WELCOME TO VX-5 40TH ANNIVERSARY



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THE VX-5 EMBLEM

When the 115 men who constituted VX-5 at its commissioning in 1951 sat down to design an emblem that would reflect their squadron's mission, they faced several problems. First, in order to have a squadron emblem, the design would have to be within guidelines set by the Chief of Naval Operations (CNO), and then the proposed emblem would have to be officially approved by CNO. Second, since the mission of VX-5 was to develop day and night, allweather attack tactics, the task of designing a meaningful symbol to signify that broad a charter was not a simple one.

The central symbol, the "vampire" bat, was probably picked for its notorious night-flying abilities. The blue-gold background represents the squadron's allweather capabilities, with the sun and moon included to represent day-andnight capabilities. Lightning bolts, from under the bat's wings, depict Vx-5's role in strike aviation. The burst at the bottom of the patch represents a bomb burst and is normally depicted in red, gold and green.

The squadron's emblem is used on everything from aircraft to stationary and can also be seen on the patches worn on jackets and flight gear by squadron personnel. The largest examples of the Vampire's emblem can be seen on the east and west walls of the VX-5 hangar at Armitage Field.

VAMPIRES TAKE A MEMORABLE LOOK AT 40 YEARS IN REVIEW

For VX-5, the last 40 years have gone by quickly--far too quickly. Despite wishful thinking to the contrary, people come and people go, but history lives on. In the last 40 years, which ranks among the very best in naval aviation history, there can be nothing but praise and thanks to all the "Vampires" for 40 unforgettable years of professional excellence. You exemplified the "Right Stuff".

In 1951, they were the fresh young aviators and enlisted men who were called to develop and evaluate aircraft tactics and procedures for the delivery of airborne special weapons. This group of young men would become the members of air development squadron five (VX-5) commissioned on 18 June at the U.S. Naval Air Station (NAS), Moffett Field, CA. CDR T. J. Walker was the squadron's first Commanding Officer. The squadron consisted of 15 officers, 100 enlisted and 9 AD Skyraider It was under the operational control of aircraft. Commander, Operational Development Force and under the administrative control of Commander, Fleet Air Alameda. New tactics and techniques were developed as the squadron aircraft inventory began to include types other than the AD-1s. One "skill developer" aspect of VX-5's mission, the development of employment tactics for a one-of-a-kind weapon was demonstrated by the nuclear bomb delivered from carrier-based aircraft in the early fifties.

The "over-the-shoulder" technique, developed by VX-5 in 1954 practically tossed the bomb several miles to the target through a near supersonic loop that put the delivering aircraft well out of danger before bomb detonation. Later in 1955, the science of "loft-bombing", an alternative to the "over-the-shoulder" technique, was evolved and perfected under the quittance of Capt F.B. Gilkeson and made standard for fleet pilots.

By this time, the squadron aircraft inventory included the F-7U Cutlass, the Grumman F-9F-8D Cougar, the F-2H Banshee, the F-3D Skynight, and the F-3D Skywarrior, deemed to be one of the Navy's most valuable bombers. VX-5 Detachment Alpha was established at NAS Sanford, FL for the purpose of conducting an operational evaluation of the A-5C Vigilante weapon system.

In July 1956, Air Development Squadron Five moved to the Naval Air Facility, China Lake, CA. The move was ordered by CNO to take advantage of the vastly improved ranges and the technical personnel and facilities at the Naval Ordnance Test Station (NOTS), now known as the Naval Weapons Center (NWC). The squadron consisted of 30 officers and 200 enlisted men. Then, the pilots were involved in field carrier-landing practice with the help of a new landing aid: the mirror landing system, now known as the "meatball". F-9F-8s were shooting Sidewinder Air-to-Air guided missiles at F-6F "drone" target planes and flying loft bombing missions. The A-3D Skywarrior was the Navy's carrier based bomber. The Sidewinder Air-to-Air-guided missile, entirely developed at China Lake, became operational with the fleet. That same year, Detachment Alpha was moved to Naval Weapons Evaluation Facility Albuquerque, New Mexico, in order to complete the testing of the A-5C and its unusual linear bomb bay.

