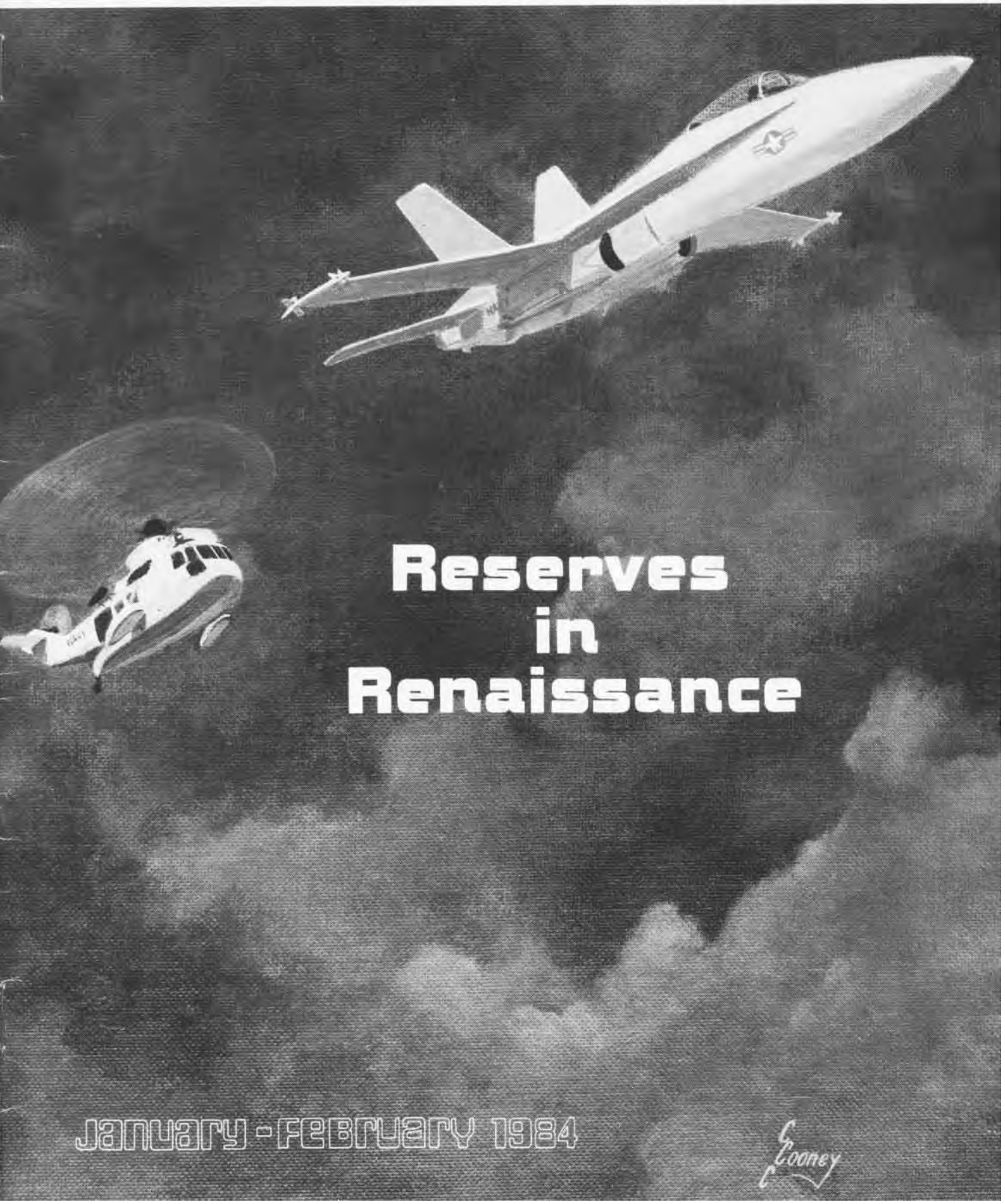
naval aviation news



Reserves in Renaissance

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Cooney

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The theme of this issue – *Reserves in Renaissance* – is vivid in this original acrylic painting by *NANews'* Art Director, Mr. Charles C. Cooney

Features

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The *Total Force* concept is reaching reality as the Air Reserve gets front-line fleet aircraft. "A Choice for Readiness," p. 5, sums up the reserve community while "Gearing Up the Reserves," p. 7, gives a rundown of the new aircraft expected to be flown by reservists.

The Selected Reservists of VFA-303 will be flying the Navy's newest, and some say *hottest*, fighter/attack aircraft at NAS Lemoore mid this year. The F/A-18 is the beginning of the "Reserve Air in Renaissance," p. 8.

HC-9 reservists picked up the primary combat SAR mission that ended in the active fleet with the deactivation of HC-7 following Vietnam. While their HH-3As aren't getting younger, the rescue tactics they develop and practice are new and often make them "Riders of the Night," p. 12.

The Naval Air Reserve NATOPS Evalu ation Team, NAS Willow Grove, Pa. doesn't have any aircraft but they ge the lion's share of P-3 flying hours They spend a lot of time on the roac "Teaching the Gospel According to NATOPS," p. 18.

Few areas in the Naval Reserve are a fully integrated into the regular Nav as VR squadrons. From Grenada t Beirut you can appreciate why the say, "We Deliver," p. 22.

There's been lots of talk about ho the Reserves can go operational o short notice and meld with the acti fleet thousands of miles from hom base. The reservists of VFs 201 ar 202 did more than talk, *they did* with their F-4N *Phantoms* and prov "Readiness Is Their Business," p. 2

PH2 R. J. Ortez

Robert C. Osborn: 41 Years of Unbroken Service

With 41 years of unbroken service, Grampaw Pettibone has never tired of his mission — to doggedly and openly harangue perpetrators and would-be perpetrators of safety violations and accidents. He is the oldest, feistiest, least forgiving, and most enduring champion of Naval Aviation safety; and surely has contributed to saving hundreds of lives, prevented thousands of injuries, and saved untold millions of dollars worth of equipment.

Unique in aviation safety, the visual characterization of Gramps was created by Robert C. Osborn, when he was a reserve junior officer on active duty in January 1943 in the Bureau of Aeronautics — now known as the Office of the Deputy Chief of Naval Operations (Air Warfare) OP-05, in concert with the man who conceived the idea and was the original columnist, the late Captain Spencer "Seth" Warner.

There have been many writers of Gramps stories over the years but there has been only one Gramps caricaturist. Mr. Osborn today, even at 79, continues to masterfully draw Gramps for *Naval Aviation News* in between the many commitments brought on by his international fame as a renowned artist, and acclaimed illustrator and cartoonist.

One measure of success and greatness for any man is to be asked to publish his biography during his lifetime. Mr. Osborn enjoys this distinction and released his autobiography a year ago last October. It's called *Osborn on Osborn*.

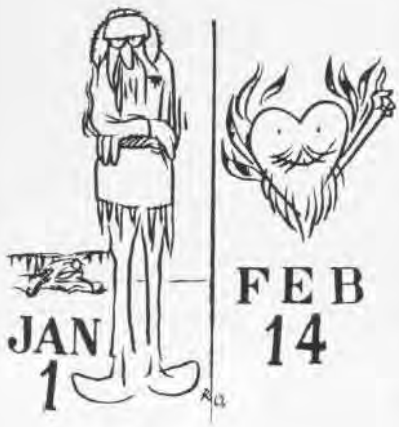
Last November 10, Mr. Osborn was given well-earned recognition for his long-term support of Naval Aviation safety as the guest of honor at a Naval Aviation Schools Command commissioning ceremony and luncheon at NAS Pensacola. This event coincided with the Naval Aviation Museum's 20th Anniversary celebration.

During the commissioning of 36 ensigns of Class 2883, Mr. Osborn was given an opportunity to express himself with words rather than with his sketch pad and charcoal. Standing before the gathering of some 150 guests and friends, he said, "The Navy has a clear desire for excellence in any act or operation. . . .One can see this idea from the top to the bottom, the Chief of Naval Operations to the freshly enlisted lad in boot camp. I happen to feel that in the Navy and Marine Corps excellence is pursued more rigorously than in any other service. Of course, I am prejudiced."

Then, talking directly to the young officers about to receive their commissions and begin their flight training, he added, "You gentlemen are on the way to joining an elite group, a distinguished cadre of pros. You are unlike civilians. Their world's much smaller and more limited than yours. You are working for ends to help all of us, not just you or your children, but all of us."

It is safe to say that virtually all Naval Aviators on active duty today read Gramps when they were ensigns and remembered the lessons learned with the help of the illustrations done by the insightful Mr. Osborn. Most of them learned to fly with Gramps as their safety conscience because of Grampaw Pettibone's uninhibited intolerance for poor headwork and negligence in any form.

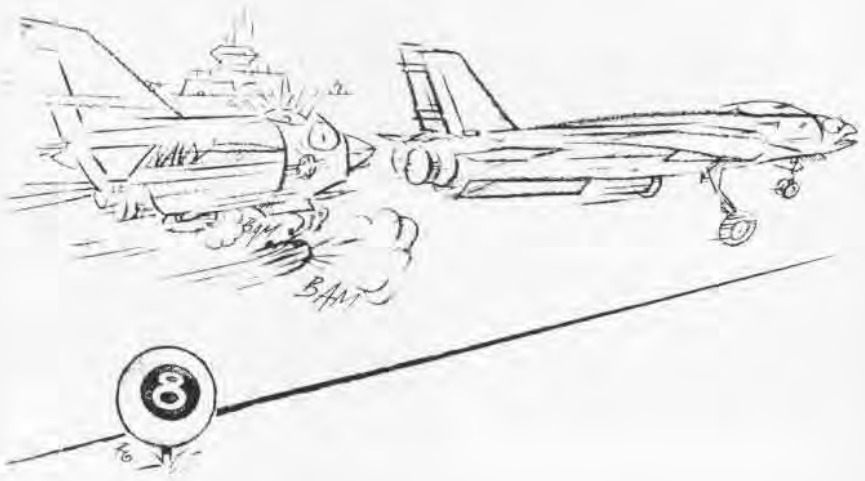
It was fitting that the future Naval Aviators and Flight Officers of Class 2883 should have the unique opportunity to meet the man who helped give the simple idea of Grampaw Pettibone life and remarkable longevity nearly two decades before they were born. ■



8 Board and Counting

A first-tour lieutenant, fresh from the fleet readiness squadron with 130 hours in the *Phantom,* was landing at NAS West Coast. His RIO was also a first-tour type but with cruise experience. The lieutenant was the first nugget pilot crewed with the RIO. The pilot's ICS and UHF were not working properly but everything else was in order. The F-4N separated from a wingman at the three-quarter-mile point and touched down behind an F-14 *Tomcat* with what appeared to be normal interval according to the tower and crash crew personnel, plus a witnessing pilot. The exact interval distance was undetermined. The pilot deployed the drag chute on touchdown but it didn't blossom for about 1,000 to 1,500 feet of the rollout. The RIO called for the chute three times, on touchdown and twice more before it opened. The pilot couldn't reply to the back-seater due to his radio problem. The pilot sensed an excessive closure rate on the *Tomcat* without the chute and believed he didn't have enough room to take off and go around. The tower controller estimated that the F-14 was 5,000 feet from the approach end of the runway at near taxi speed when the *Phantom* pilot, traveling at about 115 knots, commenced light braking.

After passing the 8 board (8,000 feet remaining), both main tires blew. The aircraft was on centerline at the 7 board but began turning left in a right skid, completing a 160-degree ground loop on the runway's left shoulder. The starboard main gear collapsed as the aircraft came to a



ILLUSTRATED BY Osborn

stop, dropping the wing to the ground. Neither flyer was hurt.

Grampaw Pettibone says:

My achin' acorns! Another judgment call that costs. Although reliable witnesses said the Phantom and Tomcat had proper interval, the pilot believed he was in extremis and began braking early. The F-4B/N NATOPS states that "Normally, wheel brakes should be used only below 100 knots since the probability of blowing a tire decreases significantly with a reduction in ground speed. . . . At high speed, brake pedal deflections as small as 1/16 inch have proved sufficient to blow a tire."

Old Gramps thinks the RIO's repeated calls for the chute early on in the landing didn't help to keep the cockpit climate "cool," although the pilot says the transmissions didn't bother him.

Postflight checks revealed no electrical continuity discrepancies in the nose gear steering system, yet the Phantom went out of control as it slowed down. Could be the pilot thought the worst was over and relaxed his vigil.

I've said it before and I'm sure I'll have to say it again: Know your machine. Stay ahead of it. And remember, a pilot is often like a quarterback dropping back into the pocket lookin' for a receiver while six huge linemen are bearin' down on him. Quick and correct decisions are a must for safety and health.

