1978 - Year in Review

NAVAL AVIATION NEWS

February 1979


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NAVAL AVIATION NEWS

SIXTY-FIRST YEAR OF PUBLICATION

COVERS — NANews' Charles Cooney created front cover which signals 1978 Year in Review feature beginning on page 8. JO1 June Israel filmed USS Saipan (LHA-2) entering port in New York, back cover. Here, McDonnell Douglas' Harry Gann photographed a VC-13 TA-4J and a VR-57 C-9B during pre-briefed picture-

editor's corner

Speaking of C-9s. That's VR-30's Ltjg. Steven Loranger posing with his dad, retired Captain Donald Loranger, up front in a *Skytrain II*. Father rode "space available" on a scheduled flight while son did the driving. Capt. Loranger flew props and jets in earlier days and was C.O. of VA-94 and VX-5. After 30 years, he retired with 7,000 hours of flight time in his logbook and 850 carrier traps. The younger Loranger flies the CT-39 and the C-1A in addition to the C-9B at the North Island-based squadron.

The Chief's a Youngster. AOC Keith T. Berrier joined the Navy in Oct. 1971, and has been climbing the ladder of success ever since. In fact, through a provision in the advancement manual (BupersInst 1430.16A), which allows constructive time in service for meritorious advancement, he made chief in seven rather than nine years. He was an instructor at NAS Lemoore's Light Attack Weapons School before assignment, last January, to VA-113, his first squadron. Chief Berrier is 25 years old!

Snake's Alive! The P-3A *Orion* from New Orleans-based VP-94 had returned from a six-day goodwill visit to Venezuela. AE1 W. R. Williams and ASM2 C. G. Venable set about unloading equipment and quite unsuspectingly became instant marathon sprinters. For, lo and behold, from out of hiding in a stack of gear emerged a pit viper. The two men took off in a direction opposite to that of the serpentine stowaway. The pair notified base security. Base security notified the fire department. The fire department notified medical. The buck finally stopped when all agencies agreed on a mutual effort. HM2 H. E. Pullin, who collects snakes as a hobby, boarded the aircraft and subdued the viper with a cold blast from a CO_2 fire bottle.

"That was the fastest snake I've ever seen," said the corpsman. "It's a very poisonous species and its bite would have brought death within an hour."

Apparently the creature found its way into some gear which had been stored in a Venezuelan hangar before being loaded aboard.

Orion Maternity Ward. Quoted in part from Lockheed's *Airborne ASW Log* is this report about a VP-45 radarman. "The squadron was asked to ferry two women in premature labor from Sigonella to Naples. A maintenance crew installed wiring and a converter in record time to provide 60-cycle current for an incubator, just in case. The simple one-hour flight began looking more serious when Naples radioed that the hospital there couldn't handle the premature delivery. The crew would have to divert to Ramstein Air Base, Germany, but would they please land at Naples anyway, to pick up another customer?

"So at Naples they took aboard a third expectant mother, her husband and the attending physician. Over the Alps, the doctor came forward to ask for a little more speed – his patient might not wait. The plane surged ahead. The doctor and radarman, AWCS Kenneth Avery, quickly converted the ordnance station into a delivery room. And as the airplane made what may be history's smoothest touchdown, a baby girl greeted the world.

"The new arrival went into the incubator and everybody breathed a sigh of relief. . .except the mother. She announced she was about to deliver again. And a baby boy soon joined his twin sister in the incubator."

The rest of the flight progressed normally and Avery's shipmates have made him an honorary midwife. That's Avery posing next to a P-3C gear door. The insignia, "Clarke's Stork Taxi," is for LCdr. Tom Clarke, pilot of the maternity mission. Lt. Mike Kupfer was the copilot. PH3 Skip Holmes took the picture.

NAVAL AVIATION NEWS

did you know?

Harrier Pad Tests

Naval Air Engineering Center engineers put an AV-8A *Harrier* through its VTOL paces recently to develop data which will help them design an economical way to anchor aluminum matting for vertical takeoffs and landings. It is the same matting that serves as the *Harrier* airfield in forward combat areas.

When the AV-8A was introduced, it was found that the heat and blast generated during VTOL operations was destroying conventional concrete runway surfaces. Some years ago, NAEC Lakehurst developed aluminum matting

for use by the Marine Corps in launching combat aircraft from expeditionary airfields in forward areas, called short airfield tactical support (SATS) sites. The runways made of this matting are equipped with portable catapults and are well suited for the *Harrier's* VTOL operations.

In the pad tests, the engineers measured the upward forces by using instrumented hold-down stakes set at various points. The 96 foot square pad consists of interlocking extruded aluminum sections two feet wide, and either six or twelve feet long. It weighs about 55,000 pounds and, when used in a combat zone, it is palletized and either airlifted into the area or dropped by parachute.

NAVAL AVIATION NEWS did you know?

SH-60B Mock-Up The SH-60B LAMPS mock-up being developed for the Navy by Sikorsky recently completed critical shipboard compatibility trials aboard two types of ships from which it will operate: the frigate USS *Oliver Hazard Perry* (FFG-7) at Mayport, Fla., and the destroyer USS *Arthur W. Radford* (DD-968) at Norfolk, Va. The new ASW helicopters are expected to enter the fleet in the mid-1980s.

The evaluation involved extensive exercises including various deck and hangar maneuvers, measuring critical deck and hangar clearances; folding aircraft blades and tail pylon; opening all access panels, doors and work platforms with personnel simulating maintenance and servicing; removing and replacing major components; and loading of sonobuoys and torpedoes.

The evaluation was made by a joint team from NavAirSysCom and the manufacturers.

Tilt Rotor Research Plane Two new aircraft have been built by Bell Helicopter Textron, Fort Worth, Texas, under a joint program sponsored by NASA's Ames Research Center, Calif., and the Army Research and Technology Laboratories at Moffett Field, Calif. The XV-15 tilt rotor research plane has wing-tip-mounted turbine engines which turn 25-foot prop rotors. The engine-prop rotor assembly can be tilted for helicopter-type vertical takeoff and landing, or adjusted forward in the normal manner for conventional flight.

For military use tilt rotor aircraft can combine the tactical utility of

helicopters with the advantages of longer range, higher speed transports. Their cruise speed is about 340 miles an hour and they are much quieter than helos. Potential military missions include search and rescue, reconnaissance and surveillance, and troop transport.

New Fighting Ship

The Naval Sea Systems Command has awarded a contract to the Ingalls Shipbuilding Division of Litton Industries for the first *Aegis*-equipped guided missile destroyer, DDG-47. The new ship, with a *Spruance*-class hull and propulsion system, is designed to accommodate the sophisticated electronic equipment of the *Aegis* weapons system. This high-firepower, computer-controlled, antiair warfare system is intended to be the Navy's key to meeting any air threat of the 1980s and beyond.

DDG-47 will be armed with *Standard* and *Harpoon* missiles, a modern ASW suite including antisubmarine rockets and torpedoes, two five-inch guns and the *Phalanx* close-in defense system. She will carry the LAMPS multi-purpose helicopter. DDG-47, the first of a new class of multi-mission warships, will operate in battle groups containing conventional aircraft carriers. Outside the umbrella of the carrier aircraft, she will provide support and protection to other naval forces.

Energy Conservation Awards

Among the 1978 winners in the Navy's new Energy Awareness Program for significant savings in energy consumption are USS *John F. Kennedy*; the Pacific Missile Test Center, Point Mugu, Calif.; MCAS Iwakuni, Japan; and Air Test and Evaluation Squadron One, NAS Patuxent River, Md. Each winner is awarded an energy flag to be displayed until a new winner is announced.

An example of the imagination and ingenuity that accomplished the reductions in energy consumption is the method used by *JFK* in following ocean currents which increased wind speed across the deck during launch and recovery of aircraft. *Kennedy* estimates that careful planning of energy use has saved $6.3 million during the qualification period.

FLEDS

The ground support and equipment department at NAEC Lakehurst has developed a flight line electrical distribution system (FLEDS) which will decrease aircraft maintenance time and increase safety. It is being installed at naval air stations around the world.

The system allows more aircraft to be electrically serviced from a single fixed or single mobile electric power plant (MEPP). In the past, one MEPP serviced four planes. The new system enables one power supply to support 24 aircraft, although in actual operations three MEPPs are usually assigned to each 24-plane group, one for each 12 aircraft and one as a backup unit.

Traffic Controller

ACC Robert F. Rodriguez, NWC China Lake, Calif., is the recipient of the 1978 Vice Admiral Robert B. Pirie Air Traffic Controller of the Year award.

He was cited for his action in preventing the loss of a P-3 and its crew at NS Adak, Alaska. During a practice instrument approach to the runway, which is surrounded by mountainous terrain, the *Orion* undershot the final approach radial. It continued to turn away, descending through 1,800 feet on a direct collision course with a mountain. Rodriguez instructed the pilot, who did not have visual contact with the ground, to execute an immediate climbing turn. His prompt, decisive instructions prevented a disaster.

VAdm. Pirie was DCNO(Air) from 1958 to 1962 and a major contributor to the formation of the National Airspace System.

grampaw pettibone

The AWOL Bomb

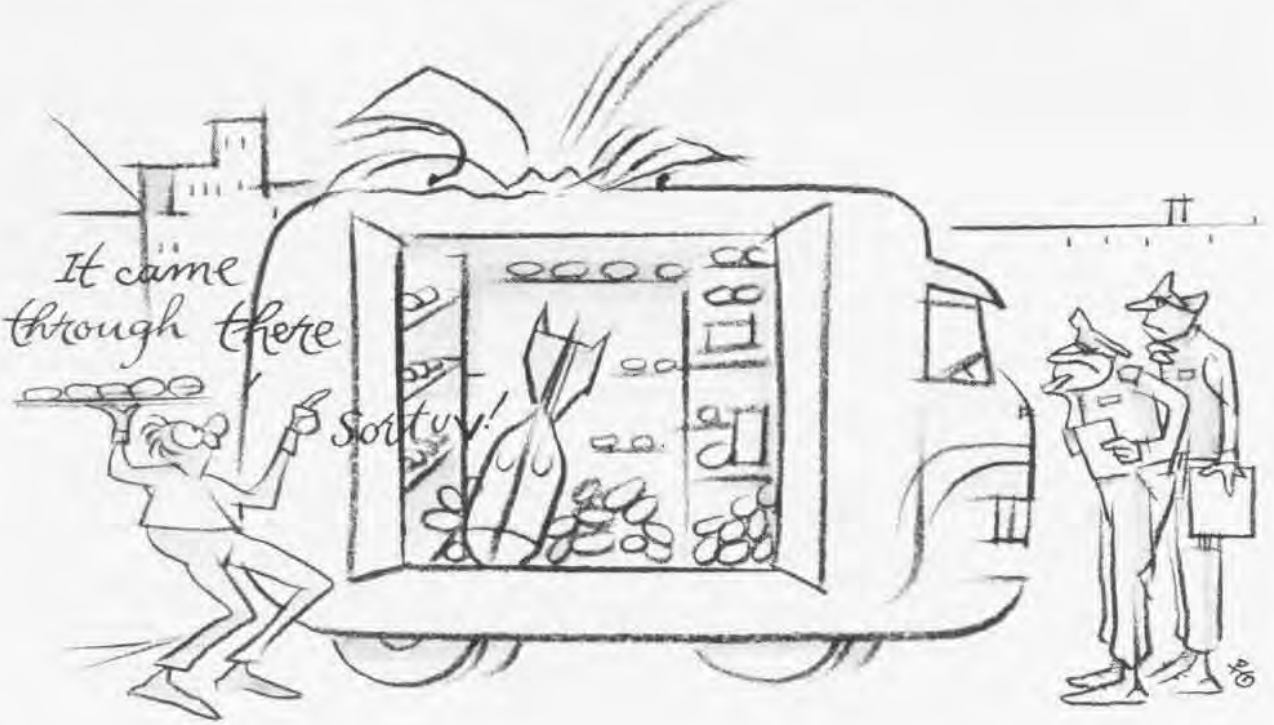
About 0830 one morning a practice bomb (Mk76) was found downtown, USA, inside an English muffin delivery truck belonging to a local bakery. Military ordnance personnel were quickly dispatched to investigate. They determined that the bomb was inert. The truck's roof was extensively torn where the bomb was reported to have entered. (A damage assessment to English muffins was not readily available.)

The muffin man refused to release the bomb to naval personnel because he needed it for insurance purposes. The identification numbers of the bomb were noted but could not be matched with any "lot" numbers assigned to nearby military bases. Local military and FAA authorities investigated all possible aircraft which could have dropped the bomb – without success. Further investigation traced the bomb to its home base which was over 500 miles away. No connection could be made between the subject Mk76 and any aircraft.

Grampaw Pettibone says:

Holy bomb squad! Looks like a clear case of muffin' up! You could easily leap to the wrong conclusion on this one. Downtown yet! Well, some good investigating shed light on the mystery of whodunit – and it wasn't an airplane. Allegedly, a young lad who was AWOL from the service and driving the muffin truck had misappropriated a practice Mk76. He had accidentally torn the truck's roof when he drove under an overhanging tree branch. He returned the vehicle without reporting the damage. Next time the truck was used, a different driver discovered the hole and found the Mk76 in the back. Understandably, the owner concluded that the bomb was dropped by an airplane.

Sometimes, what seems obvious at the outset disintegrates in the face of evidence. In this case, an airplane didn't assault English muffins. Nuff sed!



ILLUSTRATED BY Osborne

Flop Hop

Following a routine student flight briefing and preflight, a T-44 with two students and one instructor aboard departed NAS Home Plate on an IFR flight plan. The mission was to conduct multiple training instrument approaches at nearby airports. The first three approaches (VOR, ILS, ADF) were performed by the first student at airport #1 and resulted in two uneventful touch and go landings and one wave-off. The instructor then requested and received radar vectors to airport #2 where another approach and uneventful touch and go landing were made.