In 1957, the squadron received the Douglas A-4D2 Skyhawk and the North American FJ-4B Fury aircraft, and began developing delivery tactics for and evaluating the capabilities of these aircraft.

In 1958, in-flight refueling of the light attack bombers was one of the strike techniques being evaluated at VX-5. Then, the attack planes were going forth in company with a buddy tanker plane which carried the extra fuel required for a high speed attack on distant enemy bases. Midway to the target, the buddy tanker would extend its fueling drogue or coupling and the attack plane would maneuver for its drink. This fueling-in-flight act was performed by 9-ton Skyhawks and 11-ton Furys sweeping through the sky at an altitude of six miles and hurdling toward the enemy at better than seven miles each minute.

In 1959, activities included fire power demonstrations of the latest nuclear weapons delivery maneuvers on the C-3 nuclear weapons delivery training range onboard the Naval Weapons Center.

In 1960, the squadron received three new Douglas A4D-2N jet high speed, light attack aircraft, the third version of the A-4D. These were among the first type of this aircraft to be delivered to the Navy by the Douglas aircraft company. Equipment had been devised and installed in the new aircraft increasing mission capability over previous models of the A-4D. An automatic flight control system terrain clearance radar and improved loft bombing system were the then recently developed equipment added to the aircraft. The advanced features of the aircraft included a slightly longer model, improved weather and navigational capabilities plus pressure fueling and in-flight refueling. Capable of carrying atomic weapons, rockets, guided missiles and machine guns,...Its speed was in excess of 650 miles per hour with a range of well over 1000 nautical miles. The range of development and evaluation continued to increase and began to include many projects in connection with the Army and Marine Corps.

During that time frame, VX-5 had evaluated F-2H "Banshees", F-7U "Cutlasses", F-9F-8B "Cougars", F-3D "Skynights" and the A-3D "Skywarrior", then the Navy's largest carrier-based jet attack bomber, and A-4D "Skyhawk" and the FJ-4B of the famed "Fury" series.

An adapter which enabled the MK-55 bomb rack to carry the MK-106 practice bomb was devised by VX-5 as a proposed solution to the critical shortage throughout the fleet of carrying devices for the MK-106 practice bomb. Prior to the development of this adapter the Aero 8A container costing approximately \$4000 was the only device in the fleet that could carry the MK-106 practice bomb. The Aero 8A bomb container required special loading tools and would carry only four bombs. The adapter required no special loading tools and costs less than \$40 each.

In 1961, VX-5 added the world's record-breaking McDonnells' F4H-1 Phantom II all weather fighter to its aggregation of supersonic planes to carry out the squadron's tactical development for the delivery of nuclear weapons. VX-5 pilots and ground crews had trained with Air Force personnel and McDonnell representatives prior to bringing the better-than-twice-the-speed-of-sound, two-seat, twin-jet Phantom II to set an unofficial altitude record of 98,560 feet and 1,390 miles per hour over a 100 kilometer course. It was armed with Sparrow III and Sidewinder Air-to-Air missiles for high altitude intercept.

In 1962, arrival of the Navy's new A-4E (A4D-5) at China Lake for use in VX-5, gave us the distinction of the first squadron to receive the new plane. That same year Detachment Alpha was assigned two A-6A Intruders by Commander, Operational Test and Evaluation Force to evaluate the advanced weapon system.

In 1963, VX-5 project pilots were test-launching the NOTS-developed "Eye" series of weapons: Walleye, Gladeye and Sadeye. The extremely hush-hush thing of that time was called "Fisheye". On June of this year, VX-5 participated in a weapons demonstration for president John F. Kennedy during his visit to NOTS.

In 1964, VX-5 developed the Snakeye high drag weapon.

In 1965, the Shrike missile, the nation's first anti-radar guided missile was introduced into the fleet. VX-5 saw evaluation begin on the MK-4 gun pod, improved Napalm weapons, and the Walleye TV guided weapon, the first of the "smart bombs". Spurred by the Vietnam conflict, a great deal of effort was directed toward perfecting the computer assisted bombing system in the A-4E and to the Shrike anti-radiation missile. Detachment Alpha (later to be known as Detachment Oceana), moved to Naval Air Station Oceana, Virginia Beach, VA where facilities were available to fully support the A-6 aircraft.

