Winter 2011

Printed in the USA

vertiflite

A Publication of American Helicopter Society International The Vertical Flight Technical Society



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Designed and Produced by Kay Yosua Brackins



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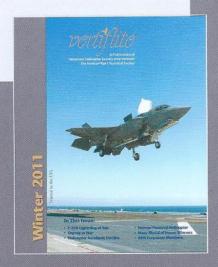
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The F-35B completed initial shipboard trials in October (see page 26). Lockheed Martin photo.





Editor's Note

Vertiflite, Vol. 57, No. 4

Advancing Vertical Flight
Technology

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Vertiflite (ISSN 0042-4455) is published quarterly by the AHS, 217 N. Washington St., Alexandria, VA 22314-2538, USA. Periodicals postage rate paid at Alexandria, VA and additional mailing offices. Vertiflite is distributed to the AHS membership and is also available by subscription. Rates: \$135 per year for non-members in the U.S., \$165 per year for foreign non-members (including Canada and Mexico). Single copies, US \$40 and for foreign \$50. All rights are reserved and reproduction without the consent of the AHS is prohibited, POSTMASTER: Send address changes to Vertiflite, 217 N. Washington St., Alexandria, VA 22314-2538, USA, (703) 684-6777, Toll Free (855) AHS-INTL, Fax (703) 739-9279, e-mail: staff@vtol.org.

Vertiflite is the official publication of the AHS International, the professional society for the advancement of vertical flight technology and its useful application throughout the world. Vertiflite's editorial energies are devoted to informing our readers of the advances being made in the industry and encouraging increasingly broader use of-rotorcraft and vertical lift aircraft.

Printed in the U.S.A. 2011 © AHS International All rights reserved. have more than one incident in my past that I am not proud of. Although this will not come as a complete shock to those of you who do know me (or think they do), one of these incidents was a defining moment. I was attending Syracuse University for my bachelor's degree and it was at the height of the Vietnam War. President Nixon had just announced that the U.S. was invading Cambodia and that seemed to many people to be an expansion of the war effort. My sprawling antiquated campus (single sex dorms, proctors, curfews, white-only football team) all of a sudden entered the war protest fray.

Uncertain of how I felt about demonstrating as I had friends that were serving, I was eventually persuaded to join the protesters the following day. At the appointed time I arrived in front of the U.S. Marine Corps recruitment offices to lock arms with my fellow agitators. The organizers referred to this as "civil disobedience." Jane Fonda and Abbie Hoffman were leading the revolt and organizing the demonstration. At one point a lovely elderly woman approached me (I think I was the least threatening looking of the lot) and asked if she could get by. When I explained patiently that we were blocking the USMC recruitment office she smiled at me sweetly and said, "Honey, that's on the other side of the building. You're blocking the unemployment office." With that succinct pronouncement, I ended my very brief tenure as a war protestor.

This true story, for an editor searching for a lead, is to point you in the direction of an article in this issue titled "Noble Men: Vietnam, the Huey, and the Medal of Honor," by Paul J. Fardink. This moving tribute to the men who flew rescue missions in Vietnam is a testament to their courage and tenacity. I was overwhelmed by the description of their daring missions and moved to tears by their exploits, and, in some cases, their untimely deaths. The article came in just before Veteran's Day and I thought it was a fitting tribute to all of our members who have served. Unfortunately, some of these heroic men received the Medal of Honor posthumously but their stories are compelling.

Paul Fardink, the author of this finely researched article actually thanked me for including his in-depth work in Vertiflite. "I

want to thank you and all of the AHS staff for printing articles from the "users" perspective." "And please note," he added, "The ten individuals in this article were awarded the Medal of Honor for the lives they saved, NOT the lives they took! The helicopter is truly one of the greatest life saving machines of modern technology!"

The other hero in this article is Bell Helicopter. According to the Vietnam Helicopter Pilots Association (VHPA), Bell built 10,005 Hueys from 1957 through 1975. Of the 10,005 production Hueys, 9,216 of these went to the Army, 79 to the Air Force, 42 to the Navy and 127 to the Marine Corps. Some 7,013 Hueys served in the Vietnam War and almost all were Army. Army UH-1s were flown an incredible 7,531,955 hours in the Vietnam War between October 1966 and the end of 1975.