The aircraft proceeded to airport #3 and completed a routine GCA to a touch and go. On the downwind leg at airport #3 the student pilots were changed and a new student completed the landing checklist and commenced the next GCA. The aircraft made a normal landing. After about 900 feet of roll-out, the instructor and students heard the landing gear warning horn. The landing gear handle was checked-down by the instructor, but it was too late; the partially retracted port main mount allowed the port prop to strike the runway, causing severe engine/prop damage.

Takeoff attempts were aborted and after a wild slide, the aircraft halted and everyone exited without injury.

Grampaw Pettibone says:

Holy distraction! During the roll-out the instructor was critiquing the student's landing as the warning horn sounded. The instructor inadvertently raised the landing gear handle while still on the ground. Being an instructor pilot is tedious, rewarding and demanding work. It requires total attention and supervision every moment. The instructor in this accident permitted himself to be distracted. He raised the landing gear handle vice the flap handle. If I had a nickel for every accident caused by memory failure, I could buy a farm and retire. Remember – every landing is a separate evolution warranting special attention – especially when the other guy's flying. I don't trust nobody with my ole hide. Your hop's a flop when the thinkin' stops!

Sad Story

An A-4B departed a naval air station for what should have been a routine cross-country training flight. The flight had been requested, approved, briefed, planned and filed as an IFR cross-country training flight to a midwest NAS. The pilot was cleared IFR at 31,000 feet, but very shortly after takeoff he cancelled his IFR, reporting that he had a compass malfunction and would proceed VFR. Approximately one hour later he requested and received a change of flight plan to an Air Force base over 900 miles away and filed for an en route time of two hours with two and a half hours of fuel remaining.

There was no further communication between the pilot and control agencies for the next hour and 20 minutes. Then he requested the winds at 35,000 and 40,000 feet.

Approximately two and a half hours after refilling in the air, the pilot contacted the control tower at the destination field and informed them he was 15 miles out and requested landing instructions. He also reported fluctuating fuel pressure and requested the status of the Vortac serving the field. The tower advised him that the Vortac was down for maintenance and that a Notam stating it would be out of service was sent the day before. The pilot then requested a DF steer and the tower controller gave him a heading to the field.

Some 10 minutes after initial contact with the Air Force tower, the pilot reported a flameout and indicated he would not be able to make the field. The tower informed him that there were no auxiliary fields near his position and that the bailout/ejection area was 10 miles northeast. At this time the pilot informed the tower that he was passing through 9,000 feet. A short time later the aircraft crashed in the desert nine miles east of the Air Force base. The pilot ejected at an estimated altitude of a little more than 10 feet above the ground and was fatally injured.

Grampaw Pettibone says:

Great balls of fire, what waste! This well trained and experienced lad made some real bad moves on this flight and after they accumulated to the point of no return, he made the fatal mistake of staying with the aircraft until he was too low to eject safely.

Most of us have committed errors hard to explain, but this pilot's decisions from takeoff to flameout are beyond reason. Here's a pilot whose demonstrated ability and personal conduct were such that his cross-country request was approved without reservation; yet he cancels his instrument flight plan just after takeoff, proceeds VFR through APC, with insufficient fuel and no Notam info, changes his flight plan to a field hundreds of miles away and overflies good en route fuel stops trying to make his new destination.

Poor judgment and lack of professionalism were the primary factors in this accident. Several Navy and FAA directives were violated; but neither Natops nor any other publication ever was written to take the place of a pilot's judgment. (August 1964)

Naval Aviation Review 1978

By George Wesley Pryce, Assistant Naval Aviation Historian

JANUARY

At the beginning of the new year there were 19,379 officers in Naval Aviation as compared to the January 1977 figure of 20,179. A partial breakdown of these totals includes:

	January 1978	January 1977
Pilots	11,298	12,205
NFOs	4,231	4,080
Student pilots	982	1,113
Student NFOs	479	491

There were 103,607 enlisted personnel in Naval Aviation in January 1978 compared to the January 1977 total of 101,676.

6. Two T-34C *Mentors* arrived at NATC Patuxent River, Md., to begin Phase I of the initial BIS trials. The *Mentor* brings turbine power to primary training, offering an engine that develops 550 horsepower, more than double the 225 in the T-34B.

7. The first of a series of six survivability tests was conducted on the *Tomahawk* cruise missile. The missile was launched from an A-6 *Intruder* and flew against detection and acquisition components of a representative air defense system.

16. NASA selected 35 astronaut candidates. Eleven were Navy personnel. These candidates will participate in NASA's space shuttle program. Eight of the Navy selectees will be in the pilot training program and the other three will be trained as mission specialists.

FEBRUARY

6. The Navy and Air Force jointly awarded Boeing and General Dynamics contracts totaling $26.5 million in the first funding for a competitive "fly-off" to determine which company's air-launched cruise missile should be produced. The competition will be between Boeing's Air Force air-to-ground cruise missile and the air-launched version of the Navy's *Tomahawk*. A selection is scheduled to be made in November 1979 following 10 test flights.

9. The first satellite of the new Navy Fleet Satellite Communications System was launched. This system will satisfy the need for worldwide tactical command control and communications for the entire fleet.

27. DOD awarded Sikorsky Aircraft an $88.8 million contract to begin full scale production of the CH-53E *Super Stallion*. Six have been authorized for production. The

FY 79 budget proposal requests funds for 14 more. The CH-53E will provide the Navy and Marine Corps with a heavy-lift helicopter. It lifts twice as much as the earlier D model now in service and will be the largest, most powerful helo in the western world.

27. Secretary of the Navy W. Graham Claytor, Jr., awarded the Medal of Honor posthumously to Captain Michael J.

Estocin for his actions on April 20 and 26, 1967, while attached to VA-192 during the Vietnam Conflict. Mrs. Estocin accepted the medal.

28. DOD authorized full-scale development of Sikorsky Aircraft's SH-60B LAMPS MK III helicopter. The contract has a total value of $109.3 million. The aircraft will be used primarily in antisubmarine and antiship missions. Scheduled to be operational in the early 1980s, it will be deployed aboard frigates, destroyers and cruisers.

MARCH

10. Four medals for "heroic achievement in aerial flight" were presented on behalf of President Carter to members of the NAS Lemoore SAR team. The medals were for the high-altitude rescue in August 1977 of two injured ice climbers from a sloping edge on Mt. Mendel in the Sierra Nevadas. The four men receiving the awards were Lt. Kerry Sullivan, pilot of the rescue helicopter, LCdr. Arland Dyer, copilot, crewman Wesley Foster, Jr., and hospital corpsman William Bethards. The climbers were rescued from a spot more than 13,000 feet up the face of the mountain.

17. NASA selected four two-man crews for early orbital flights of the space shuttle. Captain John W. Young, USN, was selected as commander and Commander Robert L. Crippen, USN, as pilot for the first orbital test scheduled in the spring of 1979. Colonel Joe H. Engle, USAF, and Commander Richard H. Truly, USN, will be the backup crew. Also included in this first group of two-man crews was LCol. Jack R. Lousma, USMC.

17. President Carter paid a visit to USS *Eisenhower*, the Navy's newest nuclear-powered aircraft carrier, and spent several hours aboard observing shipboard and flight operations. The carrier was operating off the East Coast.

20. Chief of Naval Operations Admiral James L. Holloway III inaugurated the Navy Fleet Satellite Communications System by sending the first message — to *Enterprise*.

APRIL

10. While participating with elements of the U.S. Navy in Exercise *RimPac 78*, LCdr. James Bateman of HS-287 landed his disabled *Sea King* aboard the tiny deck of the New Zealand frigate, HMNZS *Waikato*. While flying a

mission from HMCS *Provider*, a Canadian tanker, LCdr. Bateman experienced an airborne emergency and was preparing to ditch when *Waikato* answered his distress call. Exercise *RimPac 78* was a four-nation exercise including U.S., Australian, Canadian and New Zealand forces.

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10. The first TA-7C attack trainer arrived at NATC Patuxent River, Md., to begin BIS trials. This aircraft will allow the instructor to be in the same aircraft with the

student allowing for more efficient methods of instruction while reducing fuel consumption about half. The new two-seater will also reduce the number of aircraft required for transition training.

14. The first of 12 C-2A *Greyhounds* rolled off the service life extension program (SLEP) line at NARF North Island. SLEP will add between 7 and 10 years of service to the

carrier-on-board-delivery aircraft. There is no other aircraft in the Navy's inventory which can carry as much, as far — to a carrier at sea. The cost of building a replacement would be approximately $7.5 million. SLEP costs about $1 million per aircraft.

MAY

24. The 5,000th F-4 *Phantom II* rolled out of McDonnell Douglas' St. Louis plant. This venerable aircraft, in production for 20 years, has been produced in 14 models. The

milestone aircraft was decorated with the flags of the 10 nations which have flown the *Phantom*.

31. Major General Frank C. Lang, USMC, became the Navy's new Gray Eagle when CWO4 Henry Wildfang turned the title over to him in a ceremony at MCAS Cherry Point, N.C.

General Lang, Deputy Commander, Fleet Marine Force, Pacific, began his career as an aviator in 1943.

JUNE

1. Dr. Donald "Deke" Slayton, one of the original seven astronauts, and currently the manager for orbital flight test at NASA, visited the Naval Air Test Center, Patuxent River to study the HUD (head up display) landing system which allows a crew to keep its eyes on the runway and still see all the instruments. Dr. Slayton indicated interest in the possible use of HUD in the space shuttle which is designed to make deadstick, one-chance-only landings.

21. A Navy *Tomahawk* cruise missile, in its first public flight, carried out a series of maneuvers at speeds up to 500 miles per hour. On hand to witness the demonstration was Secretary of Defense Harold Brown who said development of the missile is on schedule and predicted it would be able to penetrate any Soviet defense when it is deployed in the early 1980s.

30. Lieutenant General Thomas H. Miller, Deputy Chief of Staff for Aviation, Headquarters, Marine Corps, became the Navy's latest Gray Eagle, at MCAS Kaneohe Bay, Hawaii.

Among his many accomplishments, LGen. Miller was the first American to fly the AV-8 *Harrier* and, in 1960, he set a closed-course world speed record of 1,216.78 miles per hour in an F-4B *Phantom*.

JULY

1. Admiral Thomas B. Hayward relieved Admiral James Holloway III as Chief of Naval Operations. Adm. Hayward is a Naval Aviator.

8. The Naval Air Test and Evaluation Museum at NAS Patuxent River, Md., opened its doors to the public for the first time. Its premier exhibition depicts the full scope of test and evaluation in Naval Aviation. The displays are varied, showing the many different types of aircraft which have passed through the Patuxent River test facility over the years.

12. The Senate approved a $36.1 billion defense authorization bill by a vote of 87 to 2 which included $1.9 billion for a *Nimitz*-class nuclear-powered aircraft carrier with the proviso that it be the last one ever built.

Any further requests would have to be for a substantially smaller and less costly version.

21. The final flight of the service acceptance trials for the AH-1T helicopter gunship was made at Naval Air Test

Center, Patuxent River, Md. The helo boasts an increase of more than 200 percent in its armament payload. It will have the capacity to fly farther, and fight longer and harder over a target than previous models of the *Cobra*.

22. Captain Holden C. Richardson was inducted into the Aviation Hall of Fame. Capt. Richardson was an early

pioneer in Naval Aviation but it was his work in catapults and wind tunnels which marked his contributions to Naval Aviation.

AUGUST

2-3. The mock-up of the SH-60B ASW helicopter was put through shipboard compatibility trials aboard USS *Arthur W. Radford* (DD-968). Earlier trials were conducted July 25-26 aboard USS *Oliver Hazard Perry* (FFG-7). The

SH-60B, being developed by Sikorsky Aircraft, is scheduled to enter the fleet in the mid-1980s.

17. President Carter vetoed the military authorization bill. The President objected to the construction of a fifth nuclear-powered aircraft carrier.

SEPTEMBER

14. A Navy technical evaluation was completed on the CH-53E to determine if performance had been altered by changes made since the initial trials conducted by the Board of Inspection and Survey. The *Super Stallion* successfully completed the 60-hour test program.

15. The test-bed P-3C *Orion* was delivered to the Naval Air Development Center for the Update III program. The aircraft will feature an advanced signal processor developed by IBM which provides a four-fold improvement in isolating sounds of submerged targets from ocean background noise. Lockheed California Company is the prime contractor of the P-3C and has been involved with its development over the past 17 years.

23. USS *Belleau Wood* (LHA-3) was commissioned at Pascagoula, Miss. Its primary mission is amphibious assault. The ship can embark, deploy and land a fully-equipped

Marine assault force by helicopter or landing craft, or a combination of the two.

30. The United States quietly abandoned its last military foothold in Africa with a low-key ceremony that ended military presence in Morocco dating back to Operation *Torch*, a turning point in WW II. Captain William Parrish turned over to the Moroccan government the last communications bases. Parrish and four other officers were the last in a succession of tens of thousands who had served there since General George Patton's troops stormed ashore November 8, 1942.

OCTOBER

1. President Carter awarded the first Congressional Space Medal of Honor to six former astronauts. The recipients were Neil A. Armstrong, Frank Borman, Charles Conrad, Jr., John H. Glenn, Jr., Alan B. Shepard, Jr., and Virgil I. Grissom, whose medal was accepted by his widow, Betty Grissom. The medal was awarded to these men who distinguished themselves "by exceptionally meritorious

efforts and contributions to the welfare of the nation and mankind."

13. Following the President's August veto, Congress passed a new military authorization bill which excluded a nuclear-powered aircraft carrier.

The bill approved the construction of 104 aircraft including nine F/A-18s and 36 F-14s. Congress also authorized $95 million for development of the light airborne multi-purpose systems (LAMPS III) program.

26. While on routine patrol, a P-3 *Orion* from VP-9 ditched in the Bering Sea due to engine trouble. Five of the crew were killed. The 10 survivors, floating in stormy seas for 14 hours, were picked up by a Soviet trawler on the 27th and taken to Petropavlovsk then flown to Khabarovsk. They finally returned home to Moffett Field on November 4.

