vast distance (650 miles) between South Pole Station and the home base of deployed forces at McMurdo Station, it is impossible to provide the supervision and assistance normally available to controllers or to the technicians performing corrective and preventive maintenance on the electronics equipment.

The equipment at the South Pole consists of Tacan, FPN-36 quad radar, combined radar room and control tower, Q-60, UHF radio beacon and various communications systems.

The landing field is a skiway carved out of the harsh and unforgiving terrain. The distance to an alternate landing site is tremendous, the margin for error is nil. The pressure is on for every approach.

This past season, AC1 Keith Keys and ET1 Keith Belt, photo, were chosen to place the facility at the Pole in an operational status. The dig-out, the equipment checkout, alignment, repositioning and certification for flight safety of the equipment by the petty officers is a tremendous responsibility.

The two men are the only military personnel assigned to the scientific research station. About 40 scientists and investigators from the United States and exchange scientists from signatory nations of the Antarctic Treaty make up the population of South Pole Station.

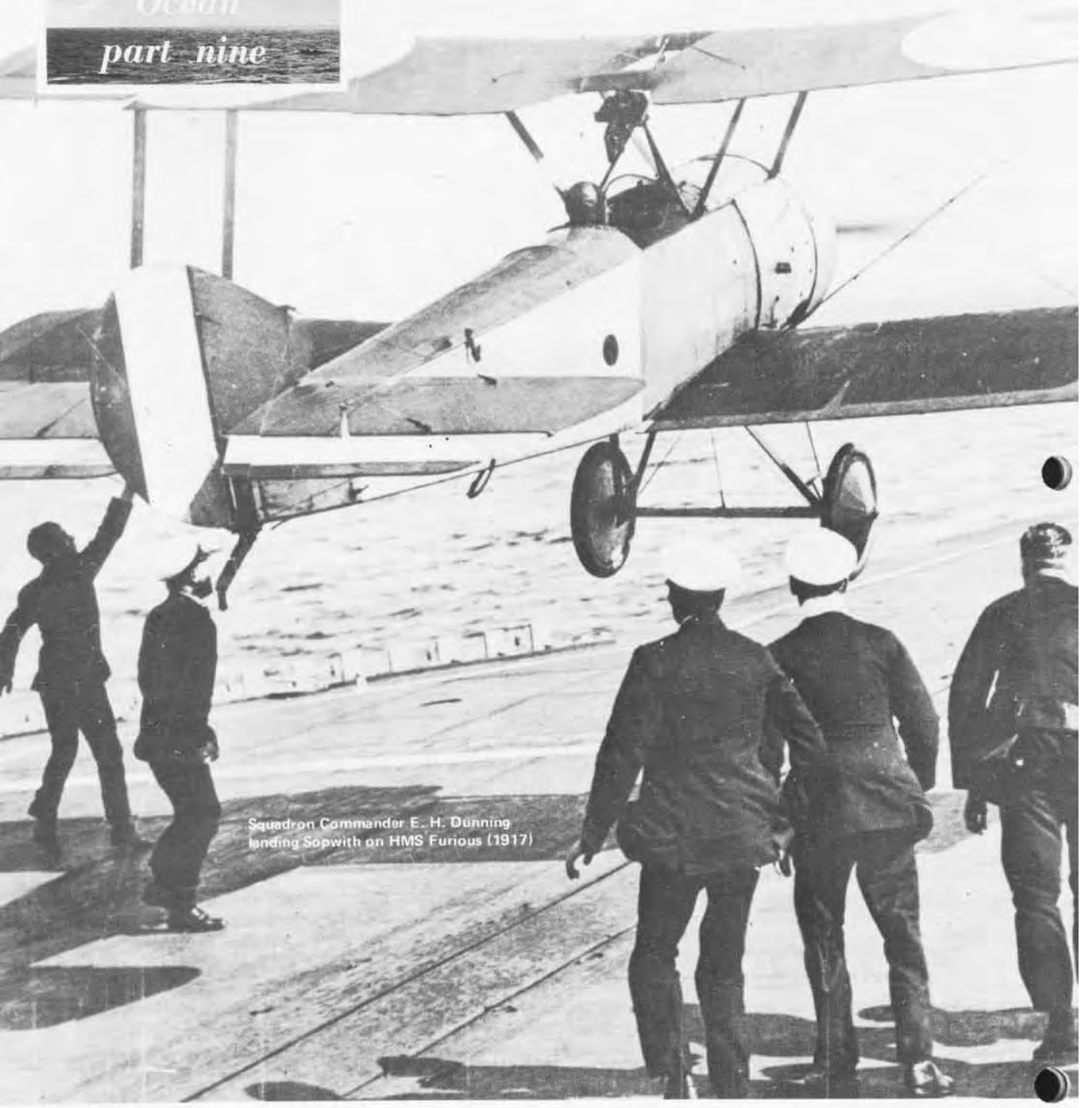
Task Force 199, comprised of Naval Support Force, Antarctica and VXE-6, deploys to Antarctica during the austral summer, October through February, in support of science research projects conducted under the auspices of the National Science Foundation. The Support Force also maintains a small detachment of Navy men who run McMurdo Station during the austral winter.