Bronco Belly Burner

A replacement pilot and his instructor were on a FAM flight in an OV-10 *Bronco*. After a pair of touch and go's, and one stop and go, the tower cleared the *Bronco* for a right crosswind turn in the pattern. The replacement pilot was in the turn at about 600 feet when the IP gave him a simulated port engine failure. The pilot leveled his wings, added power on the good engine, raised the gear and started a climb. He told the tower he had a simulated emergency and that he would extend the upwind leg.

Shortly thereafter, without further transmissions, the tower cleared the *Bronco* for a touch and go. The crew did not make the standard position report and gear check at low key where they arrived a little high and fast. From here on, the instructor pilot (IP) constantly coached the replacement pilot (RP). The OV-10 landed on the centerline drop tank about 1,600 feet down the runway slightly left. Neither flyer realized they had made a wheels-up landing until the aircraft stopped. The IP initially thought the nose gear had collapsed. The engines were secured just prior to stopping completely and the flyers egressed uninjured.

Grampaw Pettibone says:

Bust my bronco! Another case of tryin' hard but not seein' the forest for the trees. These fellows got so caught up with the simulated engine-out emergency they skipped the basics, like putting the wheels down. It just burns my belly to hear about these wheels-up fiascoes.

The RP made proper gear check calls on only one of the previous approaches but the IP didn't correct this trend. On the mishap approach, the tower issued a landing clearance unusually early in the pattern. But it's still the folks at the controls who are responsible for lowering the landing gear. 'Nuff sed!

With little fanfare, the newly established U.S. Naval Space Command became operational last October 1 at Dahlgren, Va. It consolidates Navy space activities — the Naval Space Surveillance System, the Naval Astronautics Group with headquarters at Point Mugu, and elements supporting the Fleet Satellite Communications System of the Naval Telecommunications Command — into one noncombatant command under the Chief of Naval Operations. The new organization will function in full cooperation with the Air Force Space Command and other Department of Defense elements.

Astronaut Captain Richard H. Truly, USN, has been selected as the first commander of the Naval Space Command.

It provides an organizational structure to support the Navy's space policy and strategy, and is the latest of the steps the Navy has taken in its increasing use of space to carry out its mission.

The Navy's interest began with the *Vanguard* project early in the space age and its use of space systems has steadily increased. In addition to conducting a number of space-related programs, the Navy is also currently participating in two joint space/satellite programs: Military Strategic and Tactical Relay Satellite and the NavStar Geoposition System, an advanced navigation satellite.

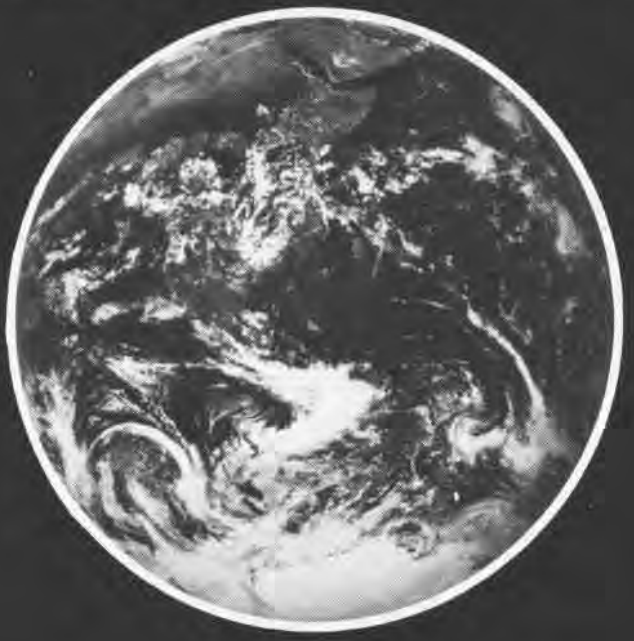
Several organizational changes preceded the establishment of the new command. In January 1981, a Navy Space Division was created within the staff of CNO to bring the various space functions together in a single staff office. A flag officer was assigned to head the Navy's space acquisition efforts in September 1982. And one month later, 12 officers began a postgraduate master's program in space engineering and operations at the Naval Postgraduate School in Monterey, Calif. On finishing, they will be assigned to the new command as Navy space subspecialists.

Truly was commander of the Space Shuttle *Challenger* for the eighth shuttle mission and was pilot on the second mission of *Challenger's* sister ship *Columbia.* He is the second astronaut to return to naval service since NASA was established 25 years ago. Commander Scott Carpenter, one of the original seven astronauts, was the first. Until Capt. Truly completes his commitments to NASA and reports full time as head of the Space Command, deputy commander Captain E. F. Bronson will be acting commander.

The initial staff at Dahlgren will begin the groundwork while additional naval and civilian personnel are being selected and transferred to the new command during the coming months.

The Dahlgren site was selected because it meets the new space command's requirements with minimal changes to the physical plant. The Naval Space Surveillance System, which is one of the oldest Navy space activities, has been located there since 1960. Therefore, the necessary communications with other space-related command centers are already in operation.

The Navy's reliance on space for maritime communications, navigation, environmental prediction and surveillance dictates that space systems be integrated into the Navy's operating plans. The Naval Space Command will explore opportunities in space that will enable the Navy to more effectively carry out its worldwide maritime missions. ■



JOC Kirby Harrison

AO1 Don Baker explains loading and firing of the M-60 machine gun to reserve pilots and aircrewmen from combat SAR squadron HC-9.

The Reserves: A Choice for Readiness

By Sandy Russell

For sure, Naval Aviation is not without a great many opportunities. With the right talents, training and motivation, the shopping list of careers and pipelines in the active Navy is impressive by any standards.

So, why choose the Reserves as a career? And, while we're on the subject, what are TARs and SelRes, and who or what is SAM? This story will answer these questions and others commonly asked by those unfamiliar with the ever-changing Naval Air Reserve program.

The first order of business is to clear the air and say that all active duty reserve personnel are officially referred to as TARs, which stands for Training and Administration of Reserves. The acronyms after the names of members of the reserve community are as follows: active duty Naval Reserve officers and enlisted are designated USNR and USNR-R-(TAR), respectively, while nonactive duty, part-time officers and enlisted members, i.e., *reservists,* are designated USNR-R.

TAR officers and enlisted personnel in the aviation community are assigned primarily to reserve units or reserve air stations and facilities. Their mission is to train reservists who drill once a month and for two weeks of active duty yearly, and to administer the Naval Reserve program.

In recent years, Selected Reservist (SelRes) has become the official term for paid, part-time Naval Reserve personnel, including those in the air and surface communities. Individual Ready Reservists, on the other hand, hold non-pay billets in volunteer training units (VTU), where new members are initially placed after joining the Naval Reserve. Old acronyms like SAR (Selected Air Reservist) die slowly and are still used in the reserve air community, along with new arrivals like SAM – the Sea and Air Mariner program. For now, let's just say that SAM is a recruiting program that enables civilians with no prior military service to join the Reserves. Later, we'll discuss exactly how this new kid on the block fits into the reserve family.

No matter what a member is called, the basic mission of the Naval Air Reserve has remained dedicated and consistent – to have on hand a force that is ready to mobilize when the need arises.

Established in 1953, the TAR program is unique in its longevity and breadth compared to similar programs in the other military services. Of about 12,000 TARs in the Navy, roughly 40 percent are part of the aviation community, comprising 800 officers and 4,000 enlisted members.

To become a TAR, officers must apply and be selected by a board. Enlisted personnel apply through a Naval Reserve recruiter. Only E-5s and below can enlist in the TAR program.

Commander Tom Leonard, a TAR and the aircraft modification program coordinator under the Deputy Chief of Naval Operations (Air Warfare), explains that the TAR program is the Navy's method of developing experts in the field of reserve management. "Our product," he says, "is the operational capability of [97,000] civilians."

Most TAR officers come into the program after a first or second tour in the active fleet and, therefore, bring to the reserve community up-to-date capability and experience. Cdr. Leonard's career pattern proves that a TAR officer not only brings in fresh expertise but that he can maintain it with a good deal of ongoing operational experience. Since joining the TAR program in 1970, he has flown F-4 *Phantoms* with VF-143, completing two SEAsia combat cruises and a Med cruise, and later with NAS Miramar's VF-301, where he was officer in charge. While assigned to Op-508 in Washington, D.C., he screened for command and again reported to VF-301, to become executive officer and then commanding officer, before returning to Washington and his present assignment in Op-506. Interestingly, about 10 percent of the 52 reserve squadrons have a TAR as commanding officer.

The basic difference between TARs and regular Navy personnel is that the TAR's mission is *training*. A TAR is responsible for maintaining readiness by training the civilian reserve community to be combat-capable and mobilization-ready. Cdr. Leonard says, "You're dealing with a different kind of people who have a different philosophy." He adds that we must be thankful for those dedicated people who take the time to drill on weekends. In fact, the *weekend warrior* might more accurately be dubbed *twice a citizen*. Like a regular Navy squadron, a reserve aviation squadron (ResForon) operates 22-24 days a month. The average reservist officer spends around 115 days a year training with the Reserves and, as Cdr. Leonard says, "That's a lot of time and a big personal sacrifice considering that he must also pursue a full-time civilian career."

One member of this dedicated group is SelRes Commander Jay Miller. Formerly skipper of VFP-206, NAF Washington, D.C., he now commands the newly formed carrier augmentation group CVN-69 Det 166, also based at the air facility. The unit's mission is to support USS *Eisenhower* in case of mobilization by bringing the ship's company up to combat manning level. Weekend drills consist of training in fire fighting, damage control and safety equipment for the detachment's approximately 50 enlisted personnel. Yearly active duty for training periods are normally spent aboard the carrier acquiring firsthand experience.

Cdr. Miller joined the Reserves in 1969 after several years of active duty flying the F-8 *Crusader*. Combined with his reserve time in the aircraft, he says he may hold a record for flying the F-8 – 15 consecutive years.

When asked to compare Navy flying with civilian flying, the Eastern Airlines pilot says, "In everything that I did associated with flying in the Navy I was totally responsible for myself, including my preflight planning and aircraft preflight. I had to keep up to speed on the knowledge I acquired over the years or suffer the consequences." He also likes the fact that his job in the Reserves gives him a chance to exercise his leadership and organizational capabilities. He enjoys "making things happen in the Navy," but adds that he's not a man who can sit at a desk all day. By his choice, he has the "best of both worlds."

Two HC-1 Sea Kings make a low-level pass above the Snake River during active duty for training near Mountain Home AFB, Idaho.

CWO3 Robert W. Quittner

When an officer makes the transition from active duty to the Reserves, as mentioned earlier, he is normally placed in a volunteer training unit, a non-pay drilling status. To get a paying aviation billet, he must have established a good record in the reserve program for drill attendance, performance and qualifications in the aircraft he wants to fly. He is then selected by the command to which he applied and is approved by the air wing commander.

Selected Reservists are rated through officer fitness reports and enlisted evaluations like their regular Navy counterparts. Their salaries are funded by the Chief of Naval Reserve, while TARs are paid from the same funds as regular Navy personnel.

Now let's take a look at the new Sea and Air Mariner (SAM) program, an expanded recruiting effort for enlisted reservists. Traditionally, an important function of the Naval Reserve has been to recruit *veterans* – individuals with prior active duty service. However, in paygrades E-1 through E-4, there are not enough veterans who leave active duty and join the Reserves. One way to resolve that problem is *to bring personnel with no prior service directly into the Naval Reserve.*

The SAM program was implemented on October 1, 1983, to improve, both in quality and quantity, Selected Reserve readiness by filling mobilization billet-manning shortfalls in paygrades E-4 and below. Administered by the Chief of Naval Reserve, it replaces the Navy Recruiting Command's Ready Mariner program. SAM will recruit 10,000 SelRes per year vice 2,000 under its predecessor.

All SAM enlistments are for six years. The age requirements for the program are 17 years to a maximum of 34

years of age. All SAMs will receive a minimum of 12 weeks of basic training.

There are three basic enlistment programs available under SAM:

- An enlistee can go to boot camp and directly to a Navy "A" school.
- An individual can go to boot camp, followed by apprenticeship training in one of three pipelines: aviation, seamanship and fireman. Training is conducted at sites co-located with the boot camps at San Diego, Calif., Great Lakes, Ill. and Orlando, Fla.
- Under the split training plan, a high school student can go to boot camp in the summer after his junior year, drill with the Naval Reserve during his senior year and, following graduation, go to an "A" school or apprenticeship training. Apprenticeship training lasts for four weeks. An "A" school may take several months. A similar plan exists for vocational/technical school and college students.

Other enlistment options under SAM include bringing some personnel into the Naval Reserve as designated strikers at an advanced paygrade up to E-3, based on their previous education in the field for which they are striking; and offering some qualified SAMs either a bonus or educational assistance if they strike for what are determined to be "critical" ratings.