This article profiles ten individuals who received the Medal of Honor – eight served with the Army, one with the U.S. Marine Corps and one with the Air Force – but all flew the venerable Huey.

The author of this article is no stranger to Army Aviation. Paul Fardink is a retired Army Lieutenant Colonel who enjoys researching and writing about Army aviation history. He has written a myriad of articles for Army Aviation Magazine, United States Army Aviation Digest, Army RD&A Bulletin, and Assembly Magazine. Rated as an Army Aviator in both helicopters and fixed wing aircraft, he earned a Bachelor of Science degree from the United States Military Academy at West Point, New York and later a Master of Science degree in Aeronautical Engineering from the Naval Postgraduate School in Monterey, California.

The courageous men who are profiled in this article truly embody the Army Warrior Ethos:

I will always place the mission first.

I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

Serving your country and your fellow citizens is one of the highest callings. Thank you from a reformed thirty minute war protestor.

Noble Men: Vietnam, the Huey, and the Medal of Honor

By Paul J. Fardink



he Vietnam Helicopter Pilots Association (VHPA) has compiled detailed records of helicopter deployment and usage during the Vietnam War. Their numbers indicate that Bell Helicopter built 10,005 Hueys from 1957 through 1975. Prior to 1957, there were three XH-40 prototypes and six YH-40 test helicopters manufactured. Of the 10,005 production Hueys, 9,216 of these went to the Army, 79 to the Air Force, 42 to the Navy, and 127 to the Marine Corps. The rest went to other countries. VHPA further indicates that 7,013 Hueys served in the Vietnam War and almost all were Army. Army UH-1's totaled an incredible 7,531,955 flight hours in the Vietnam War between October 1966 and the end of 1975. (Ref. 1) It is no wonder that many historians refer to the Vietnam War as the "Helicopter War."

But as amazing as these statistics might be, there is another number that bears tribute to the brave crewman who flew the Huey in Vietnam. A total of 10 Huey pilots and crewman would be awarded the Medal of Honor from the Army, Marine Corps and the Air Force. Their stories follow in chronological order.

In his 1992 book, We Were Soldiers Once...and Young, Lieutenant General Harold G. Moore vividly describes November 1965, when helicopters dropped 450 men of the 1st Battalion, 7th Cavalry, under his command, into a small clearing in the la Drang Valley. Two thousand North Vietnamese soldiers

immediately surrounded this 1st Air Cavalry Division battalion. Three days later, only two and a half miles away, a sister battalion, the 2nd Battalion, 7th Cavalry, suffered severe losses. Together, these actions at landing zones X-Ray and Albany, constitute two of the most brutal and significant battles of the Vietnam War. Moore states:



Combat Operations in the Ia Drang Valley, Vietnam, November 1965. Bruce P. Crandall's UH-1 Huey dispatches infantry while under fire. (Photo courtesy of the U.S. Army.)

Never before had the Vietnamese enemy carried the fight to an American Army unit with such tenacity. None of the common wisdom born of the American experience in Vietnam to date applied to this enemy. We were locked in a savage battle of fire and maneuver, a battle for survival, which only one side would be permitted to win.

Over the twenty months of airmobile training (at Fort Benning, Georgia), a bond had been welded between the infantry and their rides, the Huey helicopter pilots and crewman. Now the strength of that bond would be tested in the hottest of fires. If the air bridge failed, the embattled men of the 1st Battalion, 7th Cavalry would certainly die in much the same way George Armstrong Custer's cavalrymen died at the Little Bighorn – cut off, surrounded by numerically superior forces, overrun, and butchered to the last man. (Ref. 2)