*A History of Sea-Air Aviation*

# Wings Over The Ocean

## part nine

By John M. Lindley



Squadron Commander E. H. Dunning landing Sopwith on HMS Furious (1917)

Prior to WW I, the biggest continental navy belonged to Imperial Germany, the rival of Great Britain. Like the British, the Germans initially concentrated upon the development of lighter-than-air craft. Thus the German Navy acquired its first zeppelin, LZ 14, in the fall of 1912. This rigid airship served as a training ship and took part in maneuvers with the High Seas Fleet in 1913. During these maneuvers, it scouted ahead of the fleet in accordance with accepted naval doctrine. Although the German Navy was committed by 1912 to airship development, its program moved slowly because its first two dirigibles crashed before the third, LZ 24, was ready for service in the spring of 1914. After war broke out that summer, the German Navy stepped up its rigid airship operations.

The only other major navy to become involved in a substantial aviation program before WW I was the Japanese. In 1912 it sent five officers to flight training, thereby beginning a program in Naval Aviation. Two of the officers went to the United States for their training; the other three went to France. At the same time, the Japanese Navy bought three aircraft including two British-built Maurice Farman float biplanes. The Japanese Navy refitted a naval transport as a seaplane tender in the fall of 1913. Since Japan was not widely engaged in the naval operations of WW I, its Naval Aviators took part in only one minor action.

By 1914 all the major navies of the world had begun to organize aviation branches as a supplement to the conventional operations of the fleet. The prevailing naval doctrine was that both lighter-than-air and heavier-than-air craft would be used for coastal defense and naval scouting. In either mission the emphasis was on a defensive or passive role which would aid the capital ships of the fleet in bringing an impending engagement with enemy ships to a victorious conclusion. To assist in the implementation of this doctrine of scouting and coastal defense for airplanes, the U.S. and British Navies experimented with various methods for launching and recovering airplanes from warships. One experimental method was the catapult. On November 5, 1915, LCdr. Henry C. Mustin was the first aviator to catapult from a ship in an airplane. Mustin flew an AB-2 flying boat from the stern of the battleship *North Carolina* in Pensacola Bay. Although the concept of an aircraft carrier could have been developed as a possible means for recovering aircraft, it was temporarily ignored because such a vessel did not, as yet, seem necessary. Only when the Royal Navy found that wheeled aircraft alone had the necessary characteristics for intercepting zeppelins and for bombing their bases would the carrier become a logical addition to the fleet, because it could provide both a take-off and landing platform for naval aircraft.

When the General Board of the U.S. Navy, which was the principal advisory body for the Secretary of the Navy, surveyed in 1916 "the possible naval uses of aircraft," it concluded that "aeronautics does not offer a prospect of becoming the principal means of exercising compelling force against the enemy." In this judgment the General Board meant that the airplane would not be a major weapon for defeating an enemy fleet in the same way that naval guns already were. Naval Aviation would not replace the dreadnought and the battle line, the Board argued, because its range was too short and its offensive capabilities, relative to those of capital ships, were too small. Thus the Board foresaw aircraft in the fleet being used for scouting, patroling and spotting naval gunfire. It also recognized that aircraft should have some fighting capacity. Despite this limited offensive mission, the General Board's overall recommendation was that Naval Aviation serve in a "subordinate role" within the fleet. Even though this recommendation of 1916 came from a board of senior naval officers in the U.S. Navy, the naval authorities of every other major fleet in the world would probably have agreed at that time with the conclusions. WW I would soon begin the process of reevaluating these conclusions.