In 1966, VX-5 grew to 37 officers and over 190 enlisted men who were involved in evaluating weapons and tactics for the A-4C and A-4E Skyhawk, the F-4B Phantom II, and the A-6A Intruder. The squadron had 17 aircraft and would shortly receive the A-7A Corsair II and the TA-4A Skyhawk. Squadron detachments were maintained at the Naval Air Station, Oceana, Virginia, and at Nashua, New Hampshire.

On December 23, 1967, delivery of the new A-7A Corsair II, light attack bomber, was made at VX-5. The aircraft, number 31 off the LTV assembly line, was only the second one to be assigned on the west coast, with an eventual increase of five A-7As being tested at VX-5. The squadron was running the gamut of operational equipment and situations with the A-7A including all available weapons and nuclear configurations, and all maneuver tactics. The A-7A was an addition to the existing VX-5 project aircraft consisting of A-4 Skyhawks, A-6 Intruders, and F-4 Phantom II's. The imagination and initiative of the personnel at VX-5 was no less staggering. So far it had led to the development of conventional delivery tactics, the loft, dive and glide, roll-ahead, and over-the-shoulder delivery maneuvers for both nuclear and conventional weapons, design and development improvements which have increased the reliability and effectiveness of smoke and spray tanks; the development of a new delivery technique which also increased weapon effectiveness, and the development of an accurate low altitude, high speed weapons delivery tactic utilizing jet aircraft.

That same year, VX-5 camouflaged A-4 aircraft in a project to aid combat pilots. Color schemes tested included black, a combination of vegetation green and tan and an all-over light skyblue. On July 1, 1967, the Naval Ordnance Test Station (NOTS) officially became the Naval Weapons Center (NWC). The latest delivery "firepower" techniques this year included the A-7 Corsair II firing 2.75-Inch rockets in a salvo of six and dropping MK-81 250pound bombs using the new CP741 bomb release computer, a then current VX-5 project, the A-4 releasing several 250bombs in quick succession or "ripple" and firing Zuni rockets, and a firing demonstration of the MK-4 external rapid fire gun pod from the F-4 Phantom II.

The A-7A was the first aircraft to have been scrutinized and evaluated so completely under one project plan. This was a significant improvement over the A-4 Skyhawk, which the A-7A was to replace in the fleet. The A-7A, a bigger plane by about 8000 pounds, would carry roughly twice the ordnance of the A-4, have more advanced bomb and weapon systems and have more hard points under the wings for weapon racks. Another significant test being conducted included enabling the Intruder to carry the Air-to-Air Sidewinder without restricting the Air-to-Ground ordnance load. This test was initiated resulting from an incident where two A-6 Intruders, returning from a bombing strike in North Vietnam strayed into Red China territory and were consequently shot down by communist fighters. The A-6s were not armed with their normal Air-to-Air Sidewinder missiles because the Sidewinder rack limits the space necessary for the required bomb load. After thorough study and research, it was learned that a Sidewinder rack used on an F-8 Crusader was adaptable when hung on an A-6. The F-8 rack would eventually be recommended for fleet use.

History was in the making in 1969, when the first female officer, Ens Patricia C. Bainman reported to VX-5 as personnel officer. It was the first move to put women into administrative billets in operating squadrons. The unit designation was changed to Air Test and Evaluation Squadron Five.

The arrival of the new bell HH-1K helicopter at NWC in 1970 provided a rescue vehicle for the area capable of rescue to altitudes above 2 miles. Considerable work was done developing the tactics for the new Laserguided "smart-bomb" (LGB) and the Walleye "television bomb". This same year, VX-5 was presented its first meritorious unit commendation for meritorious service in support of combat operations in Southeast Asia.

1972, ushered in the new AH-1J Sea Cobra gunship that had recently arrived at VX-5 for weapons evaluation. That same year, VX-5 would receive notification that it was one of 11 squadrons from throughout the Naval Air Forces Pacific Fleet to earn a Chief of Naval Operations "Aviation Safety Award" for two consecutive fiscal years of accidentfree flying representing almost 10,000 hours in the air. In 1973, electronic warfare was being updated with new weapons such as laser guided bombs and missiles carrying TV cameras to ensure great accuracy by fighter plane personnel from great distances as far away as 50 miles. Fuel air explosives were the then new type weapons.