Bruce P. Crandall

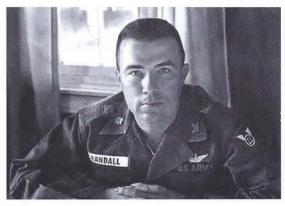
Major – U.S. Army Ia Drang Valley, RVN, LZ X-Ray November 14, 1965

ajor Bruce Crandall and the Huey helicopter unit he commanded, A Company, 229th Assault Helicopter Battalion, 1st Cavalry Division (Airmobile), created a major portion of that air bridge. IT DID NOT FAIL! On November 14, 1965, his flight of 16 helicopters lifted troops from the 7th Cavalry for a search and destroy mission from Plei Me, Vietnam, to Landing Zone X-Ray in the la Drang Valley. On the fourth troop lift, the helicopters began to take enemy fire; and by the time the aircraft had refueled and returned for, the next troop lift, the enemy had targeted Landing Zone X-Ray. As Major Crandall and the first eight helicopters landed to discharge troops, his unarmed Huey came under such intense enemy fire that the ground commander ordered the second flight of eight aircraft to abort their mission.

Flying back to Plei Me, Major Crandall determined that the ground commander of the besieged 1st Battalion, 7th Cavalry desperately needed more ammunition. Crandall then changed his base of operations to Firebase Falcon to shorten the flight distance for delivering ammunition and to evacuate wounded soldiers. Since his unit's mission did not include medical

evacuation, he immediately sought volunteers (CPT Ed Freeman) and led the two aircraft to Landing Zone X-Ray, still under relentless enemy fire. Despite this, Major Crandall landed and supervised the loading of seriously wounded soldiers aboard his aircraft. After his first medical evacuation, Major Crandall continued to fly into and out of the landing zone throughout the day and evening. He completed a total of 22 flights (in three different helicopters), most under intense enemy fire. His actions provided critical resupply of ammunition and evacuation of the wounded, (Ref. 3)

During a second tour in Vietnam in January 1968, Crandall's helicopter was downed during another rescue attempt requiring him to spend five months in the hospital with a broken back and other injuries. Bruce Crandall retired from the Army in 1977 as a Lieutenant Colonel. Forty-one years after his heroic actions in the la Drang Valley, at age 74, he received the Medal of Honor from President George W. Bush during a White House ceremony on February 26, 2007. Currently, he resides in Washington State.



Bruce Crandall as a Major and Member of the 11th Air Assault Division before Deployment to Vietnam as the 1st Cavalry Division (Airmobile). (Photo courtesy of the Army Aviation Hall of Fame.)

Edward W. Freeman

Captain – U.S. Army Ia Drang Valley, RVN, LZ X-Ray November 14, 1965

aptain Ed W. Freeman, second in command of A Company's 16helicopter flight, served as a flight leader. As previously mentioned, the infantry ground commander closed the helicopter landing zone due to intense direct enemy fire, but Captain Freeman (a.k.a. "Too Tall") risked his own life by volunteering to fly his unarmed Huey helicopter through a gauntlet of enemy fire, time after time, delivering critically needed ammunition,

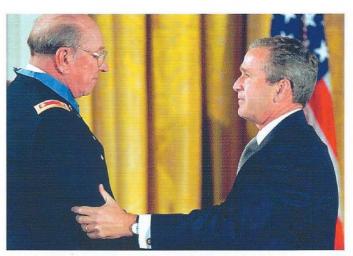
water, and medical supplies to the besieged battalion. His flights had a direct impact on the battle's outcome by providing the engaged units with timely supplies of ammunition critical to their survival—without which they would have surely experienced a much greater loss of life. Captain Freeman flew 14 separate rescue missions,

providing life-saving evacuation of an estimated 30 seriously wounded soldiers, some of whom would not have survived, had he not acted. He repeatedly landed in a small emergency landing zone within 100 to 200 meters of the defensive perimeter where heavily committed units perilously held off attacking elements. (Ref. 4)

Subsequently promoted to the rank of Major, Freeman left Vietnam in 1966 and retired from the Army in 1967. He continued to work as a pilot for the Department of the Interior, flying

helicopters for another 20 years until his second retirement in 1991. He accumulated 17,000 flight hours in helicopters and 8,000 in fixed-wing aircraft.