After the outbreak of war in 1914, all the major navies of the world began

to develop their aviation arms so that by the time the United States entered the conflict in April 1917, aviation was a vital part of the war machines of all the combatants. The war did more, however, than just accelerate the growth of Naval Aviation as measured in numbers of trained pilots or aircraft available. It further aggravated the problem of determining the best operational function or mission of both heavier-than-air and lighter-than-air craft. This unsettling of the adaptation of naval doctrine to accommodate limited use of aviation prior to 1914 was compounded by the rapid technological development of land and sea aircraft, and to a more limited degree, of airships as well, during the conflict.

Presumably the governments of each of the warring powers decided to utilize Naval Aviation because they felt it would help win the war; yet this policy alone was not sufficient to ensure victory because each combatant developed defensive tactics and aerial forces to counter the aggressor's air offensive. One instance of this inability of combatant navies to exploit the airplane or the airship successfully within the confines of existing doctrine took place at the Battle of Jutland in May 1916. During that famous engagement between the British and German battle fleets, neither the single British reconnaissance planes nor the German zeppelins were able to exercise any substantial influence over the course of the battle. Probably neither naval staff expected the aircraft to have an important role in the battle. The ineffectiveness of the British Short seaplane and of the zeppelins was the result of shortcomings in the aviation doctrine and technology of both navies. During the battle, the Short did discover and report the movements of the German fleet, but the seaplane tender *Engadine*, which received the reports, was slow in relaying them to the British fleet commander and lacked the speed necessary to keep up with the battle cruisers which would have benefited from aerial intelligence. The limited exploitation of Naval Aviation in the Battle of Jutland was only one case when possession of a potentially superior weapon did not grant victory. In addition to the superior weapon, naval forces needed a doctrine which defined how that weapon could best be used and a weapons system sufficiently developed to carry out that mission successfully. The fact that the British had just one seaplane out scouting for the German fleet indicated that Royal Navy strategists assigned Naval Aviation a peripheral role even in scouting. The technological shortcomings of *Engadine* illustrated just how uncertain naval planners were about aircraft-carrying ships.

There were many other instances where aircraft and airships did perform valuable scouting and reconnaissance flights. A typical example was in operations against the German U-boats. To hunt the U-boat, the British purchased the Curtiss *America*, the twin-engine flying boat which Glenn Curtiss had built in 1914 to fly the Atlantic. When it proved inadequate, larger aircraft were developed, some by Curtiss and others by the English at Felixstowe. A final result of this cross-nation fertilization was the F-5, a Felixstowe design which was modified by the Americans to use the Liberty engine and placed in production as the F5L.

Flying boats alone could not subdue the marauding U-boats, particularly in the early stages of the war when British heavier-than-air craft were severely limited in range and staying power. Consequently, in February 1915 the Royal Navy began to use a number of small, but fairly fast (40-mph), non-rigid airships to hunt the U-boats in the English Channel, and the North Baltic, Mediterranean and Irish Seas. By the end of 1916 the Royal Naval Air Service (RNAS) had 27 C-type submarine *Scouts* active in antisubmarine operations.

Pilots and crews of both the flying boats and airships found that hunting for U-boats was monotonous and dangerous. U-boats were hard to spot in the choppy waters off the coast of England, so submarine patrols learned to look for patches of oil on the surface and to spot periscope wakes. They even studied seagulls, because sometimes they gave away the presence of a German submarine. When the British adopted the convoy system of sailing merchant ships across submarine-infested areas in March 1917, the airships and flying boats began convoy protection. The flying boats, in particular, used "spider web" patrols which were an out-and-back pattern from a central point along radial arms. Since the U-boats had taken a terrific toll of merchant ships supplying Britain, these patrols were designed to keep the subs "down" and thus more vulnerable to attack when they finally had to surface to recharge their batteries.