28. The new Soviet V/STOL aircraft carrier *Minsk* joined her sister carrier, *Kiev*, in fleet service. *Minsk* measures 900

feet, just 200 feet shorter than USS *Eisenhower* and displaces approximately 40,000 tons. The angled flight deck permits operation of both helicopters and V/STOL aircraft.

NOVEMBER

9. The U.S. Marine Corps' newest light attack aircraft, the AV-8B, flew for the first time at McDonnell Douglas Corporation in St. Louis, Mo. The AV-8B will more than double the payload or radius of its predecessor, the AV-8A.

18. Navy's new strike fighter, the F/A-18 *Hornet*, made its first flight at McDonnell Douglas Corporation in St. Louis,

Mo. It has a combat radius of more than 550 miles and a ferry range of more than 2,000 miles.

DECEMBER

17. This date marks the seventy-fifth anniversary of the Wright Brothers first flight in 1903, the first time that man achieved powered flight.

Sunliner Sailor

We just came down from the flight deck. Peering into the darkness, my buddies and I were looking for some sign that we were close to Florida, maybe even near Jacksonville. But there wasn't anything – just blackness and a rain squall to the west.

The night is like most of the over 200 nights that *Forrestal* has been gone. The big difference is inside us. It's called "channel fever" and though the sea looks the same, we, definitely, are not.

Tomorrow: the sea buoy, the jetties, Mayport. We'll all be on deck looking for *her*, whoever she is. And the guys with no one waiting at the pier will be looking beyond the coast, at least in spirit, for that special person.

By the time you read this I'll be with my two girls: a wife who voted for the first time in the November primaries and a daughter who is now walking and reportedly "getting into everything."

These last hours are tough. You can't sleep, you can't pack (that was done over a week ago when we left Spain), you can't even concentrate on the cards on the table. Right now chewing the fat is the most useful thing you can do when you're not working on one of the A-7Es.

I've been in VA-81 for quite awhile, and this is the first time I've realized that the *Sunliner* motto – Anytime, Anyplace – really means something. We've been gone since the fourth of April, sailed the Tyrrhenian, Aegean, Atlantic, Norwegian, North and Mediterranean Seas. Our pilots have flown *Corsairs* to targets in Greece, Sicily, Italy, Sardinia, France, Spain, Germany, the Shetland Islands, Norway and Denmark.

Working on the flight deck, I didn't get to see much of the targets or the beach for that matter, but *Forrestal's* C.O., Captain Peter B. Booth, gave us an idea of what our enemies would face if they took on *Forrestal* and CVW-17. After the airplanes were loaded with live 500-pound bombs so the pilots could do their heavy ordnance practice, the skipper directed them to show us how it would work in combat.

A helo from HS-3 laid a smoke light in the water a mile or two off the port beam and Capt. Booth called in VA-81's *Corsairs*. You could hardly see the all-gray airplanes in the haze. In fact, I never did see them until they'd dropped their bombs and were simulating escape from enemy fire with hard-to-follow, zigzag maneuvers.

All of the 12 bombs were right on target. The rest of the show was impressive, too. Our sister squadron, VA-83, laid its ordnance right in there, and the F-4s came in supersonic and thumped the eardrums of those not clever enough to put their fingers in their ears.

When it gets lonesome out there, it is hard to understand why we go to

the Med at all. In some ways it's like joining a parade that has gone on for over 20 years. But this parade signifies that we can and will support NATO.

We participated in a lot of multination exercises. We were always the Blue Force, while many of the ships in our task force separated and became the Orange Force. The scenarios were pretty similar. Increasing hostility led to an outbreak of fighting and then *Forrestal* and CVW-17 moved in to sweep the area clean of the Orange Force which threatened allied supply lines.

Flying in exercises *Dawn Patrol* and *National Week XXV*, we worked with our NATO allies. In *Dasix* we cooperated with the French, testing their air defense and trying out our tactics. Popping up over the beaches near St. Tropez and Marseilles so they wouldn't disturb the nude sunbathers, the pilots rapidly descended into the valleys of the Maritime Alps and worked north to simulated targets. They were really excited when they showed us the charts of where they'd been. It amazes me that at slightly subsonic speeds they can find a small bridge 200 miles from the coast or put a bomb on a small target like a smoke light. But the *Sunliners'* airplanes have got the best possible armament division working on inertial platforms, radars, electronics, instruments, release systems, and loading and testing bombs and missiles. The division proved it is the best when a small detachment from our squadron went to Zaragoza, Spain, and walked away with the highest awards in competitive bombing and strafing exercises. And talk about radars! One of our pilots picked up the periscope of a submerged submarine during *National Week XXV*.

It takes about 180 of us, each working 12 hours a day, to maintain our 10 planes. A carrier is a pretty hostile environment for an airplane. Catapult launches and landings seem like minor crashes and combine with salt spray to bend, twist and corrode even the strongest parts of the *Corsairs*.

Corrosion control is a never ending problem, but we did very well. Our mid-term inspection showed that the aircraft's material condition was improving. These planes are expected to last about 20 years. In order to be lightweight, they are made with exotic metals that oxidize with the first breath of salt air. It's a tough job that devours man-hours and requires meticulous inspection and treatment by our corrosion control "rust busters."

The *Sunliner* aircraft division – made up of jet engine mechanics, airframes technicians, hydraulics specialists, environmental and ejection seat specialists and parariggers – takes care of the basic aircraft. Much of its work occurs on the flight deck.

The roar and exhaust of 15 to 20 jet engines coupled with the heat of a Mediterranean summer day can be pretty stifling. We saw the other extreme, too. Operating within 100 miles of the Arctic Circle, our task group supported amphibious operations in the Shetland Islands and Denmark. After that experience it was pretty easy to figure out why we met so many Swedes, Norwegians and Germans on the warm beaches of Spain's Costa del Sol.

Since October 1977, the VA-81 *Sunliners* have spent more than 270 days at sea – over 200 of those consecutively on a Med deployment. Those who could afford air fare were able to take leave and visit the States or have their wives meet them in Majorca, Spain, or Italy. But most of the 5,000 aboard *Forrestal* have only been home via letters, an occasional tape recording or perhaps a quick but expensive phone call. These last days of transit from the Med have been tough with no mail calls, no real reason to write home and an abundance of thinking time.

I can't help wondering if my family has really changed – I know I have. The new third class crow on my sleeve, the extra couple of bucks in my paycheck and seeing a big piece of Europe must have had some effect. But what about my bride, fending for herself, and the baby: they have had to be affected, too. Tomorrow I'll know. And I know it will be good.

I'm going back up on the flight deck now. Maybe I can see Florida before I turn in. It's like Christmas Eve. The clock is dragging and I simply can't wait for tomorrow when I'll hear the band on the pier play "Everything's Coming Up Roses" and I will finally catch sight of *them* in the crowd.

I've decided that the saddest song I know is "Anchors Aweigh." Every time I hear it, my family's on the pier waving and I'm on the ship going some place for a long time.

But the Anytime, Anyplace *Sunliners* are all home now...home for awhile, anyway.

LCdr. Dan Ryder, VA-81, imagined himself a "Sunliner Sailor" and explored the feelings that might pass through a young enlisted man's mind on the final night of a deployment.

touch and go

Reserve Cruise

It was to be a business-as-usual reserve cruise for VR-51. The itinerary for one C-118, two seven-man flight crews and 13 support troops included 16 days of stops in Rota, Naples, Sigonella, Majorca and Olbia.

While on a routine passenger run to Sigonella, the unit discovered that a C-141 had cancelled its trip, leaving about 17,000 pounds of mail, destined for the fleet in Rota, stranded. The ships the mail was intended for were scheduled to leave port that night for six weeks at sea.

LCdr. Shriver, the VR-51 plane commander, decided to delay his flight and transport as much of the mail as possible. Loadmasters AEC Berger and ADR2 Fries carefully figured how much additional weight the aircraft could safely carry.

Mail sacks weighing 13,497 pounds filled every available nook and cranny, both in the cargo holds and the cabin. The mail was destined for the crews of *Iwo Jima, Trippe, Pensacola, Fairfax, Trenton, Boulder, Forrestal, Detroit, Ingram* and *Alamo.*

These statistics tell the tale of the remainder of the cruise: 19,420 miles flown (11,510 in Europe); 365 passengers carried for a total of 262,728 passenger miles; 1,854.7 cargo-ton miles; 11,543.1 mail-ton miles.

All in all, VR-51 reports it was just another ordinary cruise.

Century of Progress

A reception for Vice Admiral T.G.W. "Tex" Settle, USN(Ret.), was held on the 45th anniversary of his record-making balloon flight to 61,237 feet. The Washington Navy Yard's Marine Corps Museum was the site of the gathering of balloonists and lighter-than-air historians brought together by the Chesapeake Balloon Association.

VAdm. Settle narrated a slide presentation of the flight, and a transcription of an inflight radio interview with the late Maj. Chester "Mike" Fordney, USMC, was played for the audience. Fordney accompanied Settle in the gondola of the 600,000-cubic-foot-capacity balloon, after Settle's earlier solo attempt was aborted when a valve stuck in the open position.

VAdm. Settle and Col. Fordney's granddaughter, Elizabeth Diggs, posed for the author in front of a caricature of Fordney.

The hydrogen-filled *Century of Progress* lifted off from the Goodyear Zeppelin dock in Akron, Ohio, at 9 a.m., November 20, 1933. The immense pear-shaped balloon drifted over Ohio and, at 12:45 p.m., the pair started ballasting continuously from their supply of 40-pound bags of lead shot. By 2:10 p.m. they had reached 58,000 feet. For two hours the first Americans in a space-equivalent environment floated at near maximum altitude, while samples of living organisms (spores) were subjected to conditions at such altitude. In the cramped seven-foot-diameter gondola, the men busied themselves with cosmic ray equipment, cameras, spectrographs, a light polarization indicator, air sampling bottles, color chart comparisons with sky color and other programmed scientific duties.

With daylight ending, the hydrogen inflating the balloon started to cool, and Settle and Fordney began ballasting to hold the descent to 900 feet per minute. When they descended to 30,000 feet, inboard and outboard pressure was equalized. Down another 3,500 feet, they opened the hatches and started throwing out radio batteries, tools and food, each with a small chute to protect anyone on the ground.

Now standing on top of the gondola, Settle told Fordney to jettison his parachute harness.

"What if we need the chutes later?" asked Fordney.

"I've already heaved over the chutes," replied Settle.

Her flight path was constantly eastward. By 5:40 p.m. the *Century of Progress* landed near Bridgeton, N.J., darkness making it impossible for the two balloonists to make their way out of the marshes in which the deflated balloon rested. At dawn, Maj. Fordney plodded through the cold water to a farmhouse five miles away. Settle guarded the barograph, which was soon flown to Washington in a Coast Guard plane. The Federal Aeronautique Internationale recognized the altitude of 61,237 feet as a world record. Settle and Fordney had blazed a trail for those who followed. Eight months later, the Army Air Corps' Kepner, Stevens and Anderson reached 60,000 feet, but the envelope failed and the crew had to parachute to safety. Two years later, Stevens and Anderson attained 72,395 feet in *Explorer II*.

Settle, then a lieutenant commander, left stratospheric competition to others when he moved to China duty, commanding the Yangtze River gunboat *Palos*. Earlier, he had served on *Shenandoah* and *Los Angeles*. **Thom Hook**

touch and go

Tractor Driver?

It's a long, long road from hired hand and tractor driver to stunt pilot and *Tomcat* driver. Navy fighter pilot Ltjg. Gerald Reust, VF-12, made it in five years – from the dusty farmlands near McLoud, Okla., to the flight deck of *Enterprise* in the Pacific.

He learned to fly a Cessna for fun. That spawned an interest which led him into stunt flying in a souped-up *Bellanca*. Which led him to the Naval Academy. He graduated in 1975 with a degree in oceanography. Later he graduated first in his class from Pensacola flight school.

After he received his wings, he asked for the *Tomcat*, which he has been flying for a year and a half. As soon as Reust has 1,000 flying hours, he is going to try for the *Blue Angels* or the test pilot program.

And when he is too old to fly, it will be back to the earth. "There's something gutsy and noble about hard physical labor – you have to be cut out for that, too."

Reverse Modeler

There are probably hundreds of military persons who spend their off-duty time building model airplanes. But one person, 1st Lt. William Fletcher, USMC, bombardier/navigator with VMA(AW)-332, has a new twist.

He has taken a small airplane and scaled it *up* (to an actual flying aircraft) instead of down. He used the same structural techniques of foam and fiberglass for the skin of the aircraft that radio-controlled-model builders use.

Fletcher started construction in 1973 while attending Purdue University. The aircraft was part of an independent research project he was involved in.

"Originally there were three of us building airplanes but mine is the only one still being completed. The others have sold theirs," Fletcher says.

The prototype aircraft, the one the plans were originally designed for, weighed 310 pounds empty and was powered by a 36-hp Volkswagen engine. Fletcher's plane, called the KR-1, will weigh a bit more because he has dressed it up in certain areas and increased the strength in the cabin area.

He's also using a larger engine for more thrust.

"I should be able to cruise at about 200 miles per hour," he says. "Others have used 65-hp VW engines and attained a cruising speed around 170 miles per hour. The limiting factor on mine is probably the tail. It was designed for 250 miles per hour.

"I've removed the cooling and shrouding equipment as well as the generator and alternator from the engine. The distributor has been removed and replaced with an aircraft magneto."

Fletcher's system gives his plane about 72 miles per gallon, cruising at 200 miles per hour.

The fuselage of the aircraft is made of wood, primarily spruce, and polyurethane foam (building insulation) that is laid in and sanded to shape, with fiberglass on top of that. This makes it a very lightweight plane. Fletcher estimates he has about 500 hours more of work to complete his plane.