As proof of the success of such a program, there are personnel on active duty today who came into the Navy through programs much like SAM. ATCS E. A. Delooze, a TAR and the maintenance chief at NAF, Washington's AIMD, went through boot camp during the summer after his junior year. After graduation, he completed his technical training and was required to fulfill a two-year active duty obligation, followed by four years in the Naval Reserve. Instead, he chose to go on active duty as a TAR and has been in the Navy for 17 years.

The TAR program is not for everybody and it is not easy to be accepted. Senior Chief Delooze says that one appealing part of the program is its stability in terms of deployments. On the other hand, you don't enjoy the benefits of sea pay or a reenlistment bonus like regular Navy sailors. Until recently, an enlisted TAR could not stay in the Navy past 20 years. Now, enlisted TARs in paygrades E-7 through E-9 may continue their active duty service to 26 years. The service for an E-6 has been extended to 22 years.

There are no guarantees with any of life's choices. One usually chooses the career path which seems the most suitable at the time.

For their own personal reasons, Cdr. Leonard and Senior Chief Delooze took the active duty TAR route. Cdr. Miller chose the Selected Reserve and perhaps he speaks for all with his reasons: "[My choice] gave me a continued ability to fly, to continue to enjoy the pride in the Navy that I had on active duty, and to be associated with Navy people and do things the Navy way. I enjoy the traditions, the responsibilities and the authority you get by virtue of doing a good job."

The Naval Air Reserve is one career choice. The program's success today is due to the combined talents and dedication of its active duty and part-time personnel. Whether they are TARs or Selected Reservists they are part of the Reserves because they *choose* to be. For them, it is *the right choice.* ■

Gearing Up the Reserves

There are four major Naval Reserve air readiness flight programs:

Tactical Air is made up of fighter and attack squadrons under Carrier Air Wing Reserve 20 (CVWR-20) and Carrier Air Wing Reserve 30 (CVWR-30).

Reserve Maritime Patrol flies its aircraft under two wings, Reserve Patrol Wing, Atlantic and Reserve Patrol Wing, Pacific.

Helicopter Wing Reserve is made up of antisubmarine warfare, search and rescue, and light attack squadrons.

Reserve Tactical Support Wing is comprised of fleet logistics support and fleet composite squadrons.

In 1982, Secretary of the Navy John Lehman initiated a "horizontal integration of the Naval Air Reserve into the Total Force," which means that in the future Naval Reserve aircrews will be flying the same aircraft that fleet crews fly.

Some of this modernization of the Reserves has already begun. One light attack squadron, VA-203, is flying the A-7E. Additionally, one carrier airborne early warning squadron, VAW-78, has started to move from the E-2B into the E-2C. Transition from the C-118 to the C-9 by tactical support (VR) squadrons is almost completed. The P-3 (VP) community is upgrading from its P-3As and Bs to the P-3B TacNav Mod series, a fleet-level *Orion,* while the active fleet is moving into the P-3C. This year, VA-303 is scheduled to become Strike Fighter Squadron (VFA) 303 and the Naval Air Reserve's first F/A-18 squadron, to be home-ported at NAS Lemoore, Calif. Work is progressing to equip Fighter Squadron (VF) 301 as the first ResForon with the F-14. In the future, the reserve helicopter combat support (HC) and helicopter antisubmarine (HS) squadrons will lose their H-3s and H-46s to a version of the SH-60.

In the interim, reserve crews are starting to fly active fleet aircraft. Squadron Augment Unit (SAU) personnel are presently flying F-14s with the fleet readiness squadrons at Naval Air Stations Oceana, Va., and Miramar, Calif.; EA-6Bs at NAS Whidbey Island, Wash.; and A-7Es at NAS Cecil Field, Fla. The reserve squadron which has already received fleet equipment, the E-2C at Norfolk's VAW-78, will take over the training responsibility for CVWR-20 E-2 SAU personnel. In case of mobilization, the SAUs disestablish and the individuals are sent to designated active fleet units.

In the words of Admiral W. L. McDonald, when he was Deputy Chief of Naval Operations (Air Warfare), "It is essential that the Naval Air Reserve Force continue as a viable, visible and dynamic complement to our regular units. . . .Capitalizing on the stockpile of experience which characterizes the Air Reserves is as necessary as it is wise. Indeed, it would be most difficult, if not impossible, to fulfill the overall Naval Aviation mission without them." ■

F/A-18: Reserve Air in Renaissance

By JO2 Timothy J. Christmann

In modern warfare, seconds can separate success from failure, according to Admiral James D. Watkins, Chief of Naval Operations. Because of this grim reality and the many potential military challenges the United States faces worldwide, the Navy is concerned that its active and reserve air arms be able to mobilize as a compatible fighting force.

To this end, the Navy is building new weapon systems, replacing old ones and rethinking a few of its operating methods.

Although most of the Navy's new muscle is being used to strengthen the active Navy, the Naval Air Reserve is also sharing in this revival – the most exciting being the coming of the fleet's newest aircraft, the F/A-18 *Hornet.*

Currently, Navy reservists are training with VFA-125, the Navy's F/A-18 fleet readiness squadron at NAS Lemoore, Calif. They are preparing for the establishment of VFA-303, the first of many Naval Air Reserve F/A-18 squadrons to be organized.

"Our goal is to have a reserve squadron for all our front-line fleet aircraft," said Adm. Watkins, in a speech last year.

In January, VFA-303 will evolve from VA-303, presently located at NAS Alameda, Calif. The squadron will relocate to NAS Lemoore that same month and begin receiving its new *Hornets* in June.

This modernization of the Naval Air Reserve is a result of the commitment by Secretary of the Navy John Lehman and Adm. Watkins to introduce the F/A-18 into the Reserves and active fleet simultaneously.

"In order to achieve compatibility with the fleet, we need to fly the same airplanes the fleet flies," said Commander J. S. Ozbirn, Assistant Coordinator for the Tactical Naval Air Reserve. "The reason we need to do this is that on mobilization day we have to be ready to augment the fleet. The only way we can do that is if we have the same equipment."

According to Commander Richard A. Banks, commanding officer of VFA-303, the Naval Air Reserve has typically received assets from the fleet that are no longer in service.

"Since World War II, the Reserves have flown older aircraft which are not compatible with its fleet counterparts," said Banks, a reservist who flies with Western Airlines. Because of this, the Reserves cannot be quickly and routinely mobilized. "All this will change with the *Hornet,*" he said. "The Reserves will be a viable force that can be mobilized in a national crisis or war, and be compatible with the fleet."

"We'll be stronger," said Commander Bob Greathouse, VFA-303's executive officer, who is a TAR (see story on page 5). "We [Reserves] will be able to go aboard ships, fight and have a good chance of sustaining ourselves for a very long time."

According to Adm. Watkins, "Too many people still think the Naval Air Reserve can be kept in a closet, dusted off quickly in an emergency and then counted upon to perform professionally. It doesn't happen that way. Readiness is an ongoing, full-time commitment. . .and the Reserves are a critical element in our readiness equation. For me to do my job, I need a Naval Air Reserve Force every bit as strong, ready and modernized as the active duty forces patrolling the world's oceans."

Years ago, the thought of F/A-18 *Hornets* being integrated into the Reserves was inconceivable, said Cdr. Greathouse. "The chances were that slim." Today, Greathouse couldn't be happier.

"For me, it's the chance of a lifetime," he said. "The *Hornet* is new to the Reserves, and I'm proud to be a part of its integration."

Greathouse finished five months of training in the sophisticated, multimission F/A-18 *Hornet* last fall at NAS Lemoore, along with two other TARs, Lieutenant Commanders Nick Johnson and Charlie Askey. All three are currently flight instructors with VFA-125.

So far, the bulk of VFA-303's enlisted maintenance personnel are either in training or have completed training. The squadron's 16 Selected Reserve pilots are scheduled to begin the five-week flight training syllabus in May. According to Greathouse, F/A-18 pilots are currently being handpicked in both the active and reserve Navy. "This is primarily because the *Hornet* is a new aircraft and the Navy wants it to succeed," he added.

Greathouse, who used to fly the F-4 *Phantom,* said transitioning from that aircraft to the *Hornet* isn't too difficult overall. "As for just flying the airplane, the F/A-18 is relatively easy," he said. But, because the *Hornet* is such a high technology aircraft,

Cdr. Bob Greathouse, executive officer of VFA-303, examines the wheel well of the multimission F/A-18 Hornet at NAS Lemoore.

A fighter/attack-capable Hornet takes off at NAS Lemoore. It is slated to replace both the A-7 Corsair and F-4 Phantom.

many pilots will find a challenge in learning its systems. Added Greathouse, "It's going to take some homework on everyone's part before they get the hang of it."

At NAS Lemoore, the F/A-18 training program is designed to help teach pilots how to master the aircraft with state-of-the-art methods.

"We have computer systems on which pilots can take lessons and practice tests. . .and training simulators used for air-to-air radar, procedure training, instrument training and air-to-ground training," said Greathouse. "Soon, we'll even have a dome-shaped simulator which will give the pilot the illusion that he's actually up in the air flying. It will be a complete air-to-air trainer for air-to-air combat as well as air-to-ground combat." Little wonder Cdr. Greathouse and some of his colleagues consider the training facility at Lemoore the best in the world.

Once established, VFA-303 will operate just like any other squadron. Each pilot will fly approximately 130 hours a year, and the squadron will have an annual training syllabus that is almost identical to the training plan used by Commander Naval Air Force, U.S. Pacific Fleet and Commander Naval Air Force, U.S. Atlantic Fleet.

There is a misconception that all reserve pilots do is fly one weekend a month and two weeks out of the year – not so for VFA-303. "To fly 130 hours (for which every reserve pilot is funded annually) in a tactical aircraft like the *Hornet* requires up to 100 flights in addition to pilot training," said Greathouse. That's a lot, especially when you consider that F/A-18 pilots fly training missions averaging an hour to an hour and one-half each. Therefore, VFA-303 pilots will have to invest 80 or more days a year, Cdr. Greathouse predicts, in order to meet their required training quotas.

The versatile F/A-18 *Hornet* will eventually replace the aging F-4 *Phantom* and A-7 *Corsair,* both of which heavily populate the Naval Air Reserve.

"The *Phantom* will be replaced in the late 1980s," said Greathouse, "but the *Corsair* will be around until the early 1990s before it's totally replaced."

Its performance, thrust, inertial navigation system, maintainability and the way it is integrated into a weapons platform make the *Hornet* infinitely better than either of its predecessors, according to Greathouse. In addition, the *Hornet's* systems are so automatic that they greatly ease the pilot's work load. This luxury isn't found in either the *Corsair* or *Phantom.*

Said Cdr. Banks, "The *Hornet* is a superior mix of the two aircraft."

Although the *Hornet* carries a leaner payload than the A-7 *Corsair,* it's twice as fast, has more accurate targeting and possesses a superior air-to-air fighter capability. Therefore, it puts more ordnance squarely on the target faster and more reliably than the aircraft it is replacing.

During an attack mission, the A-7 *Corsair* requires fighter escorts (F-4 *Phantoms* or F-14 *Tomcats*) to protect it from enemy interceptors. However, the fighter/attack *Hornet,* with its modern air-to-air radar, can fly to a target without the accompaniment of additional fighters.

According to Greathouse, the F/A-18's dual capabilities have been successfully tested at NAS Lemoore. Results confirm that because of its tremendous turning ability and power, the *Hornet* can fight (particularly at low altitudes) even when weighed down by heavy ordnance.

"The *Hornet's* big advantage is survivability," Greathouse said. "It can penetrate a high-threat environment as a high-performance fighter when necessary and survive much better than its predecessors."

Greathouse feels that the *Hornet* is the "most superior" aircraft in the world today, and that its integration into the Naval Air Reserve will make the Reserve as formidable an air arm as its active duty counterparts. They are finally merging toward compatibility and the *One Navy* concept that Adm. Watkins hopes to attain. ■

RIDERS of the NIGHT

Maintenance personnel work under lights to prepare an HC-9 helicopter for a late mission out of Mountain Home AFB. During the full squadron deployments, maintenance crews work round-the-clock shifts to keep the big aircraft flying.

Evening comes quickly out west. On the flight line, five bulky helicopter shapes blend without effort into the gathering Idaho night as maintenance crews ready them for flight. They are armed and armored HH-3A *Sea Kings*, tough veterans of Vietnam combat search and rescue, and now part of Helicopter Combat Support Squadron (HC) Nine.

In a nearby operations building, pilots and aircrew are briefed. They are reserve personnel perfecting the skills and tactics that may one day mean the difference between escape and capture for a downed pilot. It is evening at Mountain Home AFB, Idaho, and the Navy's only combat SAR squadron rides the night.

Their story begins two years after Vietnam. In 1975 a decision was made to shift combat SAR responsibility from the active duty Navy to the Naval Air Reserve. In August that year, HC-9 was activated, just three months after deactivation of HC-7's *Big Mothers*. Not only did HC-9 inherit nine of the old squadron's aircraft, but a relatively large number of pilots, aircrew and maintenance people from HC-7 who had stayed in the Reserves after the war were reassigned to the new unit. It was a fortunate assemblage of reliable, if aging, aircraft and a nucleus of people experienced in combat SAR under wartime conditions. It was also a solid foundation for evaluating past tactics and making the changes needed to meet a different and expanding threat environment born of new technology.