On May 20, 1917, a British flying boat bombed and sank U.C. 36, the first submarine to be sunk by air attack. In contrast, dirigibles lacked the speed and maneuverability to sink a U-boat, but they were able to radio the sub's position so that nearby merchant ships could avoid it and surface escorts could try to sink it with depth charges. When the U.S. joined the war, its fledgling naval air arm quickly adapted these British sub-hunting techniques and, therefore, contributed greatly to the success of the convoy system by defeating the U-boat attempt ending its stranglehold on Britain's line of supply.

Reconnaissance, gunnery spotting and the detection of submarines were all fleet aviation operations which naval planners had foreseen prior to 1914. However, the nature of the war at sea soon produced both unexpected and unprecedented developments in Naval Aviation. The first of these came early in the war – at Gallipoli, a peninsula in European Turkey along the north shore of the Dardanelles, where the British launched an invasion in 1915. Problems with Turkey had arisen in August 1914 when two German cruisers sought refuge from their Royal Navy pursuers in the Turkish Dardanelles. By the end of 1914 this incident had helped Turkey join Germany in war with England and Russia. With the support of Winston Churchill, who was then First Lord of the Admiralty, the Royal Navy sent a force to the area in February 1915 to begin what soon became known as the disastrous Gallipoli campaign. The objective was to capture Istanbul. The B

LZ-1 over Lake Constance. Note floating hangar.

ish might have achieved this goal in the early stages of the campaign, but they dissipated their initial advantages and failed to accomplish much of anything. Despite these military failures, the Gallipoli campaign is significant in the history of sea-air aviation because it was the first time in which Naval Aviation participated in amphibious operations.

The initial British invasion force which included the aircraft carrier *Ark Royal*, a merchant ship converted for operations as a seaplane tender, arrived at its base at Tenedos in February 1915. *Ark Royal* was 366 feet long and had a maximum speed of 11 knots. She was fitted with a 130-foot flying-off deck forward of her superstructure. Steel cranes on the ship could lower or raise seaplanes to the water. Her single hangar held eight seaplanes which were especially useful in aerial reconnaissance and gunnery spotting.

Later, in June 1915, another seaplane tender, a converted cross-Channel steamer named *Ben-My-Chree*, which had a maximum speed of over 24 knots, arrived at Tenedos. These two seaplane carriers and their aircraft took part in the landing of British, Australian and New Zealand troops at Sulva Bay on the night of August 6, 1915. The small British aviation force managed to hinder Turkish efforts to reenforce their troops at the landing area. The seaplanes also spotted for naval gunnery, bombed harbors in the area and torpedoed enemy shipping. One plane recorded the first sinking of a ship by aerial torpedo. Despite the work of the Naval Aviators, by September the landing at Sulva Bay had turned into a stalemate. The British and Anzac troops hung on until December when they withdrew with little to show for their efforts except a great loss of men. Although the Gallipoli campaign came to an inconclusive end, Naval Aviation had shown what it might be capable of doing in amphibious operations. A convincing demonstration of that potential would have to wait until WW II.

In contrast to that demonstration, the German rigid airships turned out to be an unexpected military failure. In 1914, France, Germany and Great Britain all had small fleets of airships which they planned to use in scouting operations and coastal defense. During the war all three nations used airships, particularly nonrigids or blimps, for these tasks, but the Germans alone tried to develop the rigid airship as, what historian Douglas H. Robinson calls, a "war-winning weapon."

When the Germans found that the in-depth British blockade of the High Seas Fleet prevented the Kaiser's warships from defeating the British fleet in a traditional naval battle, they pressed the rigid airship into service as a scout and strategic bomber. After obtaining permission from the Kaiser, German Army and Navy zeppelins began to fly across the English Channel to bomb London. In the first raid on the night of January 19, 1915, two zeppelins managed to reach Great Yarmouth and King's Lynn where their bombs caused some damage and killed four persons. Initially the Kaiser had forbidden any bombing of British royal palaces but, as the English defenses stiffened, the zeppelin crews paid little attention to specific targets. The most destructive raid occurred on October 13, 1915, when five zeppelins killed 71 persons and injured another 128 with their bombs. The British responded to the raids with the construction of extensive anti-aircraft batteries around London and the development of night fighter squadrons which were able to shoot down the hydrogen-filled airships in increasing numbers.