Spacey

Kids today collect *Star Wars* trading cards, listen to the rock group *Wings,* follow the *Super Sonics* and think the *Blue Angels* are out-of-sight. Sound spacey? It is! Teachers in the western part of Washington, recognizing that today's youth have their heads not in, but above, the clouds, are preparing to keep up with their students.

Recently 60 elementary and secondary teachers toured NAS Whidbey Island, Wash., for an in-depth look at Naval Aviation. Jim St. Martin, workshop director, said their goals were to create an interest in and awareness of aerospace industries and related fields, and develop materials for classroom use. Many of the teachers have already integrated aerospace and aerodynamics into their curricula, such as Mary Galvin's science crafts program which has her fifth graders working on rocket pyrotechnics.

As part of their workshop activities the teachers have visited Boeing, Sea-Tac Airport and the FAA control center in Seattle. They have taken flights in light aircraft and helicopters, constructed kites, model rockets, gliders and airplanes, and attended demonstrations of new teaching materials and techniques.

Airplanes

By Capt. R. A. Bruning

All the old-timers remember the "blue box" link trainers that flew like combination Mack trucks and were as unpredictable as the weather. Well, like the evolution of aircraft, from SBD *Dauntlesses* to F-14 *Tomcats*, the state of the art in flight simulators has advanced rapidly, especially in the past decade.

Today's high fidelity, sophisticated weapons system trainers with their six-degree motion bases and visual systems are, in fact, "airplanes in little rooms." These trainers-on-the-ground can pull up to seven Gs and present a realistic picture of a night approach to a carrier. The heart of these new simulators is the digital computer. In a year or two we will see two pilots in separate simulators, dog fighting to the "death" – on the ground. Almost every aircraft in the fleet either has or will have a modern simulator in the near future supporting it. They include,but are not limited to,the F-14,S-3A,P-3C, LAMPS MK I, A-7E, EA-6B, A-6E and E-2C.

A few unique features of most trainers are:

Demonstration mode – A pre-recorded evolution, such as GCA, flown with the student watching the simulated aircraft fly the maneuver. All controls, gauges, etc., move as if someone were actually doing the flying.

Playback mode – After a maneuver is completed, it can be re-flown, hands-off, to show what errors have been committed.

Freeze – At any time during the flight, the instructor can stop the trainer and explain an error, then resume the flight.

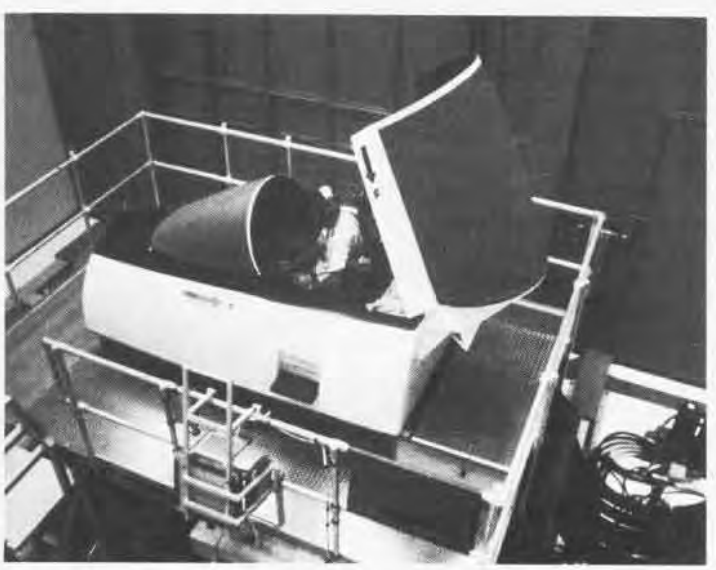
Initial conditions – A tactical flight can be commenced from some given location in the world, under any environmental conditions, at any altitude, airspeed and heading, thus eliminating takeoff and transit time. Targets, such as other aircraft, missiles, surface ships and submarines, can be pre-positioned for a tactical problem.

Canned scenarios – Pre-recorded tactical problems can be called up as an initial condition and one crew's performance can be measured against another's under identical conditions (i.e., weather, aircraft, performance, target movement, etc.).

Safety – This is probably one of the most important uses of the simulator. Emergency procedures, such as loss of a helicopter tail rotor, can be realistically done. Squadrons deploying to areas of the world with unique weather or terrain can now practice in those conditions prior to experiencing them in actual flight.

The Air Force has even used its simulators to help determine the cause of an accident. Instrument readings, aircraft altitudes and other variables which survivors could recall, were entered in the simulator computer which was then flown. The results were compared with those already programmed in the trainer and although direct correlation could not be achieved, similarity to the known emergency condition aided substantially in determining the accident cause.

The current emphasis on trainer procurement and use began in the early 1970s, when the cost of new aircraft and the cost to operate and maintain them skyrocketed. The airlines recognized the simulator's value



in Little Rooms

earlier. (Conducting training in empty, four-engine jet airliners is extremely expensive.) The Department of Defense, the Office of Management and Budget, and the Government Accounting Office began asking the services to use simulators. As a result, in 1972, CNO (Op-59) and NavAirSysCom developed extensive trainer procurement programs for all new aircraft and, when money was available, for many aircraft already in the fleet.

The seriousness of the Navy effort was highlighted when DCNO(Air Warfare) reduced the procurement of seven S-3A *Vikings* in order to purchase simulators, the first time in Naval Aviation history that this had been done. This decision contributed to the rapid transition of S-2 squadrons to S-3As. Early in the transition, when the *Viking* was having the usual new-aircraft problems, the simulators were utilized 20 hours a day, 7 days a week. Today, with the transition complete, the S-3A simulators are programmed for 16 hours a day, 5 days a week.

It is estimated that it would take twice as many aircraft hours in direct support of training if these simulators were not available. The operating cost of the S-3A is approximately $400 per flight hour,the weapons system trainer, about $100; so, the savings accured over the life of the simulators will more than pay for the initial investment cost. This does not include sonobuoy savings, fuel savings and probably the most important, more effective and efficient training. We will never reach the point where we can do everything in trainers, but we are making gigantic strides in determining what trainers we need and how to best use them.

A vital part of aviation, "airplanes in little rooms," is here to stay.

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Awards

VA-305's *Lobos*, Point Mugu, extended their list of accomplishments when they topped all A-7A, A-7B and A-4 squadrons in the ComLAtWingPac bombing derby. Members of the bombing team were Cdr. Lou Jones, C.O.; LCdrs. Doug Bailey, John Distad and Royce Mattson; and Lts. Rob Lind and Don Lawson. Competition consisted of one bomb each in 45-degree dive, level laydown delivery and high angle loft, as well as night events.

Four officers of Oceana's VA-35 received awards from Grumman Aerospace Corporation for A-6E *Intruder* flight-time milestones. They are: C.O., Cdr. J. D. Joyner, 3,000 hours; LCdr. Garth Van Sickle and Lt. John Kidder, 1,000; and Lt. John Bone, 2,000.

They say success breeds success, but in the case of VT-19, it's becoming a habit. In its short seven years, the squadron has compiled quite a record. Last year it was awarded the VAdm. John Towers, CNO and CNATra Safety Awards, and the VAdm. Robert Goldthwaite Award for training efficiency. "It has taken a lot of work on everybody's part, keeping on top of things, putting out 150 percent all the time," stated Cdr. W. Wayne Backman, C. O. of the Meridian-based squadron. "We have outstanding officers, petty officers, non-rated and civilian personnel who keep things operating smoothly."

LCdr. John M. "Pete" Taylor of Cecil Field's VA-12 counted his 900th carrier landing and received the Golden Tailhook Award while deployed on board *Eisenhower*. The award is presented to a pilot or squadron which achieving the highest landing average during a specified period of time.

The *Royal Maces* of VA-27, Lemoore, took possession of the RAdm. H.P. Glindeman,Jr., challenge trophy. Awarded by Commander, Task Force 77, the trophy goes to the squadro which proves its excellence in air-to-surface ordnance delivery competition. Led by top bomber Ltjg. Randy Deutschendorf, VA-27 outscored all challengers.

Anniversaries

Moffett Field's VP-46, claiming to be Navy's oldest continuously operating patrol squadron, recently marked its 47th anniversary. During its history, the squadron has flown in 12 aircraft models, including the PM-2, P2Y-1, PBM-5, P5M, P2V and all models of the P-3. Cdr. William E. Frederick is C.O. of the squadron, which recently surpassed 119,000 accident-free flying hours.

Commissioning

Unit Bravo and Det 2 of HM-12 were combined and redesignated HM-16 during a ceremony at Norfolk October 27, 1978. The squadron's first C.O. is Cdr. Robert V. Goodloe, Jr.

Decommissioning

October 20, 1978, marked the disestablishment of Key West-based RVAH-6. Commissioned in 1950 as VC-6, the squadron became RVAH-6 in 1965. It has been home-based at Moffett Field, Pax River, North Island and, finally, Key West in 1974. Over the years, the squadron has flown the AJ *Savage*, A-3B *Skywarrior* and RA-5C *Vigilante*. Last C.O. was Cdr. Allen J. Frank.

Records

LCdr. Fred Lentz, head of NATC's Carrier Systems Branch, Strike Aircraft Test Directorate, received a plaque from Vought Corporation for 2,000 safe flying hours in the A-7. He flew most of the *Corsair* hours while assigned to VAs 46 and 82 at Cecil Field.

While on a recent training mission, Cdr. Tom Irwin, skipper of VFP-306, NAF Washington, D.C., passed his 2,000th hour in the F-8 *Crusader*. VFP-306 is one of the last Navy squadrons flying the veteran aircraft, which has served for over 20 years in the fleet and reserve forces. It is now used solely for light photo reconnaissance.

CVW-17, commanded by Cdr. Bud Lineberger, returned from a Med deployment aboard *Forrestal*. Air wing squadrons participated in nine National and NATO exercises, including *Northern Wedding* and *Display Determination*. Pilots and aircrews flew with or against forces from France, Norway, United Kingdom, Italy, Portugal, Denmark and the USAF. During the cruise, CVW-17 amassed nearly 23,000 flight hours and 11,000 carrier landings.

Cdr. Gary F. Wheatley, CAG-1 (left), and Cdr. Hugh "Tony" Merrill, C.O. of VA-72, recently achieved 1,000 carrier arrested landings. The new members of the 1,000 Traps Club are shown exchanging mutual congratulations after their night landings. Wheatley made his milestone in an A-6E *Intruder*, Merrill in an A-7E *Corsair II*. This event is believed to be the first time that two Naval Aviators made their 1,000th trap on the same date (October 20, 1978), aboard the same ship (*Kennedy*), during the same recovery period. Coincidentally, Cdrs. Wheatley and Merrill served together during their first assignment after flight training.

VMAT-203 *Harrier* pilots (L-R) LCol. Fred Ogline, C.O.; Majs. Paul Lowrey, Dallas Weber, Jimmy Cranford and James Barksdale; Capts. Dennis Snook and John Cox (in cockpit) have each completed 1,000-plus accident-free flight hours. The Cherry Point aviators received plaques adding them to the list of safe pilots of V/STOL.

Several squadrons celebrated accident-free milestones in years: VA-176, 7; VF-32, 9; VAW-123, 10; VS-32, 14; and VS-28, 16.

Corpus Christi aircrews and maintenance personnel marked seven years of accident-free flying, representing 38,300 safe flight hours.

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Crusader 623 (in photo) recently recorded its 5,000th flight hour while flying with VFP-63 Det 2 on board *Kennedy*. This aircraft, BuNo 146858, was originally manufactured as an F8U-1P in the early 1950s by Vought. In August 1969, it was modified into an RF-8G. It has served with VC-7, VFP-63, VMCJ-1 and VMCJ-3.

The men in the photo are VF-14's maintenance officer and chiefs. They issued a challenge to the aircrews: "We'll give you more up airplanes than you have crews to fly them." And they did just that! Led by Cdr. T. W. Wright, the *Tophatters* recently broke a monthly flight hour record by logging 977.5 in 19 flying days. This shattered the old record of 752.9.

Two aviators recently achieved personal milestones. Cdr. James A. McCallum, X.O. of HC-11, North Island, flew his 4,000th flight hour, representing over 16 years of flying in 9 different aircraft, including 6 helos. LCdr. W. T. Snyder logged his 593rd carrier arrested landing and his 500th landing on *Enterprise* while flying an F-14 *Tomcat* with VF-1. As part of CVW-14, the squadron is home-based at Miramar.

Six *Tophatters* of VF-14 logged their 300th arrested landing on *Kennedy*. All six pilots achieved this milestone during their first squadron tour. They are: Lts. Bob "Arlo" Guthrie, Steve "Saint" Nichols, Don "Doc" Phifer, Ed "Elmer" Harvey, Ted "Dog" Harwood and Walt "Puppet" Rogers.

Three Moffett Field squadrons achieved milestones in accident-free flying. VP-46 clocked 120,000 hours, VP-40 surpassed 85,000 and VP-19 completed 75,000. Respective C.O.s are: Cdrs. Bill Frederick, Michael W. Gavlak and Norman C. Lord.

The *Torchbearers* of VAW-125 broke the E-2C monthly flight time record by flying 402.8 hours in 19 days. While aboard *Kennedy*, the squadron flew an average of 20 hours a day for 11 straight days in support of NATO Exercise *Display Determination*. C.O. is Cdr. William J. Mooberry.

Rescues

The Coast Guard officially thanked Patuxent River for the Navy's assistance last October when USCGC *Cuyahoga* collided with an Argentinean freighter at the mouth of the Potomac River. A message from Adm. John B. Hayes, Coast Guard Commandant, to RAdm. James H. Foxgrover, Commander, NATC, read in part, "The loss of 11 Coast Guardsmen from the cutter *Cuyahoga* was indeed tragic. Without the dedication and professionalism of the Navy personnel at Patuxent River, our loss might have been greater." The naval hospital was the focal point for the treatment of survivors, while Pax's air operations department helped coordinate search and rescue operations.