In 1974, VX-5 would once again receive the Aviation Safety Award. The squadron consisted of 43 officers and 254 enlisted men. The squadron's aircraft included the A-7 Corsair II, A-6 Intruder, A-4 Skyhawk, AH-1 Cobra and US-2 Tracker. VX-5 Detachment Oceana would be disestablished and four officers and three A-6E Intruders would journey west to join the parent squadron at China Lake.

In 1975, VX-5 Detachment Whidbey was established for the purpose of conducting an operational evaluation of the new EA-6B "Prowler" electronic warfare aircraft. Ltjg Rosemary Conaster, then the Navy's only female A-7 pilot was assigned to the Targets Division with NWC A/C department.

A C-1 aircraft was acquired by VX-5 from the aircraft carrier USS Enterprise in 1976 and was designated the squadron's bicentennial aircraft. Judged as tops among 23 designs, the nose, engine nacelle and tail of the aircraft incorporated various usage of the american flag's red and white stripes, together with stars on a blue background. That same year, two Navy pilots and bombardier navigator successfully ejected from their aircraft, an A-6 Intruder and A-7 Corsair II, following a mid-air collision.

LCDR John Leslie became the only pilot from China Lake that year to fly the F-18 Hornet prototype multimission strike fighter which McDonnell Douglas and Northrop were developing for the navy. In 1976, the F-18 would be designed to replace the A-7 Corsair II and the F-4 Phantom with fleet introduction tentatively scheduled for 1982. It would be the first aircraft whose design criteria would stress reliability, maintainability and ready servicing to such a great extent to markedly increase air time. A VX-5, A-6E would successfully launch the squadron's first standard arm (AGM-78D-2) missile at Holloman AFB, NM and Master Chief Avionics Technician Italia F. Birkinsha, the senior enlisted woman in the Navy attached with VX-5, would retire from the Naval Service after over thirty years of dedicated service.

The year 1977, ushered in several significant projects that included evaluation of: 1) an improved weapons delivery system in the A-6E Intruder, 2) the new two-seat A-7 Corsair, and 3) a forward-looking infrared detection system for the A-7. LT Eric B. Nye, VX-5's first designated (1630) Intelligence Officer would report for duty.

In 1979, VX-5 was comprised of 40 officers and 250 enlisted men with a squadron aircraft inventory of 17 aircraft including various models of the A-7 Corsair II, A-6 Intruder, A-4 Skyhawk, AH-1 Cobra and C-1 Trader. VX-5 was commended for the part it played in a Precision Guided Munitions (PGM) demonstration at the Army's White Sands Missile Range in New Mexico. Pilots dropped a television-guided, Walleye missile from an A-7 Corsair jet. That same year, a TA-7 Corsair II airplane crash would claim the lives of two VX-5 pilots on a routine training and evaluation flight.

In 1981, the squadron aircraft inventory increased to 20 aircraft with an addition of several F/A-18 Hornets along with six additional officers and 92 enlisted personnel to support the evaluation of the new aircraft. In 1983, VX-5 contained eight different types of aircraft including the C-208. That same year, HARM Maverick were still being considered by high-ranking Navy officials for inclusion into the fleet's arsenal. VX-5 was recently finishing testing the F/A-18 Hornet for its capabilities as an attack jet and found the then-new and expensive warplane not meeting every specification particularly in terms of range. The "Gator" program would be approved with assignment to the fleet by 1985. Without VX-5, the weapon system would never have been possible.

The year 1984 would make another milestone for VX-5 marking the start of the operational evaluation (OPEVAL) of the AV-8B Harrier aircraft. A VX-5 Marine, LTCOL Russ Stromberg, would pilot the first test flight of the Harrier. The AV-8B would be the first aircraft to be equipped with the gun aircraft unit (GAU) 12 25 mm gun-a weapon capable of firing up to 3600 rounds per minute. Significant improvements in the AV-8B over previous Harrier aircraft included an improved engine intake allowing for increased vertical take-off thrust; a new raised cockpit; extensive use of composite materials; and improved maneuverability, lift, and reduced transonic drag. The arrival of the AV-8B Harrier at VX-5 was a significant event that marked the beginning of V/STOL aviation at the Naval Weapons Center.