At first the zeppelins had little to fear from British fighters, which were not able to climb as fast as the airships. But the development of aircraft forced the zeppelins to climb higher and higher as they sought to avoid attack. By the end of 1916 six zeppelins had been shot down and others lost to the weather and poor navigation. Consequently the German Navy turned to building what the British called "height climbers" to bomb London from altitudes as high as 16-20,000 feet. Even this tactic did not always provide a sure refuge from the British defenses. In the last major raid of the war (October 19, 1917), for example, 5 of 11 zeppelins failed to return to their bases. After that raid, no more than five zeppelins at a time attacked England.

The record of damage caused by German airships between January 1915 and August 1918 shows that the zeppelin was relatively ineffective as a war-winning weapon. In 51 raids on Britain, zeppelins dropped 196 tons of bombs, killing 557 and injuring 1,358. The greatest losses and prop-

F5L

erty damage took place in 1915 when the British defenses were not well coordinated. Despite this slight record of overall damage, the raiders did manage, by the end of 1916, to tie down 12 Royal Flying Corps squadrons and 110 aircraft in home defense. The Allies could definitely have used those squadrons in France.

The zeppelins failed to do more damage in England because they had great difficulty in locating the cities which were their targets. This problem of navigation was compounded when the Germans began to use the height-climbers in 1917. At altitudes in excess of 15,000 feet, they encountered strong winds, a lack of oxygen for the engines and crews and bitter cold, further reducing their effectiveness.

The German military believed at the outset of the war that the zeppelin would provide aerial superiority against the low-powered and unreliable British fighter aircraft. Yet British antiaircraft defenses and improved fighter planes neutralized the zeppelin's initial advantages. The result, writes Douglas Robinson, was that the "hydrogen-inflated rigid airship ended WW I completely discredited as a combat weapon, even in Germany, where 106 were completed during the conflict."

If the failure of the zeppelin to realize its potential as a war-winning weapon was one of the unexpected results of the war, surely the first London blitz in 1917-18 was one of the unprecedented events. Strategic bombing in warfare had first occurred in 1912 when the Italians used airships to bomb Tripoli in the Italo-Turkish war. The zeppelins had tried to bomb England into submission in 1915-18 but failed. In contrast, the German *Gotha* and *Giant* bombers of 1917-18 nearly succeeded. Airplanes had flown over the English Channel and bombed London as early as December 1914. In the first 30 months of the conflict, these infrequent raids had killed 20 persons and wounded 67. In 1917 the German Army high command changed its tactics. It began daylight raids on London with *Gotha GIV* heavy bombers.

The *Gotha GIV* was a biplane with an upper wing span of nearly 78 feet. Two Mercedes engines mounted on the lower wing produced 520 horsepower, giving the plane a cruising speed of 80 miles per hour. The aircraft was fitted with a rudimentary oxygen system so that the crew of three could drop their bomb load from as high as 14,000 feet. Since the *Gothas* were faster than airships and able to fly as high as the zeppelins, the British fighters had great difficulty in finding them and shooting them down.

The other German strategic bomber, Staaken R VI, *Giant* had a wing span of more than 138 feet, only 3 feet shorter than the B-29 *Superfortress* of WW II fame. It was the largest German aircraft produced in any quantity in WW I. The R 39 had four 245-hp engines mounted fore and aft between its double wings, and carried a crew of 7 to 9. It had a range of almost 300 miles, a high speed of 80 miles per hour. Both it and the *Gotha* were armed with machine guns for fighting off British interceptors.

The first bomber raid came on June 13, 1917, when 17 *Gothas* flew over London in the middle of the day. Their bombs killed 162 and wounded 432, more damage than had resulted from any zeppelin raid. Even more important was the psychological impact. The raids not only raised great fear among the British civilian populace by revealing how inadequate the British defenses were, but also involved the civilian population directly in the war. London and the British home front were now part of the battlefield. The British government reacted to the raids by implementing civil defense measures: designating air raid shelters, installing warning sirens, and establishing emergency fire and medical services.