Studies done after Vietnam showed that despite best efforts in combat SAR in that war, even with such ideas as forward deployment of helos and crews for faster response time, fewer than one in every 10 aircrewmen who went down were rescued. "Given the situation in Vietnam, the people in combat SAR did well," says Lieutenant Commander Hank Frazier, officer in charge of the 80-man TAR (Training and Administration of Reserves) contingent. "In Vietnam, combat SAR was, by necessity, a knee-jerk response dictated by the need to get in quickly, ahead of the bad guys. We'd like to improve on that."

JOC Kirby Harrison

HC-9 helicopters are reflected in the parking apron still wet from rain at Mountain Home AFB, Idaho.

Lt.Cdr. Frazier and others in the squadron point out that it is the threat environment that dictates the tactics. In Vietnam, where it seemed everyone but the water buffalo carried an automatic rifle, the basic tactic involved approaching the landing zone at an altitude out of range of small arms ground fire. The pilot would then spiral down quickly, make the pickup and rapidly get back up out of range.

The anticipated threat in today's world is to small arms fire what small arms fire was to the old single-shot musket. Ground troops, in what is described as a "worst case scenario," may be armed with everything from automatic weapons to sophisticated and very accurate, hand-held, surface-to-air missiles.

Faced with that potential, HC-9 has developed new tactics. The most obvious is new emphasis on night flying. Night, they have discovered, is a valuable ally. "Flying combat SAR in daylight, with the present threat environment, can only be described as terminally stupid," says HC-9 executive officer Commander Daniel Hartley, a veteran of Vietnam combat SAR.

With night as their cover, stealth is the safest approach. The helicopter no longer goes in with combat air patrol (CAP) protection. Not only is the CAP vulnerable to attack from the ground, but draws attention like a bumblebee at a picnic. Tactics now involve three options or a combination thereof. The pilot may choose to make his approach to the anticipated pickup point by simply maintaining the lowest possible altitude that will allow clearance of the highest obstacle along the route, and push the airspeed to the maximum. Or he may opt for contour flying, making the best possible speed and following the earth's natural contours to remain hidden from enemy ground forces. Perhaps the most popular is "nap-of-the-earth." Flying nap-of-the-earth, the pilot maintains an altitude of 25 to 50 feet from the ground at a maximum safe airspeed. Most effective, say the pilots, is combining all these. *(Continued on page 14)*

With the copilot calling landmarks and directions from a detailed contour map, the pilot hugs the earth. Deep canyons, hills and tall trees are used to mask and distort the noise of their passing, and to avoid being seen from the ground for any more than a few seconds at a time. They estimate that any more than three seconds may be enough for an enemy on the ground to visually or electronically lock on and fire a missile. The airspeed is varied to throw off an enemy attempting to anticipate the helicopter's direction and movement, and the pilot may even stop from time to time and hover in a protected area. Even the direction of the wind is considered in masking engine noise and the whup-whup of the big blades beating the air. "More than once we've popped up over a ridge and caught the guy we were going to pick up looking in the opposite direction," says Commander Paul Huish. "We figure if we can fool our own people, we've got an advantage over the bad guys. And what they can't find, they can't hit."

A door gunner sprays ground targets with the electrically-fired minigun. The gatling-type gun fires up to 4,000 rounds per minute. A devastating weapon, crews never the-less hesitate to use it at night, pointing out that the muzzle flash is like a neon sign advertising their whereabouts to an enemy on the ground.

Technology has provided the expanded threat to combat SAR, and it is technology that has provided an important means to avoid that threat. Possibly the most important single item has been the night vision goggles. Originally developed for the Army, the goggles amplify existing light to enhance night vision and image perception. In fact, many pilots feel that flying under a full moon with night vision goggles is very nearly equal to flying in full daylight. An experienced pilot, they say, can actually fly nap-of-the-earth with only starlight amplified by the goggles.

They point out, however, that the goggles have limitations. One is that a slight loss of depth perception requires the wearer to constantly scan across the field of vision. There is also a problem with rain. Each water drop reflects light, and each of those points of light is amplified by the goggles into a "snow" of light not unlike the "snow" on a badly tuned television set.

Nevertheless, the goggles are an indispensable edge. There have been other improvements since Vietnam. The first combat SAR helos in Vietnam were given a flat gray paint job to minimize their visibility to enemy ground forces. Because no flat gray was available, some ingenious crewman came up with the idea of mixing talcum powder with the gloss gray. It worked. Today's paint is even better. It is a flat olive drab providing minimal visibility, and it has a low infrared reflective signature.

There are also improved basic avionics, and the squadron has already begun receiving the highly accurate Omega navigation system. Omega, with its sophisticated computerization, will allow a pilot to locate his position under good conditions, to within one mile.

Otherwise the aircraft have changed little since Vietnam. The HH-3As still carry an electrically operated Gatling-type minigun in the starboard side cargo door, two M-60 machine guns on the port side and 1,500 pounds of heat-treated armor plate for protection of the crew and vital engine and airframe components. The older fuel tanks have been replaced by the self-sealing type, and a high-speed hoist at the cargo door is a critical element in the combat SAR configuration.

A critical element in the future of Navy combat SAR is a new aircraft to replace the *Sea King*. With only nine of the HH-3A airframes in the Navy, normal attrition is a factor. Among the options, and one that is under consideration by the Chief of Naval Reserve, is the eventual purchase of 24 HH-60Es, a modified version of the Army's UH-60A *Blackhawk*.

Commander Hartley sees the aircraft as a possible replacement in the near future. He points to the already proven reliability of the UH-60A, which requires approximately one-fifth the maintenance time of the HH-3As. He also notes that the UH-60A has great combat survivability, a quick roll rate and the agility needed for nap-of-the-earth flying. And it is armored and has hard points for weapons. The *Blackhawk* is also self-deploying in the proper configuration and, for rapid deployment, will fit in a C-130. The *Sea King* now being used requires airlift by the much larger C-5A, and even then some dismantling is required.

Such a plan would apparently mesh well with a recently discussed proposal to combine HC-9 with the two Helicopter Attack Squadrons (Light), HAL-4 and HAL-5, to form a composite squadron. The *Blackhawk*, according to some sources, would meet the mission requirements of both combat SAR and support of SEAL or UDT special warfare units.

A spokesman at Commander Naval Air Reserve Force headquarters points

CWO3 Robert M. Quittner

out that Bell/Boeing Vertol's tilt-rotor JVX is also a serious contender for a combat SAR role. He explains that the aircraft has superior speed and range and good combat survivability. "Those are three characteristics that can't be ignored in looking at our next buy."

In the meantime, HC-9 people are looking ahead to a service life extension program for the HH-3A that would keep them flying through the 1990s. They are spending as much time as possible on deployment, figuring that no matter what the equipment, readiness is the first priority.

In addition to weekend drills for the reservists, deployments like the one at Mountain Home AFB are a vital phase of being ready. The full squadron deployment to Mountain Home is just one of several such active duty for training periods that occur annually. Others take small two and three-plane dets to train at NAS Fallon, Nev., and MCAS Yuma, Ariz., to play the role of bad guys at the Marine Aviation Weapons and Tactics School.

Cdr. Huish's experience is representative of the time pilots, aircrew and ground support people at HC-9 put into training. Huish, the squadron's NATOPS officer, joined HC-9 in 1975 and already has made more than 90 detachment deployments to NAS Fallon alone, not counting the major full squadron deployments.

The pride the men and women in HC-9 take in their profession is reflected in a record that includes more than 16,000 accident-free flight hours since the squadron was formed. They also won the Chief of Naval Operations Safety Award for two consecutive years, and are the holders of two consecutive Noel Davis awards and a Meritorious Unit Commendation.

According to Lt.Cdr. Frazier, many of the 166 reservists, holding down full-time civilian careers, still drive to the unit's home base at NAS North Island several times a month to maintain their proficiency and keep vital qualification standards up to date. Much of that time is in addition to that required for normal paid drills.

AMH1 Charles Wright is typical of the reservists. A lanky, sandy-haired veteran of combat SAR in Vietnam, he holds an engineering degree and works for a company building remotely operated underwater vehicles. A single parent, his family and friends from church share baby-sitting duties for Wright's eight-year-old son when he drills or goes on deployment. Wright feels that in addition to gaining a great deal of personal satisfaction, he is paying back a debt with his reserve commitment. "I came into the Navy as a high school dropout during Vietnam," he recalls. "It was my experience with the Navy that changed the course for me."

On the flight line at Mountain Home, Wright and others from HC-9 watch storm clouds build over the southern peaks. Sudden sheets of lightning break the darkness as they optimistically reassure one another that it will pass soon. The mission is scheduled to begin in an hour.

At the briefing an hour earlier, the scene has been set in a fictitious Central American city. Enemy guerillas have been gathering en masse south of a major airport, preparing for a dawn assault. A small U.S. special warfare unit, aided by local government special forces, is scheduled to provide predawn distraction from the enemy's rear, while local forces attack before the guerillas can launch their own offensive.

HC-9, with three helicopters, will go in under cover of darkness, find the special warfare units and bring them out.

Much thought has gone into making this exercise seem genuine, and pilots and crews are caught up in the atmosphere of realism. If there is a break in the weather, they will go.

On this summer night, however, there will be no break. Uncharacteristically, the weather closes in on the high plateau country and outlying mountains. Maintenance crews who have worked around the clock to make sure the aircraft are ready are not happy.

"That's the way it goes," remarks one, fatalistically. "Some days you eat the bear, some days the bear eats you. Tomorrow, we'll eat the bear."

Tomorrow is another night. ■

The professional expertise of CWO2 Robert M. Quittner in providing the original story and photos on combat search and rescue provided the impetus for the preceding feature. The timely assistance of JO2 Linda Creesy at Naval Air Reserve San Diego Public Affairs is also much appreciated.

Super

In recent years, one of the major thrusts in the helicopter industry has been to produce more aesthetically pleasing designs. One exception to this has been the CH-53 *Sea Stallion* which, in its new CH-53E *Super Stallion* model and the prospective MH-53E mine countermeasures version, has regressed significantly with various appurtenances and surfaces at different odd angles.

However, beauty is in the eye of the beholder, and the Marine combat officer who needs to move a 16-ton external load over rugged terrain to achieve his objective would find the newest Marine helicopter, hovering overhead as it picks up the load, *beautiful!*

The CH-53E is an obvious derivative from its CH-53 series forebears. However, the major changes necessary to provide the largest lift capability in the free world have resulted in its being given a new company model number, S-80 in lieu of S-65, for non-U.S. military sales. In many ways, like Topsy, it just grew from the earlier models. Recognizing the need for increased lift capability but not to the extent considered necessary by the Army in its HLH (heavy lift helicopter) program, the Marines, the Naval Air Systems Command and Sikorsky combined forces to develop the CH-53 from a 10-ton to a 16-plus-ton lifter.

Starting off with two concepts, a third engine and a seventh main rotor blade (all with increased diameter), a ground test rig was first built in the early 1970s. Two YCH-53E prototypes followed successful completion of these tests, the first making its initial hovering and limited maneuvering flight on March 1, 1974.

In addition to the engine and rotor changes and generally increased size, the most obvious change was in the tail configuration: a low-mounted symmetrical horizontal tail was surmounted by a larger vertical tail and tail rotor tilted from the vertical so that the tail rotor provided some lift in hover while counteracting the main rotor torque.

Not as obvious were the many internal improvements, particularly a new automatic flight control system. By August 1974, the first YCH-53E had shown that it could lift 17.8 tons to a 50-foot wheel height and, without an external load, could reach 170 knots at a 56,000-pound gross weight.

The capabilities demonstrated were such that, in spite of a number of setbacks in the subsequent development test program, NPEs and other milestones were achieved and the first two preproduction aircraft and a static test article were ordered, the first flying in December 1975. By this time, the tail had been redesigned to include a single high-mounted, strut-braced horizontal surface opposite the rotor on the 20-degree canted vertical surface, the inboard section being perpendicular to the vertical with a bend to horizontal at the strut juncture.

By the spring of 1977 testing, including shipboard trials on *Iwo Jima,* was well along and full production was subsequently ordered. The Dual Digital Automatic Flight Control System had proven its worth – technologically one of the newest systems in the *Super Stallion* and one that gives it exceptionally good flying qualities in all flight modes.

The first production aircraft flew in December 1980, being delivered to Marine squadron HMH-464 in mid-1981.