Navy/Marine Corps conducted evaluation of an early night attack system at NWC in which VX-5 played a major part. The program was called "Cheap Night" and used a TA-7C to evaluate the technology and its possible application to Naval Aviation.

The latter part of the eighties were an era of projects evaluations. Projects included completed operational evaluations (OPEVAL) of major block upgrades to the F/A-18, A-6E "SWIP", AV-8B "night attack", OV-10, EA-6B, CAPP II and AH-1W aircraft and operational introduction of missile systems to the fleet including IR Maverick, Laser Maverick, HARM Block II and III, Hellfire and Sidearm.

In 1986, VX-5 was getting its feet on the ground with passive night attack systems using the A-6E, F/A-18 and AH-1. As interest in this new concept of tactical night flying grew, it became evident that a Navywide steering committee was needed.

In January 1987, VX-5 organized the tactical aircraft night strike working group (TANSWG) and chaired the initial meetings.

In 1988, fleet firings of the HARM FOT&E and HARM Block I were closely monitored by VX-5 for any fleet lessons learned.

In 1989, for the first time in the history of night flight, a Sidewinder AIM-9M missile successfully acquired and destroyed an airborne target. VX-5's MAJ Bobby Rowland, USMC, piloted the AH-1W attack helicopter Cobra which carried the heat seeking missile. This latest test validates the concept of acquiring, locking onto and destroying a fighter aircraft at night and at low altitude.

A highlighter year was marked in 1990. An A-6E Intruder, a "special interest aircraft" was restored to full mission capable status in six weeks, achieving vx-5's long awaited goal of zero special interest aircraft.

VX-5 recently changed the insignia on their aircraft, adding the bat and lightning bolt symbol to the existing "XE" which designates aircraft assigned to the squadron.

In July 1990, VX-5 resumed sponsorship of the China Lake squadron of the United States Navy Sea Cadet Corps. VX-5 was currently evaluating night vision goggles (NVG's) as part of a night attack system. Answering real world questions concerning the Persian Gulf crisis became a top priority at VX-5 in August 1990. During Operation Desert Shield/Storm, VX-5's number one priority was direct fleet support. VX-5 responded to messages and telephone calls from the fleet regarding new weapon systems, tactics, weapon system integration and clearance.

In November 1990, VX-5 was presented its second Meritorious Unit Commendation for meritorious service in support of the Department of Defense charter for independent operational test and evaluation of airborne strike weapon systems.

In January 1991, VX-5 deployed to NAS Fallon, NV with 14 airplanes and approximately 300 personnel for two weeks. The purpose for squadron movement was to develop F/A-18 LOT XII night strike/fighter tactics, to ensure all aircrew were tactically proficient and to exercise the mobility of the squadron. Strike packages were flown against real world scenarios both day and night in support of Operation Desert Shield and Desert Storm.

In March 1991, NWC hosted the Blue Angels for the 1991 air show celebrating 81 years of Naval Aviation with pilots and aircraft from VX-5 participating.

VX-5, to sum it up, is an incredible experience--you just can't seem to get enough, even after 40 years. A tour of duty with VX-5 makes a lasting impression on anyone who has been, currently is, or will be part of the indispensable team continually contributing to test and evaluation efforts. Those privileged, have had the opportunity of witnessing the conception of a basic idea which is later molded into a perfect tactical maneuver or a piece of valuable equipment to be used in the fleet. A subsequent tour of sea duty invariably reveals the fruits of his/her efforts in the form of tangible contributions to the Navy.