Honing the Edge

While operating out of Okinawa, the *Chargers* of VF-161 participated in the three-day *ReadEx 1-79*, in which they took part in two air-to-air missile firing exercises and one air-to-surface event. The first day, Cdr. Andy Burgess and Ltjg. Steve Hissem launched an AIM-7 *Sparrow* and AIM-9 *Sidewinder* while attacking a high altitude supersonic bogey. The next day, Lt. Bob Kelly and Ltjg. Doug Loehner vectored onto a low altitude towed target, accomplishing a flawless head-on *Sparrow* attack and a lethal tail on AIM-9 firing. Finally, Lt. Walt Granade and Ltjg. Joe Capalbo flew a low altitude profile against a target barge simulating a guided-missile-equipped surface ship, ending with a *Sparrow* launch against the barge.

VP-40, NAF Okinawa, completed *ReadiEx 78*, a coordinated exercise with Seventh Fleet forces. During many types of missions, the knowledge and skills of *Marlin* aircrews were put to the test. The maintenance department did an outstanding job, allowing the squadron to meet both its operational and exercise tasking.

Et cetera

Strapped into his flight suit, CWO Don E. Diederich, VMA(AW)-533 B/N, picks up his helmet as he heads for an A-6 and his last hop

before retiring as the last warrant officer in the Marine Corps still flying in the *Intruder*. Diederich ended 28 years of service.

The first aircraft from CVW-6 to land aboard the air wing's new home, *Independence*, was an SH-3H *Sea King* flown by LCdr. Richard W. Barnum and Lt. Peter S. Blackwood from HS-15, Jacksonville. The first fixed-wing aircraft to land aboard was an F-14A from NATC Patuxent River. The *Tomcat* was one of several aircraft used to recertify *Indy's* catapults and flight deck. During sea trials off the Virginia Capes, *Independence* hosted other squadrons from her new air wing. They included VFs 33 and 102 and VA-176, Oceana; VAs 15 and 87 and VS-28, Cecil Field; and VAW-124, Norfolk. In six days air wing aircraft recorded 449 flight hours, 371 cat shots and 628 arrested landings.

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Enterprise, home-ported at Alameda, recently completed a short visit to Fremantle and Perth, Western Australia. Through the dial-a-sailor program, local Australian families entertained Navy personnel in their homes, on family outings and in parks and wildlife preserves where koalas, kangaroos and exotic birds could be seen in their environment. In turn, the sailors brought their hosts aboard *Big E* for tours of the ship. Some distinguished guests included: Governor of Western Australia, Sir Wallace Kyle; Premier of Western Australia, Sir Charles Count; the American ambassador to Australia; and the mayors of Perth and Fremantle.

The A-6 *Intruder*, whether it be the EA-6A or EA-6B with their electronic counter-measures equipment, or the A-6E bomber, has

traveled all over the world and has served in every climate, launching from tiny expeditionary airfields and carriers at sea.

There's a new kid on the block at Lemoore - the Fleet Introduction Team for the F/A-18. For the past two years, work on the *Hornet* program was a collateral duty for four officers, three enlisted personnel and two civilians on the staff of ComLAtWingPac. When the first *Hornet* arrives, the team is expected to have a complement of 23 officers, 59 enlisted personnel and 9 civilians, all trained in the maintenance and operation of the new aircraft. Facilities, supply support and technical manuals must also be developed.

Change of Command

CVW-15: Cdr. Frederick P. Meyers relieved Cdr. Leighton W. "Snuffy" Smith.

CVWR-30: Cdr. H. David Alexander relieved Capt. Riley D. Mixson.

HAL-5: Cdr. Clyde Kizer relieved Cdr. Robert Womble.

HS-2: Cdr. Vernon H. Von Sydow relieved Cdr. Edwin C. Benshop.

HSL-32: Cdr. Michael B. O'Connor relieved Cdr. Charles W. Oakes.

VA-27: Cdr. James W. Partington relieved Cdr. R. K. Pottratz.

VA-45: Cdr. Gerald R. Hertzler relieved Cdr. Richard B. Porter.

VA-113: Cdr. John P. Park relieved Cdr. Mike Webber.

VA-122: Cdr. John A. Moriarty relieved Cdr. M. W. Patrick.

VA-204: Cdr. Norris J. Flagler relieved Cdr. James S. Greenwood.

VA-205: Cdr. James G. Bailey relieved Cdr. Robert D. Sibold.

VC-3: Cdr. Jon P. Komarek relieved Cdr. William E. Stepp.

VMA-513: LCol. Jon R. Gibson relieved LCol. Richard D. Hearney.

VR-24: Cdr. Richard D. White relieved Cdr. R. E. Weaver.

By Lt. Bob Frantz, USNR

They report here with between 42 and 45 hours total time in the F-4. Upon completion of the syllabus, after six weeks or so, they'll be at least comparable to the standard fleet fighter pilot in air combat maneuvering (ACM) expertise. When they reach the fleet they'll surprise, even shock, some of their squadron mates with their competence and aggressiveness in ACM. They will have undergone what will probably prove to be the most concentrated ACM training they'll receive in their careers.

The comments belong to LCdr. Joe Thompson, officer in charge of the ACM detachment of Fighter Squadron 171. VF-171, based at NAS Oceana, Va., is a replacement air group squadron. The Det, based at Boca Chica Field, Naval Air Station, Key West, Fla., is primarily responsible for conducting ACM training in the F-4 *Phantom* for new aircrews. It also refreshes aircrews returning to an F-4 fighter billet after a layoff of one year or more.

Thompson, who came to the Det with an extensive fighter background, including 1,700 hours in the F-8 *Crusader* and 1,000 in the F-4 and combat cruises in both, places the program in perspective. "Here they will fly nothing but ACM for six weeks. Pilots will get 18 hops and Radar Intercept Officers (RIOs) 15. Top Gun (Navy Fighter Weapons School) is a great program, but it's a train-the-trainer deal. It trains one or two crews from each squadron who then go back and train the rest of the squadron. Fighter Squadron 43's adversary training is excellent. But again it's 10 to 12 hops max. Fleet squadrons just have too many other commitments. Shipboard ops and work-up for the boat just don't leave a lot of time for ACM."

Training for new aircrews begins with an introduction to F-4 performance, basic offensive and defensive maneuvers, and progresses to section air combat (two F-4s) against multiple bogeys (unidentified or enemy aircraft). Refresher replacements receive the same training but on an accelerated basis. Pilots get 12 hops and RIOs 10. Included in the training is air combat against dissimilar aircraft. The A-4E flown by staff pilots and F-5 flown by one of VF-43's adversaries simulate MiGs.

"The first one-versus-one against an A-4 is generally a learning experience for the replacements. They're amazed at what a low-wing-load (aircraft weight divided by wing area, generally an indicator of turning maneuverability) bogey can do to you." The speaker is LCdr. Dan "Lurch" Bunting, assistant officer in charge.

Lurch, with 2,500 hours in the F-4, 700 as an RIO, stresses, "Every aircraft has strengths and weaknesses. Some accelerate better, some turn better, some have a better weapons system. It's the crew's job to maximize its strengths and minimize its weaknesses. The challenge is to force your enemy to fight your fight! To do that you must know not only your aircraft, but his as well. We train these guys to be able to fly the F-4 to the edge of the envelope (limits beyond which the aircraft departs from controlled flight) to use its full potential."

During the training period, replacement pilots are crewed with instructor RIOs and replacement RIOs with instructor pilots. Replacement pilots are graded on each hop for flight preparation, basic air work, engaged maneuvering, ability to maintain sight of the bogey, energy management, fuel management and situation analysis. Replacement RIOs are graded on flight prep, voice communications, intercept and visual identification procedures, ability to maintain sight, crew coordination, fuel management and situation analysis.

Replacements are awarded a green sheet, in addition to a grade sheet, when an exceptionally good hop is flown. An unsatisfactory job is given a "down" in the form of a pink sheet which means the hop is incomplete and must be reflown. Culmination of the training is a graduation exercise in which the replacement crews are matched against each other in ACM engagements.

LCdr. Bunting describes the challenges to the replacements this way. "ACM is demanding for anybody. You're in a tremendously dynamic environment. Things are changing constantly. Bogeys are spitting in and out of the fight; your position is changing; your wingman's position is changing; and all the time in afterburner you're using gas like crazy.

"Considering the speed, with closure rates of up to 1,600 miles an hour, you realize situations must be analyzed and decisions made in a heartbeat.

"You must know not only your aircraft and its weapons system cold, but the enemy's capabilities as well.

"In an ACM engagement you're under more stress – and for a greater period of time – than anything in Naval Aviation, other than a night carrier landing. Of course there's nothing more precise or demanding than that!

"The heat in the cockpit and tremendous G forces – six to seven times your weight – nail you to your seat one minute. The next minute, with negative G, you float against the straps – create physical stress.

"Considering the stress factors and slim margin of error because of the speed at which things happen, these crews do a great job. Remember, they come here with just over 40 hours in the aircraft."

The replacements are well prepared for their ACM hops by a well conducted ground school syllabus including ACM tactics, radar, missiles, enemy aircraft and weapons systems, and aerodynamics.

Each hop is thoroughly briefed and debriefed. The entire engagement is tape-recorded and then analyzed during the debriefing.

The brief covers the specifics of the hop, the rules of engagement, professional questions to test the replacements' knowledge of ACM and the F-4, and an emergency brief to ensure replacements are aware of procedures for various emergencies.

Lt. Cliff Bateman explains the rules of engagement as a series of "artificialities" that you don't find in combat, but are essential to training for safety. "Fighter crews are competitive. They don't like to lose! We must ensure they aren't carried away by their enthusiasm and aggressiveness.

"Rules of engagement include using 10,000 feet as the deck. Below that

and you're scored as a kill. You must maintain radio communication at all times. There are several collision avoidance procedures, but the main thing is not to come closer than 500 feet to any other aircraft.

"If an unbriefed aircraft enters the fight, suspend the fight immediately.

"We also place maneuvering limits upon the aircraft. Flaps are not to be used for maneuvering. This minimizes potential damage to them. Our acceptable G range is minus three to plus six and a half. Beyond six and a half requires an inspection over and above what we do prior to every hop. Beyond seven and a half requires a major inspection which takes a minimum of four hours."

An instructor for the Det is selected based on a strong recommendation from his previous C.O., his detailer's concurrence and approval by the OinC of the Det, his staff and the RAG chain of command. The prospective instructor's reputation in the fighter community is of key importance. Det instructors are acknowledged experts in the ACM arena. Seventy-five percent of those senior enough to be eligible are combat veterans. Eighty-five percent of the more junior members are graduates of Top Gun. All have extensive and outstanding fleet fighter experience.

In addition to excellence in reputation and credentials, personality is a major factor in an instructor's selection. He must relate well with people. He must be able to teach, pass on the benefits of his experience, be critical when necessary and yet build confidence.

The average workday is long. First takeoff is at 0700 and most of the staff is still around at 1800. Yet no one refers to the job as work. The feeling of both pilot and RIO is almost a uniform "I have the best flying job in the Navy."

RIO instructors at the Det have an opportunity to "fly" the aircraft. Lt. George "Chip" Slaven calls it unique. "Here RIOs – and don't call us NFOs – find themselves critiquing replacement pilots on what has always been regarded as the pilot's bailiwick: things like aircraft positioning, offensive and defensive maneuvering and maintaining energy. Even though these guys don't have much time in the aircraft, they're competitive and want to win.

"I make sure I know enough about flying the aircraft to keep myself out of the box (nose low, accelerating in excess of 500 knots and approaching less than 7,000 feet). An ejection seat isn't much use under those conditions.

"When I see a situation building, where our safety rules may be violated, I call an immediate knock-it-off. That is, out of burner, speed brakes out, roll to nearest horizon and pull back up!"

An observer at the Det might note that instructor RIOs are tougher on the replacement pilots than instructor pilots are on the replacement RIOs. Lt. Mike Denkler, instructor RIO, explains it this way. "When a replacement RIO makes a mistake, the instructor pilot can compensate – he has his hands on the controls. We have to be more critical because we have no way of compensating for, or correcting, a mistake once the pilot makes it.

"Also replacement pilots come here with two to three times more exposure to military flying than replacement RIOs and I guess we demand more from them. We come here from fleet tours where we're used to winning. And we fight as a crew – replacement pilot and instructor RIO – and we still want to kill the bogey."

RIO Lt. Don Santapaola feels it's all worth it, just for the last couple of hops. "That's when we crew all replacements together. We sit in and monitor the missions. It's tremendous to see the job they do. You sense accomplishment in that you know you and your contemporaries have done it."

The reaction of the replacements to the training is, as expected of fighter crews, one of confidence.

Ltjg. Barry "Mules" Muhlenberg, a 1976 USAF Academy graduate, chose the Navy because he felt he'd have more opportunity to fly fighters and wanted to travel. Like the other new aircrew pilots he has had 24 hops and 45 hours in the F-4 prior to reporting to the Det.

Mules calls flying ACM, ". . . more fun, more challenging. This is the F-4's job. We learned to fly the F-4 during the early part of the syllabus at Oceana, and here we learn to fight it! It's frustrating trying to see that little plane going around, but you can see you're going to learn it. You work very hard on each flight – your flight suits are soaked with sweat – but your proficiency level goes up fast. It's great flying, and practice is the name of the game in ACM."

A 1976 Naval Academy graduate, Ltjg. Roy Weisert is a replacement RIO. ACM is new to him. "We did a little tail chasing at Oceana, where you get behind and stay at a guy's six o'clock position, but nothing like this.

"You have to get your eyes and body used to the demands of ACM. The physical strain of twisting and turning under high G in the cockpit to keep sight of the bogey makes you realize the importance of keeping physically fit. Listen to the breathing on the tapes during the debrief. There's physical effort involved.

"You learn in ACM you're not playing games anymore. This is what it's all about."