Stallion

By Harold Andrews

Further Marine deliveries have continued and Navy squadron HM-12 took delivery of its first Navy CH-53E in November 1982 for vertical onboard delivery (VOD) operations. Modification of the first Navy production CH-53E to the MH-53E configuration will lead to the MH version being the Navy's principal mine countermeasures helicopter beginning in 1986. Its capability to lift (including retrieval of all Marine and most Navy carrier tactical aircraft, as well as itself), to transport heavy internal loads at reasonable speeds for extended ranges, and to tow MCM gear for long durations, makes the *Super Stallion* a mainstay of Naval Aviation for many years to come. ■

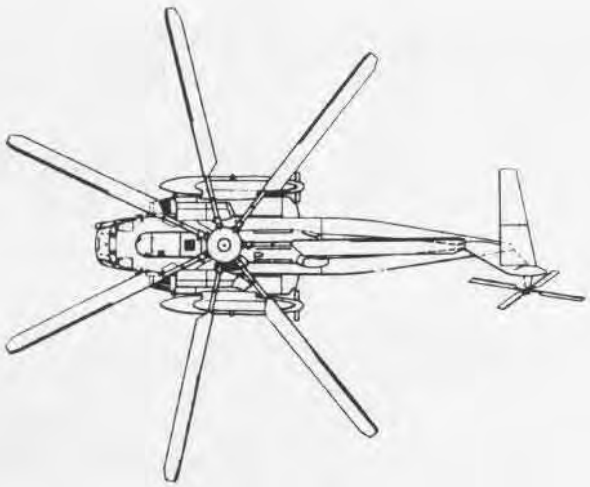
MH-53E


HC-4 CH-53Es taxi in after flight at NAS Norfolk.

JOC Kirby Harrison


H-53E

Main rotor diameter	79'
Tail rotor diameter	20'
Length of fuselage	73'4"
Width of fuselage	8'10"
Height	28'5"
Crew	3
Maximum speed	196 mph
Power plants	
3 General Electric T64-GE-416 4,380shp	



Teaching the Gospel According to NATOPS

Story and Photos by JOC Kirby Harrison

They preach the gospel according to NATOPS, the manual of Naval Air Training and Operational Procedures Standardization which is every Naval Aviator's flight bible. "They" are the eight-man, Naval Air Reserve P-3 NATOPS Evaluation Team, and the message they carry is simple – know your NATOPS manual and fly by it.

Responsible to Commander, Naval Air Reserve Force and home-based at NAS Willow Grove, Pa., the evaluation team, as part of the reserve ASW training center, travels to the 26 reserve force P-3 squadrons and squadron augment units to ensure their compliance with NATOPS. Squadron augment units do not have assigned aircraft, but do maintain proficiency in aircraft belonging to the resident reserve squadron. In simplest terms, the job of the evaluation team is to annually evaluate the 13 squadrons and 13 squadron augment units in terms of combat readiness and flight safety as set down in the NATOPS manual. The team also provides valuable feedback to the ASW train-

Much of the NATOPS Evaluation Team's time is spent on the road. Above, the team walks out to a VP-69 aircraft at NAS Whidbey Island. Right, the gear comes up on a VP-69 Orion departing for a three-hour evaluation flight.

ing center, emphasizing improvements to squadron training.

The Naval Air Reserve began flying P-3 *Orions* in 1967, using four borrowed VP-31 aircraft. A P-3 NATOPS evaluation team was organized in January 1970 at NAS Moffett Field, Calif., when the reserves received their own P-3s. In June 1972, the team was moved to NAS Patuxent River, Md., and designated the Chief of Naval Reserve/Commander, Naval Air Reserve Force P-3 NATOPS Evaluation Team. In June 1974, the team moved to its present location in eastern Pennsylvania. They do not have aircraft assigned, but are normally flown to the evaluation location by the host squadron.

The evaluation team spends approximately 110 to 120 days a year on the road, conducting squadron and augment unit evaluations. These TAD periods include evaluation of the squadrons and units, biannual NATOPS conference at Lockheed in California with VP-30 and VP-31, and a cross-evaluation with the same two active duty squadrons to perform standardized flight evaluations. These cross-evaluations involve such areas as instructor technique, examinations, new equipment and NATOPS changes.

In addition to the flight evaluations administered during TAD periods, the team performs an average of 130 "fly-in" flight evaluations at NAS Willow Grove, normally in single aircraft with two or three ASW flight stations requiring a NATOPS evaluation check. For all fly-in checkrides, training jackets are reviewed and written examinations given prior to the flight.

Put in terms of evaluation flight time, the team logs a cumulative total of 1,400 hours annually.

Team leader Lieutenant Commander Ike Puzon emphasizes that the purpose of the squadron evaluations is not simply to decide whether or not a squadron is qualified according to NATOPS. "The process also provides the squadron with an objective look at the strengths and weaknesses of its training program," he explains.

Puzon points out that the NATOPS evaluation also does not rank squadrons, nor is it meant as a competition, and he adds, "We do not go to a squadron with the intent to down them. But at the same time, there is no room for a "you-did-bad-but-we'll-let-it-slide" attitude by evaluators.

To give squadrons a headstart on maintaining qualifications, the team publishes a newsletter. The quarterly publication is designed to keep the reserve P-3 community up to speed on problem areas frequently encountered and on any changes to the NATOPS manual.

The NATOPS evaluation extends to the flight line where, right, ordnancemen hang a practice bomb from a VP-69 aircraft. Written testing of aircrewmen is an important part of the evaluation. Below, AT1 Marc Kelley of VP-69 takes the in-flight communicator test as evaluators (l-r) AT1 William Hartnett and AX1 Reece Price look on as proctors.

A typical evaluation for a full squadron takes four days, starting on Thursday with formal classroom testing. The exams are not easy, nor are they meant to be. The readiness and safety of personnel and aircraft depend on the skills of those being tested.

The team then spends the afternoon going over the NATOPS flight personnel training qualifications jackets, noting deficiencies. Maintenance of these records is considered as important as passing the examinations. During this record check, a crew is chosen at random for the in-flight NATOPS evaluation phase.

There is also nothing easy about the flying phase. The team goes out early to the flight line to ensure that the aircraft is ready. They will pull circuit breakers and create conditions to simulate malfunctions that the crew being tested must find and correct. The flight is set up to resemble as much as possible an actual mission, from laying sonobuoys to dropping practice weapons. It is complete even to the point where a member of the ground crew walking through an immobile propeller's arc on a parked aircraft is counted as a discrepancy against the squadron's line safety program.

Players in this *game* are very serious. The simulated mission is equally serious. In evaluating VP-69 this year at NAS Whidbey Island, the P-3 crew chosen was informed at the briefing that they would arrive on station prior to departure of a *Trident*-class submarine from the base at Bremerton, Wash. The mission would be to ensure her clean passage through the Strait of Juan de Fuca and entry to open ocean unaccompanied by any unidentified submarine craft. "We like to make the evaluation similar to a mission the squadron might conceivably be asked to fly," says Lt.Cdr. Puzon, "in the interest of realism."

Completion of all phases of the evaluation period is followed by a debriefing and discussion of problem areas with the unit commanding officer by each team evaluator, one for each of the stations on the P-3 *Orion*. Within 10 days after the evaluation, a written report goes back to the squadron, listing discrepancies and recommendations. Says AOC Stan Chambers,

ordnance evaluator, "By the time we finish the paperwork, it's time to visit another squadron, or at least it seems that way."

It is a relatively short tour of duty at 18-24 months but, says Chambers, "After a year or so, you begin to see the same mistakes. You have to remember that while they're the same old mistakes to you, it's a different group of people being evaluated. They are not the same old mistakes to them."

"Fortunately," adds Lt.Cdr. Puzon, "the people on the team are aware of the need to stay on top of things and start out fresh with each new evaluation."

Those chosen to become members of the NATOPS evaluation team are described in the program as *top performers* in their respective positions, and are generally considered the cream of the training and administration of reserves (TAR) long-range patrol community. The team consists of one person for each of the stations aboard the P-3 *Orion:* pilot, NFO, flight engineer, and acoustic, non-acoustic, ordnance, radio and in-flight technicians. There is also a backup crew assigned to take the place of anyone who cannot make his normal rotation schedule. And the backup personnel are chosen with the same care as the regular evaluators.

Every person on the evaluation team is hand-picked, and approval of several key persons is required. Each new candidate for the team is examined by representatives of the commanding officer of the reserve ASW training center, a representative of the Chief of Naval Reserve, and by the team leader. Lt.Cdr. Puzon emphasizes that personal skills and capability, attitude and professional expertise are just a few areas taken into consideration in choosing new team members. "It is a serious business and we are obliged to take it seriously," says Puzon.

"The fact is that when people fail to follow NATOPS guidelines, the loss is too often counted in lives," he adds.

That thought is echoed by a plaque on the wall at VP-69 that bears a list of 10 commandments for Naval Aviators. The last stands out from the rest in bold letters: "A lot of the words in the NATOPS were written in blood."

It is the gospel according to NATOPS. ■

Left, AW1 Dick Chaffee climbs into a VP-69 P-3 en route to in-flight testing at sensor station three. Below, evaluator Lt.Cdr. Roger Probert goes through the pre-flight checklist while flight engineer evaluator AMH1 Grant Poeckert (center) watches AMS1 Bernie Epstein of VP-69 during evaluation at that station.

Few areas in the Naval Reserve are as fully integrated into the regular Navy as VR squadrons.

WE DELIVER

Photos by JOC Kirby Harrison

It is 4:42 p.m. when "Swing 88's" nose lifts off the runway at NAS Norfolk. The flight is known as Swing 88 and the plane is a C-9B *Skytrain*, the Navy's version of the DC-9 so familiar to commercial air travelers. The sleek twin jet aircraft belongs to Fleet Logistics Support Squadron (VR) 57 out of North Island, one of 11 VRs all manned by reserve personnel. The crew is already two days out of their California home, shifted to East Coast control. This leg of the trip will take them south to Puerto Rico, with cargo and passengers, to ships engaged in a major Caribbean exercise. In three hours they will touch down at Naval Station, Roosevelt Roads. Two hours later they will be back in the air headed north for NAS Cecil Field, Fla. There, they will stop just long enough to offload and take on additional cargo and passengers, then go on to NAS Norfolk. In Norfolk they will refuel and head back to NS Roosevelt Roads. By the time they touch the runway there, it will be dawn in Puerto Rico and at least another two hours away from badly needed rest and sleep. If this is a "milk run," it is a lot of milk, and one heck of a run.

"Swing 88," a C-9B flying for VR-57, is unloaded in the early morning darkness at NS Roosevelt Roads, Puerto Rico.

"There are people who don't realize the extent of the fleet logistics support squadron mission," says Commander Lee Stewart, chief staff officer at Commander Logistics Support Wing headquarters at New Orleans. "Their quick response to requirements after

the Beirut bombing and the Grenada situation was that of complete professionals."

A single-plane detachment from Norfolk's VR-56 was at NAS Sigonella, Sicily, when the Marine quarters in Beirut was bombed into rubble. The explosion occurred at 6:20 a.m., Sigonella time, on Sunday, last October 23. By 7 a.m. that same morning, plane commander Lieutenant Commander Henry "Mack" Simons and his crew were ready to fly a team of 20 doctors and hospital corpsmen to Lebanon.

AMS1 Ed Palaszewski, a reservist and Norfolk fire inspector, recalls the two hours on the ground in Beirut, rigging the plane to fly the medical evacuation. "We strapped stretcher patients on the cargo pallets, and placed the ambulatory cases in seats." Other seats not being used were folded down and more stretchers lashed to them.

During the two-week detachment, the aircraft flew almost continuously. VR-56 skipper Commander Russell Kuhl, a reservist and civilian airline pilot, credits the maintenance crews with keeping the C-9B flying "beautifully" throughout the entire time. "This is basically what we train for," adds Kuhl.

That training has proven valuable for the VRs in recent months. When the decision was made to send a joint U.S.-Organization of Eastern Caribbean States force into Grenada, fleet logistics support squadrons were among the first units on alert. It was VR-56 that carried invasion force commander Rear Admiral Joseph Metcalf and his staff to the staging area near Grenada. VR-56 TAR officer in charge Commander Tom Sanderson remembers the situation well. "We had been put on alert the Monday morning before the operation (set for Tuesday) for a morning takeoff. The crew was ready and waiting when Admiral Metcalf and his staff arrived. They were in the air a little after 1100 en route to the Caribbean.

Both VR-56 and VR-58 out of NAS Jacksonville flew to the Point Saline, Grenada, airfield. "It was a very rough field, made to take large, heavy aircraft," says Sanderson, who flew into the Cuban-built field. "It was dangerous. There was no published approach, and no aids other than runway lights at night. You had to follow the lights (on the ground) and your instruments and, then at the last second, as the [aircraft] landing lights showed the beach, you got some idea of depth perception." Sanderson says VR-56 was the first Navy fixed-wing squadron into Point Saline during the operation.

VR squadrons were called upon throughout the Grenada operation. When Cuban prisoners were sent home, it was a VR-58 crew who took them on the first leg to Mexico.