It certainly does not take much imagination to see that the term "aviation heroics" easily applies here. If you need a comparison, you might consider that by the time the fleet gets an Air-to-Ground weapon, VX-5 fliers have already put it through every conceivable test imagined. VX-5 tests fairly and evaluates with toughness. As final checkers. VX-5 makes sure its fellow aircrew and pilots in the fleet get a workable, safe system. It is a crucial mission, far more important than most realize because the effects will be felt into the 21st century. On the eve of the squadron's fortieth anniversary celebration, homage is paid to all the vampires who have exemplified the VX-5 spirit, possessed the "right stuff" and met real world questions with real world answers. Welcome home on an occasion to recall experiences and memories of the past...Provide a link between the past, the present, and the future.

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CAPT RAYMOND A. KELLETT, JR. U.S. NAVY

Captain Raymond A. Kellett, Jr., USN, is from Sanford, Maine. He holds a Bachelor of Science degree from the United States Naval Academy, a Master of Science degree in Weapon Systems Acquisition Management for the United States Naval Post Graduate School, and is a graduate of the United States Naval War College. He earned his commission in June 1968 from the U.S. Naval Academy and earned his pilot wings in July 1969.

After designation as a Naval Aviator, Captain Kellett served for thirteen months with the VAL-4 "Black Ponies" in Binh Thuy and Vung Tau, Vietnam flying OV-10 Broncos. He flew 386 combat strike missions during his tour in support of Navy Seal Teams and Navy Riverine Forces. In January 1971 he reported to flight instructor duty in Meridian, Mississippi, flying the T-2 aircraft with VT-9, VT-19 and Commander, Training Wing One. In March 1974 he began his A-7 flying career with the VA-46 "Clansmen." He also served with the VA-146 "Blue Diamonds" and commanded the VA-22 "Fighting Redcocks." He has also been Assistant Strike Operations Officer aboard the USS AMERICA. He was then assigned to Battle Force Seventh Fleet (CTF-70)/Carrier Striking Force Seventh Fleet (CTF-77)/Carrier Group FIVE, where he served as Assistant Operations and Plans Officer for two years. This tour also included assignment as the commissioning Commander of Joint Task Force Middle East (CJTFME) from September 1987 through February 1988. He is currently the Commanding Officer for Air Test and Evaluation Squadron FIVE, Naval Weapons Center, China Lake, California.

Captain Kellett has accumulated more than 4600 tactical flight hours and nearly 900 carrier arrestments with deployments to the Mediterranean, Indian Ocean, North Arabian Sea, Persian Gulf, Caribbean, North and Western Pacific Oceans. His awards include: two Meritorious Service Medals, Three Air Medals, twenty six Strike Flight Medals, two Navy Commendation Medals, Joint Achievement Medal, Navy Achievement Medal, Combat Action Ribbon, Vietnamese Cross of Gallantry and various unit citations and campaign ribbons. He was designated a Weapon System Acquisition Manager in 1978.

Captain Kellett is married to the former Jeannette Dumont of Sanford, Maine. The Kelletts have three children; Todd, currently enrolled in USAF ROTC at the University of New Hampshire in Durham; Lori, enrolled at Cerro Coso Community College in Ridgecrest; and Amy, a Sophomore at Burroughs High School in Ridgecrest. They reside aboard the Naval Weapons Center.



CDR JOHN E. VOSHELL EXECUTIVE OFFICER

Commander Voshell, a native of Miami, Florida, graduated from the University of Delaware in 1966, with a Bachelor of Science degree in Electrical Engineering. He completed flight training in March 1968 and reported to the "Hellrazors" of VA-174 for training in the A-7A Corsair.

Commander Voshell was assigned to the "Sidewinders" of VA-86 and completed a combat cruise onboard USS CORAL SEA and a Mediterranean

cruise onboard USS AMERICA after transitioning to the A-7E aircraft. From 1972 through 1974, Commander Voshell served as an instructor pilot with VA-174, with additional duty as a COMLATWING ONE Light Attack Weapons School Instructor.

Commander Voshell reported to the "Sunliners" of VA-81 and served in several department billets while deploying on Mediterranean cruise onboard USS FORRESTAL. Following a tour on the staff of Commander Light Attack Wing ONE, Commander Voshell reported to the Naval War College and completed the Command and Staff course in June 1980.