A year after receiving the Medal of Honor, Freeman returned to the White House for the premiere of *We Were Soldiers*, a 2002 feature film that



Captain Ed W. Freeman received the Medal of Honor at age 74, from President George W. Bush during a White House ceremony on July 16, 2001. (White House photo by Paul Morse.)

depicted his role in the la Drang battle. As Freeman walked out of the small White House theater, the president approached him, saluted, and shook his hand, saying, "Good job, Too Tall." (Ref. 5)

Freeman passed away on August 20, 2008 at the age of 80. He is interred at the Idaho State Veterans Cemetery, Boise, Idaho. (Ref. 6)

Note: Both Crandall and Freeman received the Medal of Honor much later than the other eight recipients mentioned in this article. In 1995, Congress removed the two-year statute of limitations on award recommendations of this type. Crandall might have received his medal five years earlier, but he withdrew his name from consideration for the honor in an effort to make sure Freeman also received recognition. "I was the commander; he was the volunteer," Crandall said. "He knew what combat was like and what he was getting into. I wanted to make sure if one of us was honored, he got it first." (Ref. 7)

Stephen W. Pless

Captain – U.S. Marine Corps Quang Nai, RVN August 19, 1967

aptain Stephen W. Pless, assigned on August 19, 1967, as a UH-1E gunship pilot attached to Marine Observation Squadron 6 (VMO-6, MAG-36, 1ST Marine Aircraft Wing), monitored an emergency call while on an escort mission. He learned that four Marines



Then-Captain Stephen W. Pless (far left) with his 1967 UH-1E Gunship Crew. Pless's co-pilot and two crewmen received the Navy Cross. (Photo courtesy of Marine Corps Historical Foundation.)

had been stranded on a nearby beach and were overwhelmed by a large Viet Cong force and desperately needed rescuing. Pless flew to the scene and found 30 to 50 enemy soldiers in the open. With the enemy soldiers using bayonets and physically beating the downed Americans, Captain Pless launched a devastating attack against them to stop the savage onslaught, killing or wounding many and driving the remainder back into a tree line. Making his rocket and machine gun

attacks at such low levels, his Huey actually had to fly through debris created by explosions from its own rockets. Seeing a wounded soldier gesture for assistance, he would maneuver his helicopter into position between the wounded men and the enemy, providing a shield which permitted his crew to retrieve the wounded. During the rescue, the enemy directed intense fire at his helicopter and rushed the aircraft again and again, closing to within a few feet before being beaten back. With the wounded man aboard, Pless maneuvered the

helicopter out to sea. However before becoming safely airborne, the overloaded aircraft settled four times into the water. Captain Pless and his UH-1E crew prevented the annihilation of the four marines. (Ref. 8)

President Lyndon B. Johnson presented The Medal of Honor to Stephen Pless in ceremonies held at the White House on January 16, 1969. Major Stephen W. Pless survived 780 combat helicopter missions in Vietnam, but was tragically killed six months later on July 20, 1969, when his motorcycle plunged off an open drawbridge into Santa Rosa Sound which separates Pensacola from Pensacola Beach, Florida. He was the 18th Marine to receive the Medal of Honor for heroism in Vietnam. (Ref. 9)

Patrick H. Brady

Major – U.S. Army Chu Lai, RVN January 6, 1968



Patrick Brady (in the pilot's seat) making another patient evacuation in Vietnam. (Photo Courtesy of Patrick Brady.)

ssigned to the 57th Medical Detachment, HA (Helicopter Ambulance) in January 1964 during his first tour of duty in Vietnam, Captain Pat Brady served with the only helicopter ambulance unit in Vietnam, covering the entire country with only five UH-1B Helicopters. The 57th was also the first unit to use the Huey in combat after it arrived in Vietnam in April of 1962. In 1964, Major Charles

Kelly, considered the legendary father of Dustoff, commanded this unit until his death on July 1, 1964. After this tragedy, Brady assumed command of Detachment A (a sub-unit of the 57th) and continued flying missions as Kelly had taught him."I had learned much about the use of a helicopter in saving lives in combat and there is no way to measure the joy of saving lives....I was told that I held the unit record for patients evacuated up to that time...but, of course, the tour highlight was meeting Charles Kelly a man who defined honor. That was a life changing experience and would serve me well no matter the future." (Ref. 10)