LCdr. Fred Vogt just completed the replacement pilot syllabus and reported to VF-33 as executive officer. Although he has flown 302 combat missions as both an RIO and pilot in the F-4, Vogt has absolutely no reservations about taking the refresher course. A Top Gun graduate, returning from a tour at the Canadian Forces Command and Staff College, Cdr. Vogt feels, "It takes current practice to be good in ACM. You must stay on top of it all the time. I don't mind having to go back to step one in ACM."

Vogt also feels strongly about the F-4 *Phantom*. "It's one of the best fighters in the world. It will go down in history in the class of the *Spitfire*. It has proven to be a truly multi-mission aircraft. It has served well in an interceptor, attack, fighter and photo reconnaissance role."

Interestingly, Ltjg. Gary Freeman, one of the replacement pilots, is the son of a man who flew the F-4 15 years ago. Rear Admiral Dewitt Freeman, USN(Ret.), commanded VF-101, the original parent of VF-171 Det Key West.

EARLY RAIDERS

By Clarke Van Vleet

"It is difficult, perhaps impossible, for Americans today to understand how bitterly the United States was fighting for its very survival back in 1942."
Martin Caidin

The outlook was bleak after the attack on Pearl Harbor, Sunday, December 7, 1941:

- Eight U.S. battleships and three cruisers lay gutted in their berths.
- Guam fell to the invaders three days later.
- Wake was lost after a two-week struggle.
- The Philippines were rapidly being overrun.
- Carrier *Saratoga* was torpedoed and damaged January 11.
- Over half of Patrol Wing Ten's planes had been lost.
- Among large combatant ships, the U.S. had 6 battleships, 3 carriers and 21 cruisers against Japan's 10, 10 and 35, respectively, in the Pacific.

As 1942 got under way, the enemy was still on the move. The invaders were building up their newly captured bases in the mid-Pacific Gilbert Islands, shelling Midway and the Hawaiian group by isolated submarine attacks, and sinking several merchant ships between Hawaii and America's West Coast. Venturing to the shores of California, an enemy sub shelled an oil refinery at Ellwood on February 23. Two long-range Japanese *Emily* flying boats struck again at Pearl Harbor in early March but missed their targets.

"Where is the American Navy?" the

public began asking.

"The going will be hard. We will do the best we can with what we've got," declared Admiral Ernest King, Commander in Chief of the U.S. Fleet.

At the time, he and Admiral Chester Nimitz, Commander in Chief of the Pacific Fleet, were worried about the American-Australian lifeline. It was the convoy route over which reinforcements were being sent to slow the Japanese advance into the South Pacific. Pointing at this Allied sea lane like double-barreled shotguns were the Japanese mandated Marshall Islands and the recently taken Gilberts. The admirals decided that despite the odds of 10 carriers to 3 in favor of the enemy, the time had come to retaliate, to counterattack! Revenge raids were planned. In February 1942, carrier strikes were launched against the Marshall and Gilbert atolls and against recently lost Wake. An abortive attempt was made to raid Rabaul. In March, Marcus Island, less than 1,000 miles from Japan's homeland, was hit. Lae and Salamaua on the northern shore of New Guinea were targeted and attacked.

On Sunday, February 1, the initial raid came off. Vice Admiral William Halsey's *Enterprise*, screened by three cruisers and six destroyers, made up the team tackling the Marshalls. Rear Admiral Frank Jack Fletcher in *Yorktown*, supported by a similar but smaller screen, sailed up the enemy muzzle on a parallel course to hit the Gilberts. Seven of the coral islands in the two atoll groups were pinpointed as targets. Not too much was known about the enemy's dispositions, and the American pilots had only photostatic enlargements of old 1844 Wilkes Expedition charts to go by. Some observers termed the venture, "The husky but untried football team of State Normal going into its first game to stop the undefeated champions."

Kickoff time was 0443 that Sunday morning when *Enterprise* began launching her scouting, bombing, torpedo and fighting squadron, all carry-

ing the designation six. A full moon was still above the horizon. Commander Howard Young, head of the air group, led the first formations of 37 bombers and 9 torpedo planes. They headed toward targets on Roi and Kwajalein, the latter being the world's largest atoll. There lay the bases from which enemy planes had bombed the gallant Marine garrison on Wake only weeks before.

The bombers from *Enterprise* destined for Roi included those of Scouting Squadron Six (VS-6), which had been the first carrier unit to engage the enemy over Pearl Harbor. Now, it was among the first to strike back at Japanese territory. The first man in the unit to drop a bomb on enemy soil was the commanding officer of VS-6, Commander Hal Hopping. Sadly, he did not live to tell about it.

During the glide on Roi, Hopping's Douglas SBD *Dauntless* scout bomber was followed in by Lieutenants Earl Gallaher and Clarence Dickinson. The latter had tangled with the enemy over Pearl and had helped sink the Japanese sub I-70 off Oahu three days after the war began. As they came in on this first counteroffensive, Hopping was caught in a blaze of AA fire just as he released his bomb. His SBD was seen to sideslip, then suddenly crash-splash into the sea and sink. Three others met similar fates in a mission that attained only minor results.

It was a different story over Kwajalein. The enemy got plenty of "fish and eggs" for breakfast. In multiple missions throughout the morning, the *Dauntlesses* of Bombing Six (VB-6) joined the *Devastators* of Torpedo Six (VT-6) to surprise the Japanese. The former had ample supplies of 100 and 500-pound "eggs in their baskets," and the latter released a fistful of cigar-shaped Mk13 "fish" at ship and shoreline targets along the lagoon.

On one of those raids, the *Rams* of VB-6 arrived over the middle of the lagoon at 0725, led by their commanding officer, Commander William Hollingsworth. They were flying their SBDs in a three-division attack formation at 14,000 feet. At that height, the long, skinny reef, coiling around the 15-mile-wide lagoon, looked like a big coral snake making an oblong twist on the surface of the sea.

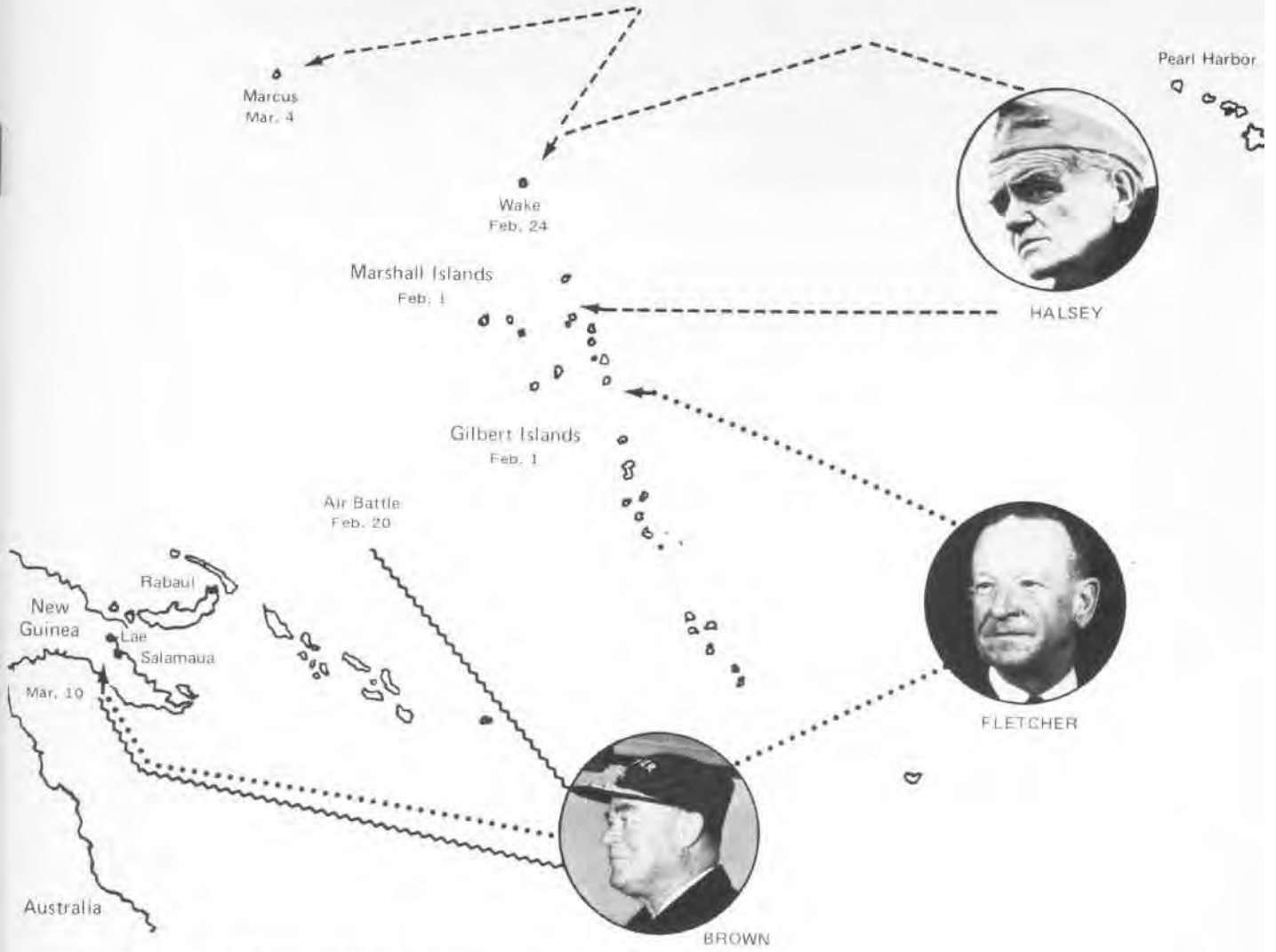
Several ships were spotted – oilers, transports, subchasers, a net tender, a gunboat, a minelayer. They looked like toy boats in a big blue bathtub. Hollingsworth eyed the cruiser kicking up a storm of ack-ack. He began preparations to go in. Like a quarterback, he scanned his *Rams'* formation. His team of 10 was poised for the charge. His signal would send them plunging at a 70-degree angle from their line of scrimmage over two miles high. It would be the first American dive-bombing attack of the war.

Hollingsworth started his pre-dive check. He glanced at the altimeter needling a steady 14,000 and at the carburetor mixture set at rich. He saw that the supercharger was engaged and that the flaps on the cowling were closed to prevent over-cooling of the engine during the dive. Both pilot and gunner settled more solidly in their seats, checking the buckles on their safety and parachute straps which crisscrossed and harnessed over their deflated Mae West flotation jackets.

The pilot snapped his goggles down over his eyes and, with a sweep of his right arm, slid the cockpit canopy back over his head and locked it into the open position. This would enable him to extricate himself more easily should the plane be hit or otherwise disabled. As the frame of the glass hood rolled back, it flipped out two aluminum shields on each side of the gunner's rear cockpit. These projections would serve to deflect the slipstream and thereby facilitate swinging, to either side, the free-mounted .30 caliber machine gun manned by the gunner who was facing aft.

Hollingsworth wasn't through. He re-examined the perforated dive flaps which were split open on the trailing edges of the wings to stabilize the plane's speed in its plunge. He made a final tab adjustment to firm the rudder which many gunners have watched shake and rattle violently during a dive. He throttled back to 2,000 rpms. He flipped open the cap on his telescopic aiming sight.

Hollingsworth was ready. The other nine pilots had gone through the same checklist. The leader signaled. It was 0727. The divisions separated, each flyer eyeing his target. Hollingsworth had chosen the cruiser. Pushing the



EMBARKED UNITS AND COMMANDERS

ENTERPRISE (CV-6)

Capt. G. D. Murray

Air Group Six
Cdr. H. L. Young

Scouting Squadron Six
VS-6
LCdr. H. L. Hopping
Lt. E. Gallaher

Bombing Squadron Six
VB-6
LCdr. W. R. Hollingsworth

Torpedo Squadron Six
VT-6
LCdr. E. E. Lindsey

Fighting Squadron Six
VF-6
LCdr. C. W. McCluskey

YORKTOWN (CV-5)

Capt. E. Buckmaster

Air Group Five
Cdr. C. S. Smiley

Scouting Squadron Five
VS-5
LCdr. W. O. Burch

Bombing Squadron Five
VB-5
LCdr. R. G. Armstrong

Torpedo Squadron Five
VT-5
LCdr. J. Taylor

Fighting Squadron Forty-Two
VF-42
LCdr. O. Pederson

LEXINGTON (CV-2)