Subsequently Commander J. Voshell served as the Strike Operations Officer aboard USS ENTERPRISE until October 1982 and then reported to the Joint Chiefs of Staff, Washington, D. C. to serve in the National Military Command Center (NMCC) and then on the Joint Planning Staff for Space (JPSS). In October 1985, he again served as the Chief Staff Officer and the OINC of an A-7 detachment aboard USS KENNEDY until May 1988. He reported to VX-5 in June 1988.

Commander Voshell has been awarded the Defense Meritorious Service Medal, twelve Strike/Flight Air Medals and two NAVY Commendation Medals with combat "V". He is married to the former Patricia Twitty of Charlotte, North Carolina and they live onboard the Weapons Center with their son Wesley and daughter Allison.

PAST COMMANDING OFFICERS

CDR T. J. Walker CDR H. H. Epes, Jr. CDR W. N. Leonard CAPT F. B. Gilkeson CAPT R. A. Beveridge CAPT K. S. Van Meter CDR W. A. Schroeder, Jr. CDR H. N. O'Connor CDR J. M. Manherz CDR E. E. Riley CDR D. Loranger CAPT W. B. Muncie Jun 1961-Jun 1953 Jun 1963-Jun 1954 Jun 1965-Jun 1965 Jun 1965-Jun 1967 Jun 1965-Jun 1967 Jun 1959-Sep 1961 Sep 1961-Jan 1963 Jan 1963-Feb 1964 Feb 1964-May 1965 May 1965-Jul 1966 May 1965-Oct 1966 Oct 1966-Oct 1966 CAPT C. W. Fritz CAPT C. Birdwell, Jr. CAPT E. M. Crow CAPT R. N. Livingston CAPT I. E. Giuliani CAPT P. D. Stephenson CAPT P. F. Hollandsworth CAPT R. P. Flower CAPT A. M. Phillips CAPT E. Vanderpoel II CAPT R. A. Kellett, Jr. Oct 1968-Oct 1970 Oct 1970-Aug 1972 Aug 1972-Jun 1975 Jun 1975-May 1977 May 1977-Jan 1979 Jan 1979-May 1981 Mar 1981-Aug 1983 Aug 1983-Apr 1986 Apr 1985-Aug 1987 Aug 1987-Sep 1989 Sep 1989-Present

OFFICERS AND TOP THREE

CAPT R. A. Kellett, Jr. CDR J. E. Voshell CAPT R. J. Shields CDR C. T. Cuninghame LCDR V. B. Winkler LCDR J. P. Kindred MAJ G. W. Duncan LCDR J. R. Seaman, Jr. LCDR M. E. Gabriel MAJ W. R. Liston MAJ K. M. Kachmar MAJ F. B. Wolcott LCDR S. A. Rabogliatti LCDR M. S. Stahl LT M. S. Kinnane LT D. A. Dunaway

MMCM(SW) R. A. Williams AVCM T. J. Datz AFCM G. L. Harper AMCS(AW) M. J. Zych AOCS(AW) T. Rudd AECS(AW) D. E. Schults ATCS(AW) M. E. McEntee

CAPT J. D. Dauplaise LT J. R. Penfield LT E. P. Hinson LT D. A. Maybury LT E. S. Disher LT S. M. Mills CAPT A. E. Aldridge CAPT T. S. Caudill LT R. D. Botham LT C. R. Bertolett LT S. A. Burkholder LT M. J. Dvorak LT S. H. Rasplicka LT M. D. Varney LT D. M. Williams LT B. J. Bull

AMCS(AW) R. G. Dahms ATCS(AW) H. G. Burkett ADCS(AW) C. M. Snoke AMSC R. L. Pierce YNC C. A. Healy AMSC N. J. Gallo GYSGT W. V. Tosh LT P. J. Kind LT D. R. Martin LT M. A. Cruz LT M. W. Allen LT J. P. Rist LT M. J. Coury LT B. W. Schneider LT D. E. Berry LT M. A. Heekett LT J. C. Gentle LT M. Y. Liu LTJG C. Keefer LTJG C. S. Zimmerman ENS R. Sadiarin

AEC(AW) J. K. Ferguson ATC(AW) M. V. Bass GYSGT M. D. Wood AEC(AW) J. Sewell AKC M. A. Wendt AOC(AW) R. K. Zeh ADC(AW) C. J. Cormier