When the British antiaircraft and fighter defenses began to improve over the summer of 1917, the bombers switched, in September, to night attacks. These were more difficult. Blackouts hindered accurate navigation and searchlights tracked the bombers. Nevertheless, the *Gothas* and *Giants* continued to pound London and its environs. In response, the British installed barrage balloons and steel curtains to force the bombers to fly up to a common altitude where their antiaircraft fire would be more effective. The peak of the bombing raids came in late September and early October when the *Gothas* and *Giants* staged six raids in eight days. This blitz wounded 259 and killed 69. Ten *Gothas* were lost.

The London blitz of 1917 had two important results. In September the British populace and many of its leaders, including Prime Minister Lloyd George, began calling for reprisal bombing raids on German cities within reach of Allied bases on the continent. At the same time, critics began to demand a reorganization of British military aviation. Parliament took up the matter and decided, on November 29, 1917, that the Army's Royal Flying Corps and the Royal Naval Air Service could better defend England if they were combined. The result was the Royal Air Force (RAF), fully independent of the Army and Navy. While Parliament and the government were establishing the RAF, British bombers on the continent began to fly reprisal raids on German industrial targets.

In late 1917 the *Gothas* and *Giants* began to meet their match — the British Sopwith *Camel*. Bomber losses due to these fighters and other factors, in combination with the spring offensive of the Allies in 1918, forced the Germans to divert more and more of their bombers to operations along the trench lines in France. Thus the last bomber raid on London was also the largest. On May 19-20, 1918, 33 bombers crossed the Channel headed for London. British fighters shot down seven. In 52 raids in 1917-18, the German bombers killed 1,414, wounded 3,416 and caused extensive property damage. In addition to this legacy of widespread death and destruction, it was ironic that the raids resulted in the creation of the RAF and the development of British fighters and bombers which would eventually become the fighter forces used during the Battle of Britain (1940) and for night strategic bombing raids on the Third Reich.

Another result of WW I, which would come to maturity in WW II, was the initial concept of the aircraft carrier. When the U-boat and zeppelin attacks required the Royal Naval Air

Gotha

Service to protect the east coast of England from air attack and to safeguard merchant shipping in the North Sea and English Channel, the aircraft carrier became a logical solution to the problem of taking aviation to sea with the fleet. When the war began, RNAS had only 130 officers, 700 enlisted men, 39 landplanes, 52 seaplanes, and 7 airships. Pilots and crew members could be trained and more aircraft built, but as long as the RNAS had such long coastlines and sea lanes to protect, it would have to have some means for operating aircraft at sea.

The first attempt to take planes to sea came in October 1914 when the Royal Navy fitted out an old light cruiser, HMS *Hermes*, to carry three seaplanes which could be launched on trolleys from a short flying deck over her bow. *Hermes'* time in service as a seaplane carrier was brief; she was torpedoed and sank later that same month. Then the British Navy began to convert cross-Channel steamers to seaplane carriers. The first three conversions were *Empress*, *Engadine* and *Riviera*. An old Cunard liner, *Campania*, an old merchant ship, *Ark Royal*, and three more Channel steamers, *Ben-My-Chree*, *Manxman*, and *Vindex*, joined the fleet in 1914 and 1915 as proto-aircraft carriers.

Although several of these early carriers lacked the speed to keep up with the battle fleet, their aircraft did make useful reconnaissance flights over the North Sea and aided in the battle against the U-boat and the zeppelin. By 1917, various RNAS aircraft had proved their superiority over the zeppelin in combat. When wheeled aircraft proved to be better than seaplanes for intercepting zeppelins, because the landplanes could climb faster and maneuver more easily, the Royal Navy began experimenting with ways to take these wheeled aircraft to sea. As long as naval operations stayed relatively close to shore, these landplanes could fly from friendly shore bases. But once Naval Aviation operations went beyond the range of shore bases, seaplanes seemed to be the only aircraft that could go with the fleet. Although seaplanes could be launched and recovered from the water, this was impractical, especially since the warship which was to recover a seaplane had to stop and hoist it aboard, thereby exposing herself to possible submarine attack.