Lieutenant Commander Joe Pazik, logistics officer at Tactical Support Wing One in Norfolk, says the VR squadrons met every fleet tasking on time. "Super" is the word that fits, says Pazik of the logistics squadron response.

VRs 56, 57 and 58 are just three of 11 fleet logistics support squadrons and one detachment, comprised of approximately 2,200 men and women and 24 aircraft, responsible to the Chief of Naval Reserve (CNavRes).

The injured were flown to U.S. Navy medical facilities in Naples, Italy, and the doctors and corpsmen returned to Sigonella. The crew then turned the aircraft over to their relief counterparts to fly scheduled flights to Israel and Egypt on October 24. On October 25, as they prepared to depart Cyprus with two litters of wounded and 11 other passengers, they were diverted to Beirut to pick up 13 bodies from the bombing tragedy and take them to the U.S. Rhein-Main Air Base in Germany.

The fleet logistics support squadrons are made up of reservists and TAR (Training and Administration of Reserves) personnel whose duties are so fully integrated into the regular Navy that the term *One Navy* is very nearly superfluous. In some areas of the VR community, regular Navy, TAR and reserve men and women work together on a completely integrated basis. On scheduled flights, the mission is most frequently in response to requests by regular Navy units. *(Cont'd on page 24)*

VR-56 pilot Commander Tom Stander prepares for a preflight check prior to a run from the squadron's home base at NAS Norfolk to NAF Washington, D.C. Cdr. Stander is a reservist who flies as a corporate pilot in his civilian role.

The squadrons are operationally responsible to Commander Fleet Logistics Support Wing at CNavRes headquarters in New Orleans. Scheduling is handled at three locations. The Navy Air Logistics Office in New Orleans is the continental U.S. (CONUS) airlift coordinator and scheduler for the Chief of Naval Reserve and Chief of Naval Education and Training, using VR squadrons 46, 48, 51, 52, 59, 60 and 61. They also handle scheduling for the VIP detachment flying TA-3s and T-39s out of NAF Washington, D.C. Commander Tactical Support Wing One at NAS Norfolk is the scheduling authority for the Atlantic Fleet, with VR-56 and VR-58. The Naval Air Logistics Center, Eastern Pacific at NAS Alameda, is the scheduler for the Pacific Fleet, with VR-55 and VR-57.

The mainline aircraft for the VRs is the C-9B. Outwardly it differs little from its civilian counterpart DC-9. Within, there is considerable difference. A 10-track cargo-handling system will accommodate eight military cargo pallets holding more than 30,000 pounds of cargo. In the passenger-only configuration, it will carry 107 persons, including six aircrewmen. The interior can also be converted to two combinations of cargo and passengers. A modern Omega navigation system and the addition of long-range fuel tanks allow the C-9B to make transatlantic flights. Antiskid and high-lift systems give the aircraft improved landing and takeoff characteristics. The C-9B flies at speeds in excess of 500 miles per hour, and specially trained reserve and TAR maintenance personnel, working with an on-site contract supply support center, keep the aircraft ready to fly virtually anytime.

It all seems simple, but when major exercises are in full swing, compounded by unforeseen requirements in the wake of such events as the Beirut bombing, schedulers and squadron personnel alike admit it can get hectic. A West Coast-based plane and crew may be scheduled for flight to NAF Washington, D.C., in support of the Naval Academy in nearby Annapolis, Md., and eventually end up as far away as Puerto Rico before returning home.

Pay does not seem to be the motivating factor for most of the reservists. Many hold full-time civilian jobs as professionals, from paramedics to airline pilots.

Lieutenant Commander Jim Ikart, a VR-56 reservist, flies for a major civilian air carrier. He left the regular Navy in 1979, and a year later decided to join the Reserves. It was a decision that made a difference when the civilian job market turned sour and he

Representatives of NATO prepare to board VR-56's "City of Pensacola" Skytrain on a flight to NAF Washington, D.C.

At NAS Norfolk, cargo is loaded aboard a VR-56 Skytrain prior to an 8 a.m. departure. By noon the aircraft will be back in Norfolk, after stops at NAF Mayport and West Palm Beach, delivering cargo and passenger.

was unemployed for a year. "That commitment to the Air Reserve kept me alive for that year," he recalls.

With squadron operations tied so closely to regular Navy logistics demands, flight time can be almost full-time work. A pilot available on a full-time basis may average as much as 30 hours of flight time a month and an annual salary of approximately $10,000.

There are probably as many reasons for being a reservist as there are people who choose to do so. AZ2 Cathi Finch is a California transplant with VR-57 who divides her time between the NAS North Island-based squadron, free-lance modeling and school. She joined the Selected Reserve program seven years ago. "I needed a job with flexible hours and I needed money to go back to school," she says. "I couldn't have a better job."

Finch flew more than 700 hours last year, and in one month totaled more than 60 hours. She remembers that year for the opportunity to spend an extended period flying with VR-56 in Europe. "There aren't many jobs that can offer that."

The crews are often what one reservist refers to as ". . .a real mixed bag." On a recent VR-57 flight that included Finch as a flight attendant, the crew included pilot Lieutenant Commander John MacDonald, a reservist recently furloughed from an airline; copilot Lieutenant Commander Greg Heckrodt, a TAR; crew chief AFS2 Tom Blatchford, a retired civil service employee who is available on call; loadmaster AMHC George Wood, Jr., another TAR; flight attendant AD2 Ginny DeGarmo, a mother of one who got bored with a civil service job; and flight attendant AD2 Mike Sprouse, a TAR along for a check ride, in excess of a normal crew complement.

A passenger aboard a VR flight may see more than a mixed bag. They may see as many women as men. Or it may be all women. VR-55's 30,000th accident-free flight hour was flown by an all-female crew on a hop from the squadron's NAS Alameda home to NAS Lemoore and back last summer.

Although it may be a mixed bag — regular Navy, TAR, and reservists, men and women — it is also a team. A team that delivers.

Cdr. Kuhl at VR-56 voiced the feeling found through the logistics support community when his detachment returned from Beirut.

"It's working as a team that kept that airplane going." ■

Major contributors to this story included JO2 Sharon Hewitt of the Naval Air Reserve Norfolk Public Affairs Office and JO2 Linda Creesy of the Naval Air Reserve San Diego Public Affairs Office.

The crew of VR-57's "Swing 88" sit with their luggage at NS Roosevelt Roads, awaiting transportation to overnight quarters near the Puerto Rico naval station.

"The professionalism with which our reservists solved logistical problems and successfully completed their deployment with the Sixth Fleet was a major achievement in combat readiness."

Commander Ed Flynn
C.O., VF-201

Readiness Is

Twenty thousand feet below, the blue waters of the Mediterranean Sea looked deceptively quiet, even peaceful. But Lieutenant Commander Charlie Parker, USNR, knew that in this politically volatile region of the world, peace was an illusion often shattered by gunfire.

It was in this arena, on August 19, 1981, that two U.S. Navy F-14s were attacked by Libyan planes. The attack was sudden and unexpected. Two Libyan fighters appeared, turned and fired missiles at the American jets. The U.S. Navy pilots evaded the missiles and returned fire, destroying both enemy fighters. The incident happened during a U.S. Navy exercise in the south Mediterranean Sea, and Libya's Muammar al-Qaddafi warned publicly that such an attack might be repeated.

That thought was not comforting to Lt.Cdr. Parker as he nudged the controls of his 25-year-old F-4N *Phantom II*. He and the radar intercept officer (RIO) Lieutenant Jim Martone, USNR, were flying combat air patrol for USS *Nimitz* in Operation *National Week*, a Sixth Fleet exercise off the southern coast of Sicily. From the cockpit, the reserve officers watched a desert wind stir the brown dust of North Africa only a few hundred miles from the Libyan border.

A radio message crackled in the aircrew's headsets. One of the Sixth Fleet's ships steaming below was reporting a radar sighting. The target seemed to be closing on *Nimitz*. In the rear cockpit of the *Phantom*, the RIO scanned his own radar and saw a blip at the edge of the screen. He notified his pilot and then radioed *Nimitz*. Response from the ship came quickly, directing them to investigate the sighting.

The reserve pilot, receiving intercept data from his RIO, brought the *Phantom* about in a wide turn to avoid detection by radar. He gradually closed the range. Through the canopy, they spotted four U.S. Navy A-7 attack jets. Tail numbers came into view. The intruders were from an adversary ship in the exercise.

Either the A-7 pilots were unaware of the fighter or they were more concerned with conserving fuel than with taking evasive action. The result was the same. The *Phantom* hung in the air within easy missile range behind the A-7s, which were flying in tight formation toward *Nimitz*.

"Sitting ducks," the RIO commented with satisfaction. He radioed *Nimitz* for instructions, and the ship gave clearance to arm and fire. The aircrew went through the routine of preparing to launch *Sparrow* and *Sidewinder* missiles. Firing was of course simulated. On paper, the aircrew scored four kills.

The aircrew was from a combined force of two Dallas-based fighter squadrons operating from temporary headquarters at NAS Sigonella, Sicily. This was believed to be the first time that naval reservists had flown in an exercise with the Sixth Fleet. Was it reasonable to expect a bunch of part-time warriors to strap on their aircraft on short notice and join the world of forward-deployed forces? That's what a lot of people wanted to know.

The idea of involving reservists in the 1983 Exercise *National Week* originated with Admiral William J. Crowe, Jr., then Commander in Chief, U.S. Naval Forces, Europe. He proposed the idea to Rear Admiral Robert F. Dunn, Chief of Naval Reserve, who recognized the possibilities and assigned the mission to two of his most proficient fighter squadrons. His choices were VF-201 and VF-202, based at NAS Dallas, Texas.

VF-202, under Commander Steve Stevens, USNR-R, was the top-ranking fighter squadron in the Naval Air Reserve Force. It had just received its second consecutive annual Battle E for excellence in combat readiness.

Both VFs 201 and 202 had established impressive performance records in carrier qualifications aboard USS *Saratoga*. In that evolution, they had flown a combined total of 363 hours, with 305 arrested landings, qualifying 33 Naval Reserve pilots. The aircraft of both squadrons were in excellent condition for the lengthy deployment envisioned.

This was an opportunity the Naval Air Reserve had long awaited but no one thought it would be an easy task. The first problem was to get to Sigonella. The deployment would require the reserve squadrons to move 18 aging *Phantoms*, along with 153,000 pounds of support equipment and more than 400 personnel, into a combat scenario halfway around the world in less than six weeks. Such a move had never been attempted by a reserve force squadron. The deployment would be a noteworthy achievement and a historic milestone for the *One Navy* concept, if they could pull it off.

To make the experiment as realistic as possible, the two squadron commanders were not initially told that this was to be a training exercise. They were told only that their squadrons would be flying operational missions with the Sixth Fleet — this at a time of growing unrest in the Middle East.

One squadron member commented, "There were rumors. We knew we'd be

"The logistics were a real challenge but we worked them out cooperatively with Navy and Marine Corps assets and the U.S. Air Force Military Airlift Command. It was a total team effort."

AVCM Wayman B. McDade
Command Master Chief

By JOC Wayne Mishler

Their Business

flying with the fleet in a hot spot and had to get there in a hurry. We figured there might be an emergency developing over there, and aircrews and maintenance personnel were getting ready for whatever it would take. We intended to arrive in Sigonella ready to fight."

Early in the planning it became obvious that the squadrons were going to have to make the long flight solely on reserve assets. Many of the resources needed to make the trip were simply not available from the active duty sector. The relatively short-range *Phantoms,* for example, would need frequent in-flight refueling during the long haul overwater. They would also need navigational assistance since the fighters were not adequately equipped with this capability.

Commander James E. Gill, then Commander Carrier Air Wing Reserve 20 with headquarters in Jacksonville, Fla., managed to find the necessary support almost entirely within existing Navy and Marine Corps reserve assets. Dallas-based VR-59, which would be flying some of the squadrons' ground crews to Sigonella, would help with the navigation problem. The lion's share of the aerial refueling would be provided by VAK-208, a Naval Reserve aerial refueling squadron based at NAS Alameda, Calif. Additional refueling support was to be

Navy Dallas Phantom launches from Saratoga during carrier qualifications in the Caribbean.

supplied by VMGR-234, a Marine Corps reserve squadron out of NAS Glenview, Ill. That solved the problem of getting the *Phantoms* to and from Sigonella. But that was only the tip of the iceberg.

Aircraft need maintenance and the responsibility for that fell to the squadrons and a detachment of NAS Dallas AIMD personnel, who would have to take with them to Sigonella all the equipment, parts and supplies needed to keep the veteran fighters flying. NAS Dallas provided six truck-size vans which contained the necessary paraphernalia. It would be necessary to airlift these vans, along with three electrical power units and other cargo.