USS LEXINGTON

Air Group Two
Cdr. W. B. Ault

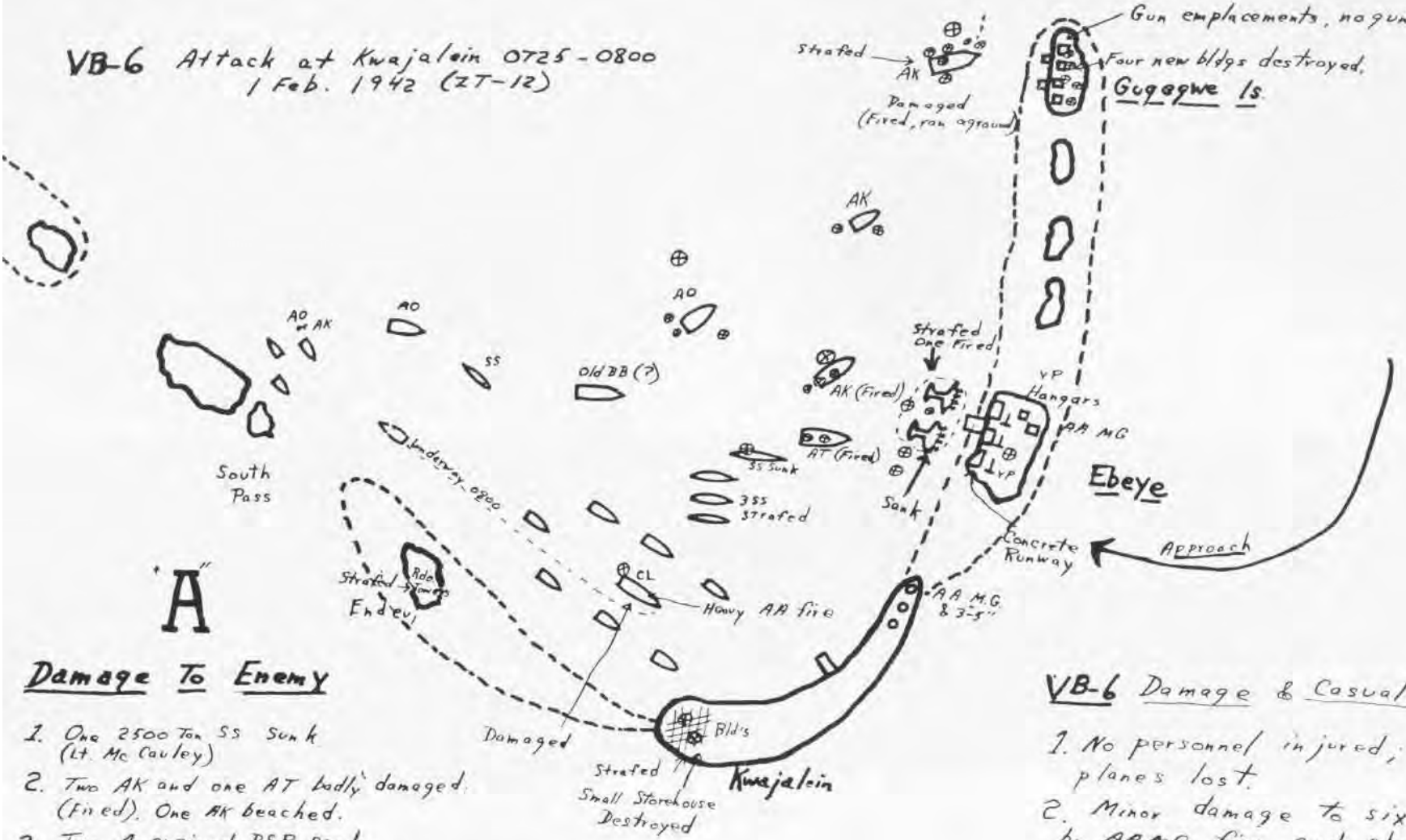
Scouting Squadron Two
VS-2
LCdr. D. E. Dixon

Bombing Squadron Two
VB-2

Torpedo Squadron Two
VT-2

Fighting Squadron Three
VF-3

VB-6 Attack at Kwajalein 0725-0800 1 Feb. 1942 (ZT-12)



Damage To Enemy

1. One 2500 Ton SS Sunk (Lt. Mc Cauley)
2. Two AK and one AT badly damaged (Fired). One AK beached.
3. Two 4-engined PSP sunk.
4. One AA-CL damaged aft. Stern rose out of water and AA fire ceased temporarily. (Lt. Comdr. Hollingsworth)
5. Four Bldg Gugegwe Is. destroyed.
6. Two small storehouses destroyed on Kwajalein Is.
7. Three SS's, several vessels and shore installations on Kwajalein, Endeu & Ebeye strafed.

VB-6 Damage & Casualties

1. No personnel injured; no planes lost.
2. Minor damage to six planes by AA M.G. fire and shrapnel.

Notes: (1) Heavy A.A. fire from CL in harbor. Light AA fire from shore batteries and considerable machine gun fire encountered.
(2) AA fire very inaccurate.
(3) No enemy aircraft encountered.

ENC "A" to Cdr VB-6 ltr VB6/A16(06) of 2/2/42

original sketch

stick forward and port, he rolled the SBD over and started down. He eased the stick back to vertical to align the plane with the ship below. He squinted into the eyepiece of the sight.

Wind whistled past the plane and withering ack-ack burst all about it in its near perpendicular descent. The air speed indicator quivered at 280 miles per hour. The cruiser loomed larger on the cross hairs of the lens. Guarding against becoming transfixed with the enlarging target, Hollingsworth shot periodic glances at the altimeter whose needle was jerking steadily downward from 12,000. . .10,000. . .5,000. The indicator hit 2,000 on the dial. The pilot reached below the throttle quadrant on his left and yanked the manual bomb-release lever. The bodies of both gunner and aviator jolted slightly as "the egg was layed."

The commander pulled the stick back to his lap. In the pullout, gravity grabbed the flesh and muscles of the men's jaws, biceps and thighs, giving them a heavy, hanging feeling. As they swept up and away, the gunner got a bird's-eye view of the explosion. The 500-pounder had shattered the stern quarter of Japan's 8,600-ton light cruiser *Katori Kanto*. Douglas Aircraft Company's *Dauntless*, designed by Chief Engineer Edward Heinemann, had proved itself in combat. (Rear Admiral W. R. Hollingsworth, now retired, lives in Maitland, Fla.; Ed Heinemann, who became "Mr. Attack Aviation," is retired at Rancho Santa Fe, Calif.)

In his action report, Hollingsworth wrote, "In several cases individual pilots, not satisfied with their dive, or observing previous hits on targets selected, pulled up and chose another target. As radical evasive action was required to escape the great volume of machine-gun fire, planes became separated and each pilot made his subsequent attacks individually. Glide-bombing and strafing were employed against ships, large seaplanes and shore installations. At 0745 the attack was completed and the squadron returned to the ship in small groups, effecting join-up en route."

The VB-6 commander led off another formation of nine *Dauntlesses* from *Enterprise* at 0930 for the island of Taroa where new airfield installations and many planes had been reported. With a ripple salvo of three bombs, Hollingsworth destroyed seven enemy planes parked on the airport apron.

Meanwhile, VF-6 fighters from *Enterprise* had first raked installations on Taroa and later on Wotje where they coordinated sweeps with the shore bombardments staged by Rear Admiral Raymond Spruance's cruisers and destroyers. Fighter pilot Lt. James Gray, who was a prime mover in installing homemade bullet-resisting boiler plating behind the seats of each F4F *Wildcat* in the squadron, shot down two interceptors during the morning, and Lt. William Rawie bagged another. Gray returned from his missions with 15 bullet pockmarks in his metal backrest.

The official *Combat Narrative* on the action had this to say: "Enemy fighters encountered were types 96, 97 and, in one instance, *Zero* fighters. The 96 and 97 fighters could outmaneuver our aircraft, including the F4Fs, and appeared faster than the SBDs. The F4Fs were much faster and had more gun power than the enemy planes, but the pilots of Fighting Squadron Six made no attempt to engage in dog fights as soon as the maneuverability of the enemy fighters became apparent."

Until around noon, Halsey maneuvered unmolested in a 5x20-mile area off Wotje waiting the return of his birds. Sensing such luck could not last long, Hollingsworth suggested, "Admiral, don't you think it's about time we got the hell out of here?"

"My boy," replied Halsey, "I've been thinking the same thing myself."

The byword throughout Task Force How became: "Haul out with Halsey."

Enterprise was pursued. Five *Betty* bombers cleared the clouds to make the first air attack on an American carrier in WW II. One of them also caused the first onboard carrier casualty of the war – bomb fragments from one near miss ripped through the hull to kill Boatswain's Mate George Smith. The other bombers overshot their mark, but one *Betty* banked, pivoted on a wing tip and came barreling back, heading directly for the ship.

Gaida and crew scurried to get a view.

RAdm. Hollingsworth with his wife, above, and as a WW II squadron commander.

"In those early days there was a lack of reliable communications. This must not be allowed to happen again. Timely, accurate and reliable communications are one of the most important keys to our defense. The equipment has been greatly improved today, and the Naval Aviation community is just as loyal, just as dedicated, just as capable as we were 35 years ago. The esprit de corps is still there and All Hands would give their all if ever called upon."

RAdm. Hollingsworth

Aviation Machinist's Mate Bruno Gaida hopped into the gunner's cockpit of a parked *Dauntless*, grabbed the .30 caliber and started peppering the on-coming enemy. Simultaneously, *Enterprise's* commanding officer, Captain George Murray, slipped the ship hard right rudder. The would-be kamikaze smashed the edge of the flight deck, sliced off the tail of Gaida's plane and then plunged over the side into the sea as Gaida and the crew scurried to get a view.

They subsequently hurried to put out a gasoline fire that ignited as a result of the crash and spread along the deck, causing billowing black smoke. RAdm. Hollingsworth, remembers, "The ship was heeling due to high speed and full right rudder. One of the Japanese bomber pilots reported to his base that the ship was on fire, listing badly and in a sinking condition. We had a Japanese interpreter on board who read the message."

Somewhat later, another incident, more dramatic than a TV script, occurred. The black smoke had marked *Enterprise* as a target for two other *Betty* bombers. On combat air patrol at the time was Commander Clarence Wade McClusky, commanding officer of VF-6, who gave chase to the two enemy snoopers. Before catching up with them, McClusky resorted to the tactics of an artillery forward observer by directing the ship's AA fire: "You're short! Out 500! You're on! You've got him!" The other bomber was pursued in and out of the clouds by McClusky with squadron mates Lieutenants Roger Mehle and James Daniels until they cornered the bomber. One of their radios crackled, "Bingo!"

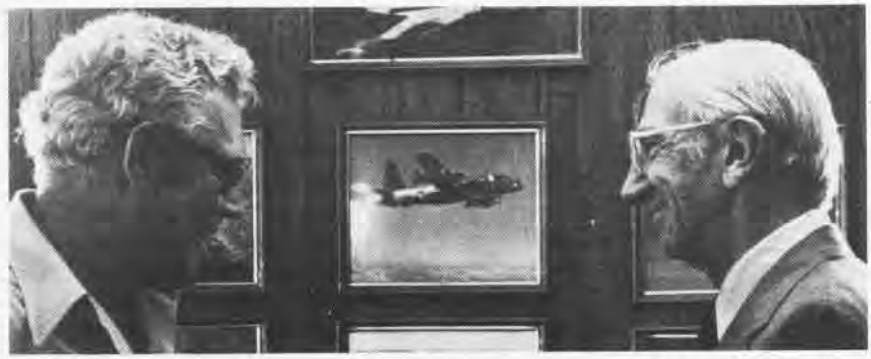
Another event developed still later. Bill Hollingsworth recalls, "The ship was some 50 miles from the area where the Japanese bombers had attacked. The ship's radio picked up an enemy squadron of torpedo planes about 70 miles away. General quarters was sounded and all guns manned. The Japanese planes arrived at the area where the carrier had been reported on fire and listing. The planes milled around for a short period, reversed course and returned to their base, reporting en route that the carrier had sunk. A report on the destruction of *Enterprise*, with all hands aboard, was broadcast by Radio Tokyo the next day."

When *Enterprise* slid into home base at Pearl Harbor on February 5, the Commander, Destroyers, Pacific, Rear Admiral Robert Theobald, came aboard shaking his finger at Halsey. He had been among those against overextending our forces at that time on such high-risk raids. "Damn you, Bill," he said, "you've got no business getting home from that one!"

In toasting the raid, Halsey may well have retorted with one of his favorites, "I've drunk your health in company; I've drunk your health alone; I've drunk your health so many times, I've damned near ruined my own."

Fletcher's Task Force Fox, with *Yorktown* in the Gilberts, did not fare as well as How. The Pacific in that area did not adhere to its name. On February 1, the morning of the scheduled launch, heavy localized turbulence thundered in over the target. Attempting to get in under the cover, many of *Yorktown's* planes got lost or separated from their formations. Despite fogged windshields and electrical disturbances in the gruel-like atmosphere, some bombings were accomplished, but the effort was not worth the cost. Eight aircraft were lost.

Several of the returning planes landed aboard *Yorktown* with less than two gallons of gas in their tanks. The last radio words heard on the fate



Heinemann with author (L) and, on opposite page, as he appeared in WW II. Mr. Attack Aviation made on-the-line critiques of planes, including his famous SBD Dauntless.

of two of VT-5's torpedo planes came through from Lt. Harlan T. Johnson: "This is 5-T-7. 5-T-7 and 5-T-6 are landing at Jaluit. Are landing alongside one of the northwestern islands of Jaluit. That is all." (Rear Admiral H. T. Johnson, a POW throughout the war, is retired in Sarasota, Fla.)

It was apparently a day for the Irish. As in the case of *Enterprise's* retirement when McClusky bagged a bomber, so did another Irishman protect *Yorktown's* retreat. VF-42's Ens. E. Scott McCuskey intercepted and finished off a four-engine flying boat bent on bombing the carrier. Wingman Ens. John Adams helped out. Much radio chatter accompanied the engagement, the final remark being, "Yippee, we shot his ass off!" Bill Surgi, then a machinist aboard *Yorktown*, remembers that this part of the dialogue got into the initial handwritten draft of the radio log.

The next foray against the enemy had to be aborted, but Navy pilots won the war's first big air battle. Vice Admiral Wilson Brown in *Lexington* was heading, on February 20, for waters off Rabaul to raid the big enemy naval base there. While still some 200 miles from the intended launch site, unknown aircraft were picked up by the carrier's radar. Six F4F *Wildcat* fighters were launched. They were led by Commander Jimmy Thach, commanding officer of the famous *Felix the Cat* squadron, Fighting Three (VF-3). A Japanese four-engined flying boat was contacted and Thach moved in to shoot it down. Later, another snooping *Emily* was intercepted and shot down by Lt. Onia Stanley. The enemy was now undoubtedly on alert and would be sending planes out from Rabaul to intercept Brown's task force. The real air battle was about to begin.

Photographed from the deck of Lady Lex during the battle, this battered Betty came back to bomb the carrier. She failed.

"Vectored out by radar and *Lexington's* fighter director, our planes made contact well out with nine Japanese twin-engined bombers at an altitude of 11,000 feet," states the official *Combat Narrative*. Thach tackled the enemy formation with his pilots Lieutenants Rollo Lemon, Walter Henry, Noel Gayler and Ensigns Dale Peterson and Edward Sellstrom. They knocked down seven of the bombers. But a damaged *Betty* turned on the carrier and began a low-level attack. The *Narrative* notes that "the plane came in against *Lexington* from the starboard beam. Fire was opened by all starboard 1.1 and .50-caliber mounts at 2,500 yards. The enemy was smoking by the time he had come within 1,000 yards of the ship, and the smoke increased until he crashed in flames 75 yards astern." This was the eighth bomber downed. The ninth escaped.