Several solutions to the problem of launching or recovering wheeled aircraft were tried in the last two years of the war. In April 1918, the British tried flying a lightweight wheeled landplane, such as the Sopwith *Scout* or *Pup*, from a 20-foot flying-off platform mounted on the turret of a battleship. The experiment proved successful and the battleship had the advantage of not having to alter course or leave formation for flight operations because the turret could be turned into the wind to launch her plane. By the end of the war, 22 cruisers and some battleships had these turret platforms. This solution was imperfect, however, because after the plane had taken off, there was no way the warship could recover it. Thus the aircraft had to fly to a friendly shore base or ditch in the sea, where air bags would keep it afloat until a destroyer could recover it.

Another method of launching planes that the RNAS tried in 1918 was to have destroyers tow barges on which wheeled aircraft were anchored. When the pilot found the speed of his launching platform was sufficient for takeoff, he had his mechanic release the plane from its blocks while he gunned the engine to become airborne. Although this barge method worked, it had limited usefulness since it depended upon the availability of destroyers and on favorable sea conditions.

All of these alternatives – seaplane carriers, and turret and barge platforms – were somewhat makeshift and none of them constituted a real aircraft carrier. In addition, both platform methods were restricted in the weight of the aircraft which they could launch; consequently they would be of limited value in launching aircraft carrying bombs for raids on German airship or submarine bases. Therefore, the Admiralty decided in March 1917 to finish building one of three light cruisers, laid down in 1914, as an aircraft carrier. The designated vessel, HMS *Furious*, was finished with a flight deck 228 feet long and 50 feet wide located forward of her superstructure. Aft of the superstructure, the ship was a battle cruiser with 18-inch guns. Underneath the forward flight deck was an aircraft hangar which held four seaplanes and six landplanes. A hydraulic elevator lifted the plane from the hangar to the flight deck. When *Furious* joined the fleet in July 1917, her aircraft could not land on the ship because of the turret and guns aft. Consequently Squadron Commander E.H. Dunning experimented with landing a wheeled plane on the flying-off deck by flying up the port side of the ship and then slipping the plane in sideways over the deck before landing. On his first try, on August 2, 1917, he got his plane centered over the flying-off deck and then cut his engine while members of the ship's crew grabbed lines hanging from the bottom wing and pulled the plane down to the deck. Five days later, however, Dunning was not so successful. His engine stalled and before he could be pulled down, his plane was blown over the side. Dunning, knocked out when the plane hit the water, drowned before a boat from *Furious* could rescue him.

*To be continued*

# NAVAL AVIATION NEWS letters

## Who Got There First?

The November 1977 issue of *Naval Aviation News* gave credit, in People, Planes and Places, to two fellow TAR officers from VFP-306 for flying the squadron's 5,000th accident-free hour in their RF-8G *Crusader*.

In the belief that the RF-8G is basically a single-seat tactical aircraft, I wonder how two aviators managed to accomplish this magnificent feat simultaneously. Who sat in who's lap? Or, did one volunteer to be an outside (external) airborne observer/photographer? Verrrry interesting!

Great magazine. Keep up the good work.

W. J. Geary, LCdr., USNR
NARU Internal Relations Officer
NAS Point Mugu, Calif. 93402

**Ed's Note: O.K. They did it on a formation flight in two, count 'em, two *Crusaders*. Who got to the yellow sheets first to score the milestone, is left to conjecture.**

## Bicentennial

An amateur aviation historian, I am currently doing research for a publication, on naval Bicentennial aircraft. It is my intention to collect at least one photo of every aircraft and catalog each, according to air units.

I am hoping to contact individuals who have photos, particularly color slides, or other information that they would be willing to sell, trade or loan.

Terry L. Durham
4326 Carlyle Way, Apt. 297
Mobile, Ala. 36609

## No. 32938

Mr. James Rogers is the owner of a Grumman amphibious airplane manufactured in 1942 for the Navy. It is in beautiful condition, and he uses it frequently for recreational flying in the U.S. and Canada.

The plane is a Grumman model J4F2, government serial #32938, manufacturer's model G44, serial #1292. It was manufactured December 21, 1942.

Mr. Rogers asked me, as an ex-Navy officer, to try to find out the history of this plane: how and where it was used, where flown, combat information, etc., with dates, if possible, of key events.

John C. Hufft
502 S. Scott Street
Middlebury, Ind. 46540

**Ed's Note: Anyone with information on #32938, please contact Mr. Hufft.**

## Typos?

On page 25 of the November 1977 issue of *Naval Aviation News* there was a paragraph concerning three *Sundowners* becoming triple centurions onboard USS *Franklin D. Roosevelt*. There are two mistakes that I would like to correct.