Three squadrons of the U.S. Air Force Military Airlift Command were to fly the heavy equipment and the main body of personnel to Sigonella aboard C-141 cargo planes.

Another problem remained: how to bring the two squadrons to full manning levels on extremely short notice. Ninety percent of the squadrons' officers and about one-third of their enlisted personnel were Selected Reservists, who would have to be notified. They would need to arrange to leave their families and their civilian jobs for a longer period of time than the usual two weeks.

Once word of the deployment got around, volunteers flooded the squadrons' personnel offices. Active duty orders were processed, pay records readied, medical records updated and vaccinations given. The manpower problem was solved.

On the morning of March 26, an advance party of personnel from VFs 201 and 202 and Carrier Air Wing Reserve 20 flew out of NAS Dallas. They were routed via Jacksonville, Fla.; Brunswick, Maine; Gander, Newfoundland; Lajes, Azores; Rota, Spain; and finally to Sigonella, Italy.

The advance party disembarked aircraft handlers at the main stopovers, who were to service the squadron *Phantoms* passing through those points. Four handlers were placed at Gander, eight in the Azores and four at Rota. Eight others went on to Sigonella, accompanied by personnel from Carrier Air Wing Reserve 20.

There were some interesting developments along the way. During their first night at Sigonella, members of the advance party stayed in the Generale Hotel on the slopes of volcanic Mount Etna. As they checked into their hotel rooms, the mountain was rumbling, oozing lava and spewing ash and steam.

Naval Reserve Phantoms pass Mount Etna en route to a mission during Sigonella deployment.

One of the members commented that the lava flow glowed like a neon sign in the darkness. "It looked very small up there, just a tiny trickle. Nothing to worry about, we thought." By morning, that trickle had advanced dangerously close to the hotel, and produced so much heat that it was impossible to stand behind the hotel for more than a few minutes without being burned. Later, after the Navy personnel had checked out to more suitable living quarters, the hotel burst into flames from the heat of the lava and burned to the ground.

As the advance party was getting settled at Sigonella, the aircrews, followed by a trail flight of maintenance personnel, were leaving Dallas. The trail flight followed the *Phantoms* across the Atlantic, picking up the aircraft handlers at each stopover after the fighters passed through.

Commander Ed Flynn, C.O. of VF-201, flew to Sigonella aboard a VR-59 C-9 with others who had been unable to make the earlier flights.

The main body of ground support personnel and the bulk of the cargo were flown to Sigonella by Air Force C-141s via a route more direct than the one taken by the aircrews. Five hours after the maintenance vans were unloaded at the destination, they were fully operational. The reservists set up a complete aircraft intermediate maintenance department in less than a day. Afterwards, they remained on alert and enabled their squadrons to achieve their goal of 100-percent aircraft availability throughout the deployment.

At Gander, the aircrews landed in snow. The runway was a sheet of ice and, offshore, chunks of ice floated in the North Atlantic.

"The leg from Gander to Lajes was a critical one in the journey," said one pilot. "We were flying large formations of aircraft in an area of known bad weather over water with temperatures just above freezing. We were more than just routinely concerned about our survivability in the event of an ejection."

There was reason for concern. Extreme weather changes, such as those experienced by the *Phantoms* in their flight to Gander, can contribute to systems problems. But problems did not arise — a tribute to the maintenance crews — and the *Phantoms* made both legs of the round trip without incident.

This was the only portion of the trip that required the use of tankers other than those of the Naval Reserve squadron. KC-130 tankers from VMGR-234 supplied the *Phantoms* with aerial refueling services between Gander and Lajes.

An urgent message from CinCUS-NavEur was waiting for the aircrews when they landed at Sigonella on April 4. The message ordered the exercise to begin a day earlier than expected. Consequently, at 0700 the next morning, the squadrons launched aircrews on their first mission.

At sea, *Nimitz* steamed off the southeastern coast of Sicily along with several other ships of the Sixth Fleet. *Vinson*, meanwhile, was located off the southwestern coast. The two

carriers were adversaries in the exercise. Aircraft from *Vinson* were to try to break through *Nimitz'* defenses.

Reservists were to fly cover for *Nimitz*. While several reserve aircrews were orbiting on station, others were on alert on the ground back at Sigonella. They were to replace airborne crews vectored off station on inbound raids.

While on station, the *Phantoms* were responsible for protecting *Nimitz* from both aerial and surface attacks. They were to report anything out of the ordinary, whether in the air or on the surface. Control ships, equipped with long-range radar, would snoop out intruders and report suspicious sightings to the aircrews who were to break out of orbit and investigate. If so ordered, the crews were to engage the intruders in combat.

One reserve aircrew, led by Lieutenant Commander Danny R. Thomas of VF-201, engaged the enemy 22 times during a 90-minute flight. Commander Dave Bjerke, executive officer of VF-111, was one of the adversaries. He flew against the reservists in his sophisticated F-14 *Tomcat*. "Those guys are real pros," he said, "smooth flyers."

The aircrews of VFs-201 and 202 are indeed professionals. All are veterans and many have flown combat missions during previous tours of active duty.

During *National Week*, reserve aircrews flew a combined total of 541 sorties. Officials who evaluated the exercise attested that not one adversary broke through the reserve air cover. The Chief of Naval Reserve stated that the deployment by his reservists was an "absolutely splendid performance. . . ."

Adm. Crowe added his approval, "This successful deployment to NAS Sigonella on short notice would by itself be reason for a great feeling of accomplishment. The planning and execution of the deployment and return transatlantic crossings were handled smoothly and professionally. This deployment has clearly demonstrated the ability of reserve forces to deploy on short notice and effectively integrate into fleet operations. More sorties were scheduled than anticipated with essentially a 100-percent completion rate."

Officials were well aware of the logistical and tactical problems faced by the reservists in this deployment. They were also aware that, in recent years, the reserve forces have been assuming a greater share of readiness responsibility for the nation's defense. This deployment was designed to find out if they could do the job when the chips were down.

From the point of view of squadron personnel, the chance to participate in *National Week* was a welcome challenge and an opportunity to demonstrate what they already knew they could do. No one was disappointed with the results. ■

A Phantom pokes its fuel probe into refueling tube of a Marine Corps Reserve KC-130 tanker.

Awards

Marine Capt. Charles R. Mize of VT-7, at NAS Meridian, received the 1982 David S. Ingalls Award presented annually to the top instructor in the Naval Air Training Command. Sponsored by the Navy League, the award recognizes the recipient's performance as an instructor pilot, his concern with flight safety, and his overall officer-like quality, character, personality and leadership ability.

America was awarded the 1982 SecNav Environmental Protection Award. The carrier's environmental program covered areas of clean air and seas, hazardous materials, hearing conservation, noise abatement, and asbestos, fire and respiratory protection.

The 1982 SecNav Command Award for Achievement in Safety Ashore was earned by ComNavAirSysCom for overall excellence in maintaining an aggressive, effective command mishap prevention program, which resulted in a significant improvement in the injury index rate for the past three years.

A VF-32 *Swordsmen* aircrew won the ACM Excellence Award as the Top Fighter Crew for 1983 on the East Coast. The award was given to C.O. Cdr. John F. Manning, Jr., and Lt.Cdr. Rocklun A. Deal, who received the highest grades during the Fleet Fighter Air Readiness Program.

The following is a list of the LDOs selected by the November board. Out of 45 considered, 21 were selected.

AT1 Charles A. Barnes, NavPRO Bethpage
AT2 Lendon L. Bendix, HS-1
AE1 Rhonda L. Buckner, VQ-4
ACC Daniel I. Clampitt II, LHA-5
ET1 Thomas O. Cooley, AS-33
AD1 Michael A. Fontenot, NASC
AD1 Edward J. Holtman, VX-1
FTG1 Mark R. Judy, NRC Youngstown
AD1 Gary L. Matthews, NADC
AD2 Daniel P. Maxwell, VR-56
ABE2 Kelly G. McGlauflin, CV-43
IC1 Eric C. Miller, NTTC Det
OSC Kevin S. Moore, NAS Key West
AMS1 Samuel T. Morgan, VP-26
AT1 Mark W. Piveral, HC-6
AD1 Stephen B. Preston, VP-23
AE2 Chromer A. Smith, VP-40
AMS1 Earl O. Southerland, VP-46
AW1 David Stephens, VP-31
HM2 Stephen D. Stewart, NRMC Camp Pendleton
AW1 John M. Weidner, CV-63

Records

When an A-7E Corsair II from VA-105 touched down last September 13, it marked the 1,000th consecutive scheduled sortie launched by the squadron from *Carl Vinson,* the Navy's newest aircraft carrier.

Several units marked accident-free flight hours: VP-24, 100,000; MAG-16, 90,000; VAW-121, 75,000; VP-68, 60,000; VT-7, 25,000; and VFA-125, 15,000; VP-56, 132,000.

Other units recorded safe flying time in years: VAW-125, 15; VS-31, 13; VAW-124, 12; VAW-112, 10; HC-3, 9; VA-52, 7; VX-1, 6; VA-105, 4; VT-25, 2; and TraWing-2, 1.

The following individuals marked personal milestones:

VA-147: Cdr. Patrick Moneymaker logged his 3,000th flight hour in the A-7 *Corsair,* while Lt.Cdr. Lewis Mason reached 500 successful arrested landings.

VS-37: Cdr. D. A. Minor, C.O., reached 5,000 accident-free flight hours, including more than 600 arrested landings.

VF-32: Skipper Cdr. J. F. Manning, Jr., marked his 4,000th flight hour, including flight time in the F-4 *Phantom,* F-14 *Tomcat* and test flights in the F/A-18 *Hornet.*

VA-165: X.O. Cdr. Bob Knowles surpassed his 3,000-hour mark in the A-6 *Intruder,* while other *Boomer* personnel set their own records. Lt.Cdr. Doug Undesser achieved 2,000 hours and Lt.Cdr. Bob McHale and Lt. Terry Jeffords reached 1,000.

CVW-15: Capt. Tom Slater, ComCVW-15, recorded his 200th arrested landing aboard USS *Carl Vinson* flying an F-14 *Tomcat,* becoming the ship's first double centurion.

Established

A squadron augment unit (SAU) training program began last October allowing reservists to train in current model aircraft at fleet readiness squadrons — aircraft that they would be expected to use in the event of mobilization. Selected Reservists in the SAUs will use fleet simulators and participate in the regular Navy's fleet replacement aviation maintenance personnel (FRAMP) program, which will prepare them and TARs to work with specific fleet-common equipment through formal job training. Members of the SAUs will return to training with the Naval Air Reserve when the reserve squadrons acquire current aircraft.

Honing the Edge

VF-143 participated in the joint exercise Bright Star with the Egyptian Air Force, U.S. Air Force and CVW-7 aboard Eisenhower in the Med recently. Below, Bright Star forces join together. Clockwise from top: MiG-21, F-16, F-4, Mirage 5, MiG-19, A-6, MiG-17 and A-7; center, F-14.

Norfolk's VAW-78 became the first reserve squadron to receive the fleet-compatible E-2C *Hawkeye,* the Navy's primary and most technologically advanced model of the airborne early warning aircraft. VAW-78 has a history of fleet operations, including a two-month deployment to Keflavik, Iceland, during the Iranian crisis to man the early warning radar system. Recently, the squadron flew missions with the South Florida Task Force's Operation *Thunderbolt* against airborne drug traffickers.

The VA-203 *Dolphins,* NAS Cecil Field, recently acquired the A-7E, flown by their regular Navy counterparts in the fleet. The transition from the A-7B to the newer model of the *Corsair II* is in line with SecNav's planned "horizontal integration" of front line equipment into the reserve forces.

The *Gunslingers* of VA-105 returned to NAS Cecil Field last October from an around-the-world cruise aboard USS *Carl Vinson.* Led by Cdr. Bob Brodsky, the squadron successfully operated in the Caribbean, Mediterranean, Indian Ocean and Western Pacific, setting a record of 1,000 consecutive scheduled sorties.

Anniversaries

The following celebrated anniversaries last year: HS-4, 31 years; NAS Norfolk, 65; and U.S. Coast Guard, 93.

Et cetera

There is one less purse snatcher on the streets of New Orleans thanks to a Naval Reserve officer on temporary duty with CNavRes headquarters recently. Cdr. Frank Davis was walking back to his hotel one night when he heard a cry for help from two British female tourists who were struggling with the purse snatcher. Davis tackled the man and held him until police arrived. The reserve officer credits his quick response to his early pilot training. "From indoctrination, through preflight and all the way through, we were continually taught to react immediately to an emergency situation," he says.

JO2 John E. Christian

HS-85 leads Sagres and a Navy tug past the Golden Gate Bridge.

Alameda's HS-85 escorted the Portuguese barque *Sagres* into San Francisco Bay recently, where the sailing ship was to be on display to the public at Fisherman's Wharf. Lt.Cdr. Ken Olson was the pilot for the reserve squadron's mission.