Meanwhile, another group of nine enemy *Bettys* was coming in from the east. The *Narrative* continues: "All *Lexington* fighters in the air, except two, were pursuing the remnants of the first wave of enemy planes and were not in a position to intercept. As the enemy came up on the starboard quarter, the two available fighters, led by Lt. Edward O'Hare, attacked. The guns of one fighter immediately jammed. Lt. O'Hare continued to attack alone. He shot down two bombers almost at once and damaged three others. He persisted in his attacks and shot down two more bombers in flames and caused a third to crash into the sea. He was directly responsible for the destruction of five enemy planes."

Thach and his pilots, returning from their foray with the first wave, bore in and shot down two more of the remaining four that O'Hare had

"Those early days in the Pacific fighting serve as testimony to American determination and fighting skill. What those flight and ground support crews accomplished was quite amazing. I'm certain that the same determination and fighting skill exist now. The flying machines then were pretty straightforward and simple. Today, I still strongly advocate the precepts of fundamental simplicity in aircraft design. We owe it to the aircrews to give them an uncomplicated but effective aircraft to help them do the job."

Ed Heinemann

broken away from when all his ammunition was expended. Another of the *Bettys* was bagged by Lt. Edward Allen and his gunner, Bruce Rountree, in their scouting SBD *Dauntless*, a plane not intended for that kind of engagement. Thus, between 1112 and 1625 that day, the *Minutemen* of *Lexington* picked off two patrol planes and 16 bombers. Squadron leader Jimmy Thach accounted for one of the *Emilys* and two of the *Bettys*. He lost only one of his pilots – Ens. John Woodrow Wilson who sank with his downed fighter.

Butch O'Hare, another Irish-American, had this to say: "The bombers were flying in a V of Vs formation about 12 miles from the carrier and at about 12,000 feet. I realized that it was up to me. There wasn't much else to do but go in shooting. On my first pass, two from the after-end on the right side of the V dropped out, then I moved over and went up the left side on the V. I'd shoot one, and after he dropped out, I'd pull out of the way, then go in after the next. I had to pull out fast to keep from letting the others bring their guns to bear. I repeated the process five times. Each time I started firing about 100 yards from the objective. The last time I got out with only about 10 rounds of ammunition left and with my gun jammed. The whole action required only four or five minutes."

Retired Admiral J. S. Thach, the "professor of aerial gunnery" who developed the famous Thach Weave fighting tactic used throughout the Pacific war, reminisces, "O'Hare's firing was a real record. He used only about 60 rounds on each of the planes he knocked down. He survived the concentrated fire from the bombers by attacking at an angle off their flight path instead of coming in from directly astern. We have practiced this for many years. No attacking fighter pilot should get hit by fire from bombers if he knows what he is doing." (Adm. Thach is retired in Coronado, Calif.; Cdr. O'Hare, lost November 1943 near Tarawa with the first combat fighter section to take off from a carrier at night, lives on in the name of Chicago's International Airport.)

During the air battle, Captain Frederick Sherman, like George Murray before him in *Enterprise*, adroitly skippered *Lexington* by helming her into abrupt maneuvers to avoid the few bombs the enemy dropped in final desperation. While the air battle was going on above the carrier, the wild enthusiasm, the cheering and jumping about the deck by the crew caused Adm. Brown "to remind some members of my staff that this was not a football game."

Realizing that the enemy was now on full alert and that his valuable vessel was subject to further attack, Brown wisely cancelled the venture against Rabaul and retired with Task Force Baker to safer waters. "It is my considered opinion," reported Brown, "that if we had been attacked by 40 planes instead of 18, only a miracle could have prevented damage to *Lexington*."

For the February 24 raid on Wake, Halsey got orders to sail as Task Force 13 on February 13, a Friday. He objected strenuously. Wishing to minimize every conceivable risk, even the mystic, he had the orders changed to read Task Force 16, sailing the 14th, St. Valentine's Day.

The Wake adventure had special significance for the crew of *Enterprise*. The ship's complement had revenge in their eyes. They remembered well delivering Marine Fighting Squadron 211 (VMF-211) to the island only four days before Pearl Harbor. They also remembered how that unit, with its colleagues on Wake, had doggedly fought the enemy until forced to surrender on December 23.

As it turned out, the Wake incursion, and the subsequent attack against Marcus Island on March 4, did little damage. Some buildings, storage tanks and hangars were destroyed. The *Combat Narrative* noted that the lessons learned and recommendations for future actions were that the strength of fighter squadrons on carriers be increased, leak-proof tanks be installed on all aircraft as expeditiously as possible, methods for the identification of our own planes while in the air be improved, carrier squadrons should have flight crews for 150 percent of operating planes as a minimum, and incendiary ammunition be supplied at the earliest time possible.

The last of the early Pacific raids came off on March 10. It was a perilous first-of-its-kind mission across rough jungle territory. The planes of *Lexington* and *Yorktown* flew the mountain passes of the world's second largest island, New Guinea, to hit the newly established Japanese bases along the island's northern shore at Lae and Salamaua. Launching 45 miles off the south coast of Papua Peninsula, the 104 planes crossed the 13,000-foot Owen Stanley Range, named after the British captain who had explored the Guinea coast in 1850.

Lexington's skipper, Capt. Sherman, reported later that "the attack by the *Lexington* and *Yorktown* groups was unique for carrier planes in that it involved a flight over difficult mountains, the pass being reported as seldom open even on good weather days for more than the four hours between 0700 and 1100. If the weather had closed in behind these planes both carrier groups might have been lost because of a gasoline shortage and their inability to climb to the altitude necessary to get back over the mountains. I do not recommend that this

A Wildcat takes off to climb through the New Guinea mountain pass.

"As long as we have aircraft, we will need aircraft carriers because these high-speed mobile bases enhance the value of the aircraft by a factor of at least 10."

Adm. Thach

Adm. Thach today, left. At right, he talks with ace O'Hare (L) during World War II.

kind of an operation for carrier planes be repeated very often."

Prior to the venture, the head of *Lexington's* Air Group Two, Commander William Ault, was picked to research and reconnoiter the little known Guinea geography in order to determine the most feasible route through the mountains to the targets. He found that the best flight path should follow the course of a jungle footpath which laced its way up and then down through a 7,000-foot gorge from the southern to the northern shore. On the ground, it was an 18-day trek for the Papuan natives, an indication of the ruggedness of this valley in the sky. For the air groups, it would be a 42-minute hop, provided they could avoid the cloud-shrouded peaks.

When the carriers arrived at the jumping-off point the morning of March 10, Ault flew up the Lakekamu River basin to the highest point in the pass astride Mt. Lawson. Here, he went into an orbit pattern to advise the upcoming raiders as to weather conditions and to vector them through the gorge via voice radio. He held his coaching circle until the last attacking plane had completed its mission and returned, back through the pass. The two carriers sent 104 planes over the hump – 103 returned, the one loss being Ens. Joseph Johnson and his gunner J. B. Jewell of VS-2, shot down by enemy AA fire. (Cdr. Ault was lost at the Battle of the Coral Sea in May 1942.)

The pilots surprised the Japanese at both Lae and Salamaua. No fighters rose to challenge them. It was Pearl Harbor and Port Darwin in reverse. Unfortunately, however, the damage rendered was not all that great. Performance of the Mk13 torpedoes at Lae and Salamaua was disappointing. Of 13 dropped only three were certain or probable hits. This prompted Adm. Nimitz to order an agonizing reappraisal of the American fish.

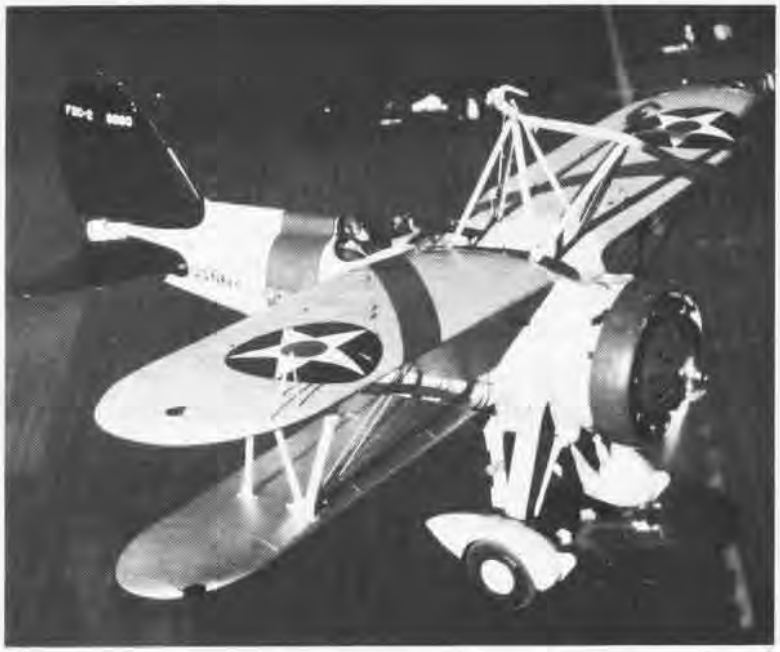
Final analysis determined that the Lae and Salamaua raid netted a large minesweeper, a transport and a light cruiser, all sunk. A counterattacking float plane was picked off by Lt. Gayler of VF-3. Installations at Salamaua were smashed and the *Lexington* group gutted the airport at Lae. It was the same field from which Amelia Earhart had taken off on her ill-fated hop nearly five years previously. It was also the same *Lexington* Air Group Two, with different personnel, which had flown 151,556 square miles over that area of the Pacific in July 1937 in search of the missing aviatrix.

As to the overall effects of the hit-and-run attacks, damage to the enemy was not great. Post-raid analysts tended to agree with the officer who observed, "The Japs didn't mind them any more than a dog minds a flea." The forays did not force the enemy to slow his advance into the South Pacific, and specifically, the conclusions of the *Combat Narrative* on the Lae and Salamaua raid reported "It must not be forgotten that it did not dislodge the Japanese from New Guinea."

But the raids were a start at stopping the aggressor. The men who participated in these initial attacks were early linebackers for all the Allied services which were then up front against an offensive that was rolling roughshod. Frank Plattner, now an attorney in Arlington, Va., was an engineering officer with the First Carrier Aircraft Service Unit at Pearl Harbor at the time. He knew many of these early pilots personally. He played many a poker hand with Butch O'Hare, for example. He says: "These flyers in the first phase of the war deserve the greatest admiration of our country. They shouldered an awesome responsibility. They looked death right in the face. They were the noblest of men in character and courage. They all ought to be angels."

Of real value was the emotional boost to America's morale engendered by the raids. Adm. Halsey's fighting spirit and swashbuckling personality were praised by the press. He became the country's first WW II naval hero whom the newspapermen dubbed "Bull," a nickname which followed him. The country also gained its first fighter ace – an ace-in-a-day with five enemy planes shot down. Edward "Butch" O'Hare was brought home a Medal of Honor hero. These developments revitalized faith on the part of the American public and bolstered morale in the Navy's budding carrier community. As President Roosevelt mentioned in a dispatch to Winston Churchill, it was the best news yet to come out of that dismal situation in the Pacific.

letters



Good Un

Your November cover was really a surprise. We were doing some quick double takes until the truth finally dawned. It was a "good un" though.

Since the subject came up, I thought you might like a selection of actual *Sparrowhawk* photos taken during their era at Moffett.

It was a super issue!

John Shackleton
PAO
NAS Moffett Field, Calif. 94035

Ed's Note: Thanks

Test Pilot School Reunion

The U.S. Naval Test Pilot School will hold its 31st annual reunion and symposium at Patuxent River, Md., on April 29, 1979.

Commander J. D. Hamilton, school director, is asking the alumni for papers on current test projects for presentation at the symposium. One-page abstracts of proposed presentations should be submitted by March 15 to Lt. P. R. Kluever, U.S. Naval Test Pilot School, NATC Patuxent River, Md. 20670.

All alumni are also requested to forward their current mailing addresses.

WTI

The article in the September 1978 issue of *NANews* concerning WTI 1-78 was outstanding. There is only one small detail which was left out: the personnel who kept the aircraft in a flying status.

I attended WTI 2-78 at MCAS Yuma as a maintenance division officer and I must say it was quite an experience. The professional attitude and outstanding performance of the maintenance personnel, from all the commands that provided aircraft, was something that should not be overlooked. They deserve recognition.

Next time, don't forget the team!!

J. M. Ainsworth, WO1
H&MS-24, MAG-24
FPO San Francisco 96602

Ommaney Bay

I am trying to locate survivors of USS *Ommaney Bay* (CVE-79) and her squadron, VC-75. The jeep carrier was sunk over a third of a century ago on January 4, 1945. Her losses were heavy. The survivors were picked up by a half dozen ships and scattered to the four winds without a chance to set a time and place to meet again.

Ommaney Bay and VC-75 left their mark on the Japanese Navy. On just one day, October 25, 1944, they sank the heavy cruiser *Chikuma* and attacked, with varying degrees of damage, a dozen other ships including three battleships, four cruisers and five destroyers.

Ommaney Bay may have been the smallest carrier in the Navy but she carried a big punch.

All former personnel interested in a reunion, please contact A. R. Zubik, 10620 Ferncliff, Baton Rouge, La. 70815.

That's an Oops

In the July 1978 issue of *Naval Aviation News* you mistakenly named the winner of the Arnold Jay Isbell Trophy for the Pacific Fleet as HSL-35. Since HSL-37 was the recipient of the award in 1977, we would appreciate your rectifying the error in your next edition.

R. F. Sears, Ltjg.
HSL-37 Public Affairs Officer

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INSIGNIA

These are some of the insignia approved by CNO during 1978.

NAVAL AVIATION NEWS