First, the squadron is, of course, VF-111 vice VF-11. Secondly, the X.O. at the time is now our skipper, and his name is Commander Tom Clift vice Clife.

The *Sundowners* have had a few other notable achievements. VF-111 reached 16,000 accident-free flight hours on May 24. Shortly thereafter on July 16, they began their sixth year of accident-free flight.

And VF-111 was named the recipient of the ComNavAirPac Battle E for the period January 1, 1976, to June 30, 1977; the second consecutive time that the *Sundowners* have been awarded the Battle E.

Finally, on October 10, VF-111 commemorated 35 years of *Sundowners* tradition.

Peter G. Valko, Ltjg., USNR
PAO, VF-111
NAS Miramar
San Diego, Calif. 92145

In the People, Planes and Places section of your December 1977 anniversary issue, an article appeared concerning the CVW-9 team aboard USS *Constellation* (CV-64) and its accomplishment of a full year of accident-free operations. Unfortunately, our squadron, VAW-126, home-based in Norfolk, Va., was not included in the squadrons cited.

VAW-126, now flying the E-2C *Hawkeye*, has been accident-free its entire 8½ years of existence, accumulating over 14,000 accident-free flight hours and over 3,400 arrested landings. Operating as a part of CVW-9 since July 1976, the squadron recently returned home to Norfolk, completing the first WestPac deployment (aboard *Connie*) of the new E-2C. Although we are an East Coast squadron, we are proud to be a part of CVW-9 and *Constellation* and are looking forward to the coming year when we again head west to join the finest air wing and carrier in the fleet today. VAW-126 is led by Cdr. D. M. Kinney.

Stan Rodman, Ltjg.
PAO, VAW-126
FPO New York, N.Y. 09501

## Bero?

Reference Jack Tate's notes. By this time I am sure others have told you "bero" was "beero" for the non-alcoholic beer drink. We had to sign this beero slip before every flight, even in VS-1 where I reported after flight training at Pensacola. Jack Tate and I both went to Pensacola from *Langley* in 1924.

Jesse G. Johnson, RAdm. (Ret.)
Cardinal Point
Norfolk, Va. 23508

## Reunions

MCAF Quantico will hold its annual Marine Aviation reunion of all aviation or aviation ground officers on May 6. For further information and reservations contact Mrs. Susan Barnes, MCAF Quantico, Va. 22134. Telephone (703) 640-2442.

All former Blue Eagle/World Traveller officers of VXN-8 interested in attending the 4th annual World Traveller's Ball on June 10, 1978, at the Patuxent River Cedar Point Officers Club please contact Lt. H. M. Stewart, VXN-8, NAS Patuxent River, Md. 20670 or call (301) 863-4798.

Former VMA-311 pilots are invited to join the *Tomcats* in a WestPac predeployment mess night, June 10. Contact Maj. Courtney or Lt. Whiteside by May 1 at VMA-311, MCAS El Toro, Santa Ana, Calif. 92709. Call: (714) 559-3553; autovon: 952-2739.

## Wasps Reunions

USS *Wasp* (CV-7) crew, squadrons and families will hold a reunion July 14-16, 1978, at Seattle, Wash. Contact Larry Chute, 1330 Nile Drive, Corpus Christi, Texas 78412. Phone (512) 991-3808.

USS *Wasp* (CVS-18) will hold a 35th anniversary reunion in Randolph, Mass., June 23-24. All interested officers, shipmates, air groups and Marine detachments are invited to attend. For full particulars, contact Allyn "Flash" Gordon, Box 471, Milton, Mass. 02186 or phone (6[illegible] 698-3108.

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NAS Memphis is home base for Patrol Squadron 67. Commissioned November 1, 1970, the reserve unit conducts flight and ground training to maintain maximum readiness for fleet mobilization. The Golden Hawk insignia was inspired by these magnificent birds which are the supreme predators of the forest. The squadron assumes that role in ASW. Led by Commander C. H. Scales, VP-67 is transitioning from the SP-2H Neptune to the P-3A Orion.

**SQUADRON INSIGNIA**