It could be said that the Shewchuks are an all-Navy family. Capt. W. M. Shewchuk is C.O. of Naval Air Reserve Norfolk, and three of his four sons are naval officers. Lts. Bill and Mike Shewchuk are Naval Aviators assigned to VA-42 and HSL-30, respectively, while Ens. Christopher Shewchuk is assigned to the operations department aboard *Vinson.* The captain's brother, Cdr. J. D. Shewchuk, is X.O. of Naval Amphibious Base, Little Creek. This family is a good example of the *One Navy* concept in action.

Change of Command

CNavRes: RAdm. Cecil J. Kempf relieved RAdm. Robert F. Dunn.

ComSeaBasedASWWingsLant: RAdm. Allen Paulson relieved RAdm. Fred Johnston, Jr.

H&MS-12: Lt.Col. H. Gary Roser relieved Lt.Col. William C. Peters.

HM-12: Cdr. R. M. Carlton, Jr., relieved Capt. R. "Van" Goodloe, Jr.

HS-4: Cdr. Robert M. Hanson relieved Cdr. Thomas F. Finley, Jr.

HS-8: Cdr. Robert A. Schottle relieved Cdr. Mack A. Thomas.

MABS-15: Lt.Col. Myles C. Still relieved Lt.Col. K. W. Dewey.

MACG-48: Col. William J. Smith relieved Col. Charles E. Yates.

MATCS-38: Lt.Col. Donald P. Brown relieved Lt.Col. Peter B. Field.

MCAS Iwakuni: Col. Donald J. McCarthy relieved Col. Speed F. Shea.

MCAS Yuma: Col. R. B. Savage, Jr., relieved Col. R. C. Andreas.

NavAiResCen Moffett: Cdr. David E. Tanner relieved Cdr. Johannes Wytsma.

NAS Glenview: Capt. Joseph W. Sessions relieved Capt. Stanley Palmer.

NAS Moffett Field: Capt. Jerome D. Piccioni relieved Capt A. C. A. Jampoler.

NAS Point Mugu: Capt. Gordon R. Nakagawa relieved Capt. John M. Tallman.

NAS Whiting Field: Capt. Robert E. Jones relieved Capt. Giles R. Norrington.

NAS Willow Grove: Capt. David T. May relieved Capt. Russell K. Schulz.

Naval Avionics Center: Capt. Warren R. Abel relieved Capt. James H. Holds.

TraWing-5: Capt. Jerry M. Hatcher relieved Capt. John P. Smith.

VA-12: Cdr. Michael W. Samuels relieved Cdr. James M. Gill.

VA-42: Cdr. John M. Luecke relieved Capt. Herbert A. Browne, Jr.

VA-81: Cdr. William Beaty relieved Cdr. William Miller.

VA-174: Capt. Robert L. Kiem relieved Capt. Donald B. Hunt.

VAQ-133: Cdr. W. B. Birkmaier, Jr., relieved Cdr. W. P. Gray.

VAQ-135: Cdr. R. R. Penfold relieved Cdr. D. J. Dewar, Jr.

VAW-116: Cdr. Peter A. Shepard relieved Cdr. William M. Bokesch.

VAW-125: Cdr. John Ogle, Jr., relieved Cdr. Charles Saffell, Jr.

VF-31: Cdr. John C. Burch relieved Cdr. William V. Cross II.

VF-124: Cdr. Richard S. Farrell relieved Cdr. Jerry D. Norris.

VF-211: Cdr. Charles M. deGruy relieved Cdr. Larry Ernst.

VF-302: Cdr. James D. Olson relieved Cdr. Thomas E. Lecours.

VMA-131: Lt.Col. Robert L. Beavis relieved Lt.Col. David W. Muir.

VMFA-314: Lt.Col. Donald P. Brown relieved Lt.Col. Peter B. Field.

VP-4: Cdr. Andrew J. Button relieved Cdr. Curtis G. Borchardt.

VP-19: Cdr. Donald C. Hefkin relieved Cdr. J. S. Humphrey III.

VP-60: Cdr. R. D. Nilson relieved Cdr. J. J. Mumaw.

VP-62: Cdr. Joe Weatherman relieved Cdr. Brian Young.

VP-91: Cdr. Dan W. Baldwin, Jr., relieved Cdr. James P. McMahon.

VP-94: Cdr. W. D. Ewing relieved Capt. Herbert E. Hermann.

VQ-2: Cdr. John J. Draper relieved Cdr. Don C. East.

VT-23: Cdr. John E. Brown relieved Cdr. John J. Sulfaro.

VXN-8: Cdr. William J. Zuberbuhler relieved Cdr. Elroy McAlexander.

STATE OF THE ART

Advanced Simulator

The Naval Air Systems Command has procured from Vought Corporation the prototype of an advanced simulation system that will permit a pilot to fly through a training scenario so realistic that he feels he is actually looking out of the cockpit window at the real world. The prototype will be installed on the A-7E flight simulator at NAS Cecil Field, Fla. The system combines new high-fidelity photographic technology with a highly sophisticated computer system. Seated in a mock cockpit, the pilot can simulate virtually any type of mission, all in real time and with scientific precision.

Vertical Separation

NASA and the FAA are cooperating in a program to change the air traffic control system – to reduce the high-altitude vertical separation standard. Both the FAA and airspace users have expressed a desire to see a 1,000-foot standard implemented in place of the current 2,000 feet. Before such a reduction can take place, however, safe air traffic control system operation must be assured and system performance standards developed to support the change. Procedures for collecting data on altitude maintenance have been undergoing periodic testing at NASA's Wallops Flight Facility and the FAA technical center will make a thorough analysis of test results during the coming months.

P-3 Radar Tests

A P-3C Update II aircraft is being used by the Naval Air Test Center at Patuxent River, Md., to test an advanced surface surveillance radar, the Texas Instruments AN/APS-137 inverse synthetic aperture radar. The APS-137 can detect submarine periscopes at long ranges and gives the operator course and speed measurements on all targets. When used against a surface target, the radar gives the operator a silhouette of the target and enables the operator to make a length measurement of the vessel and identify the target. The radar also incorporates the latest anti-jam techniques, making it relatively unsusceptible to electronic countermeasures. There will be 30 test flights, totaling 180 hours, using the radar against a variety of naval and merchant targets.

P-3C Update III

The prototype of the P-3C Update III has been delivered to the Navy by Lockheed after completion of ground and flight testing by the manufacturer. VX-1 will conduct the Navy's tests on the prototype at NAS Patuxent River, Md. What makes the Update III so effective in submarine detection is a new acoustic processing system that affords reception and speedier analyses of more signals from more sonobuoys than was possible previously. Deliveries of the production model will begin in May 1984.

C-2A CODs

The Navy has awarded a contract to Grumman Aerospace Corporation for 39 C-2A carrier on board delivery aircraft, reopening a production line which built 19 C-2As during the 1960s. The twin-engine, turboprop *Greyhound* delivers personnel, essential supplies, spare parts and other high-priority cargo to deployed carrier battle groups. It can carry a payload of 10,000 pounds over 1,200 nautical miles. The first C-2A under the new aircraft will be delivered in January 1985.

FLIGHT BAG

Thanks

I would like to thank all of you who helped me collect material for my book on aircraft markings used on CVEs in the Pacific during WW II. So many responded that I cannot write to each one individually and I hope that you will accept this as a very sincere thank you.

Jim Dresser
1222 Marston Avenue
Ames, IA 50010

Reunions, Conferences, etc.

Tactical Electronic Warfare Symposium, February 14-16, 1984, NAS Whidbey Island, Oak Harbor, Wash. Contact Cdr. Harv Goninan, autovon 820-2093/2793 or (206) 257-2093/2793.

VP/VPB-44 Black Cats of Green Island, particularly squadron members from late 1943 through early 1945, reunion being planned. Contact Philip R. Wigg, 150 Vine Street, Bowling Green, OH 43402.

USS Chandeleur AV-10 reunion, August 2-4, 1984, Hilton Colonial, Lynnfield/Wakefield, Mass. Contact Mrs. Kenneth E. Boyd, Route 4, Box 145, Culpeper, VA 22701, (703) 854-5076.

Dayton International Airshow, July 19-22, 1984, Dayton International Airport, Dayton, Ohio. Contact Shawnee Lee Culbertson, (513) 898-5901.

Navy Helicopter Association 1984 Convention, March 14-17, 1984, Town and Country Convention Cen-

ter, Mission Valley, San Diego, Calif. Contact Capt. Steve Millikin, ComHelWingRes, NAS North Island, San Diego, CA 92135, commercial (619) 437-6526, autovon 951-6526.

HC-7 reunion of all squadron shipmates (September 1967-75), March 14-17, 1984, Town and Country Hotel, Hotel Circle North, San Diego, Calif. Write HC-7 Reunion, c/o HC-9, NAS North Island, San Diego, CA 92135, or call Lt.Cdr. Jay Pettit at (619) 437-5522/77.

Reminder!

Command History Reports for 1983 are due not later than March 1, 1984, in accordance with OpNavInst 5750.12. Send them directly to: The Office of Naval Aviation History and Archives (OP-05D2), Bldg. 159E, Rm. 590, Washington Navy Yard Annex, Washington, DC. 20374. Call autovon 288-4355 if you have any questions.

Below are the insignia that were approved in October and November 1983.

How to Avoid Losing a Buck at a Bar

Ed's Note: *NANews* recently learned that a certain Air Force general apparently has been doing rather well over the years wagering with unsuspecting Naval Aviators that they don't know the meaning of a particular part of the design of their Wings of Gold. He would ask the meaning of the small circle on the port fluke of the anchor in the center of the wings. If you happen to run into this master of nautical trivia, tell him it is called a "becket." In Navy terminology a becket is an eye for securing one end of a line to a block. Anchors used on sailing ships had a becket on one of the flukes to which a line was attached to secure it to the side of the ship, to keep it from moving when the ship was underway.

PROFESSIONAL READING

By Lieutenant Commander Peter Mersky, USNR-R

Bowers, Peter M., *Forgotten Fighters and Experimental Aircraft, U.S. Navy 1918-1941*. Arco Publishing Co., 219 Park Avenue South, New York, N.Y. 10003. 1971. 79 pp. Illustrated. $3.95.

This book grew out of a series of magazine articles dealing with those aircraft which did not see large-scale squadron use, or perhaps only reached prototype stage. The photographs used to illustrate the original history translate into large reproductions, which show off the subject aircraft well.

There is the ill-fated Grumman XF5F-1, a twin-engined fighter which finally led to the somewhat successful F7F *Tigercat*. Another was the Bell XFL-1 *Airabonita* which was a proposed shipboard version of the P-39 *Airacobra*. The XFL retained the liquid-cooled Allison engine, an unusual departure for Navy aircraft which relied almost exclusively on big air-cooled radials for power plants. All the familiar company names with not-so-familiar aircraft are mentioned.

Up Ship! The U.S. Navy Rigid Airships, 1919-1935. Douglas H. Robinson and Charles L. Keller. U.S. Naval Institute, Annapolis, Md. 21402. 1982. 236 pp. Illustrated and Indexed. $29.95.

Illustrated with period photos showing construction details, the book covers the short but important history of the Navy's rigid airships.

Up Ship! tells the story of the Navy's experiment with the German-developed rigid airship famous for carrying out the first strategic bombing of London in WW I. The great airship crashes are covered in detail and the little air-launched "trapeze fighters," the Curtiss F9C *Sparrowhawks*, are also included.

Guide to the Soviet Navy, ed. Norman Polmar. Naval Institute Press, Annapolis, Md. 21402. 465 pp. Illustrated. $36.95.

This third edition is an in-depth view of the world's largest Navy. It gives a detailed treatment not found outside of classified sources. The book addresses not only ships and aircraft but their weapons systems, the people who man them, the shipyards that build them, and the environment that shapes the entire organization.

There are nearly 400 photographs, many never previously published, numerous line drawings, maps and informative tables. It is a companion to the recently published twelfth edition of *Ships and Aircraft of the U.S. Navy*, also edited by Mr. Polmar and published by the Naval Institute Press.

Phantom II: A Pictorial History of the McDonnell Douglas F-4 Phantom II. Lou Drendel. Squadron/Signal Publications, 1115 Crowley Drive, Carrollton, Texas 75006. 1977. 63 pp. Illustrated. $6.95.

Probably no other post-WW II fighter has had as much written about it as the *Phantom II*, believed by many to be the most successful military aircraft produced in the free world. Its list of superlatives is nearly endless, and its combat record is as incredible as it is diverse.

This is the second book on the F-4 which Lou Drendel has written, the first being the initial volume of the *In Action* series. *Phantom II* has a lot of text, photographs and color profiles, and a lengthy input from a Navy *Phantom* pilot and MiG killer in Vietnam.

This book, which has been out for a few years, is worth a look. There is also a section on bicentennial markings which contains some very colorful model schemes.

naval aviation news