During Brady's second tour in Vietnam, he continued flying Dustoff missions in the Kelly tradition, then a Major and the second in command of the 54th Medical Detachment, 67th Medical Group, 44th Medical Brigade. On January 6, 1968, while commanding a UH-1H ambulance helicopter, Brady volunteered to rescue wounded men from a site reported to be heavily defended and blanked in by fog. Brady

descended through this heavy fog and smoke, slowly hovering along a valley trail and turning his Huey sideways to look out the open side window for improved visibility. Despite the close-range enemy fire, he found the small site, where he successfully evacuated two badly wounded South Vietnamese soldiers.

Brady was then called to a second area completely covered by dense fog. He learned that only 50 meters separated the American casualties and the enemy—where two aircraft had already been shot down and others had only made unsuccessful

attempts to reach the site. Brady made four flights into this embattled landing zone and successfully rescued every wounded soldier. On his third mission of the day, Major Brady once again landed at an unsecured landing zone surrounded by the enemy. His Huey had been badly damaged and the controls partially shot away during his initial entry into the area. Returning minutes later, he rescued the remaining



to understand the courage, tactics, techniques and procedures for the most dangerous of life saving missions under the most adverse combat conditions, weather and terrain – thus the title, "Dead" Men Flying." (Ref. 12) Now 75-years old, Brady resides in Washington State.

Then-Captain Patrick H. Brady with His UH-1H Ambulance Helicopter in Vietnam. Brady received the Medal of Honor from President Richard Nixon on October 9, 1969. (Photo courtesy of Patrick Brady.)

injured. After obtaining a replacement UH-1H, Major Brady was requested to land in an enemy minefield to rescue a trapped platoon of American soldiers. A mine detonated wounding two crewmembers and damaging his ship. Brady still managed to fly six severely injured soldiers to medical aid. At day's end, Brady had used three helicopters to evacuate a total of 51 wounded, many of whom would have perished without prompt medical treatment. (Ref. 11)

During his two tours in Vietnam, Brady flew over 2,500 combat missions and rescued more than 5,000 wounded. He retired as a Major General from the U.S. Army in 1993 after 34 years of service and went on to author the book, Dead Men Flying, along with his daughter (Army Captain) Meghan Brady Smith. Major General Carl H. McNair, Jr., US Army (RET), Former Chief, Army Aviation Branch had this to say about this pivotal work, "Volumes have been written about Army Aviation in Vietnam, but only two focus solely on "Dust Off" -Aeromedical flight operations by Medal of Honor Recipients. The first was authored by CW4 Michael Novosel in 1999, DUSTOFF: The Memoir of an Army Aviator, and now fresh off the press -Dead Men Flying, by Patrick Brady. Both are excellent reads, factual and fascinating, especially for those anxious

Gary George Wetzel

Private First Class – U.S. Army Ap Dong An, RVN January 8, 1968

ssigned to the 173d Assault
Helicopter Company, Private First
Class Gary Wetzel served as a
door gunner aboard a UH-1D helicopter.
Just ten days short of completing his
second tour in Vietnam, he became
trapped by intense, hostile fire on a
landing zone as part of an insertion
force. While going to the aid of his
aircraft commander, enemy fire literally
blew PFC Wetzel into a rice paddy, and
he was critically wounded by two
rockets that exploded just inches from

his location. Although bleeding profusely after losing his left arm and suffering from severe wounds to his right arm, chest, and left leg, Wetzel staggered back to his original position in the helicopter gunwell and took the enemy forces under fire. His machine gun was the only weapon placing effective fire on the enemy at that time. Through a resolve that overcame shock and intolerable pain from his injuries, Wetzel remained at

his position eliminating the automatic weapons emplacement that had been inflicting heavy casualties on American troops and preventing their move against this strong enemy force. Refusing to attend to his own extensive wounds, he tried to return to the aid of his aircraft commander but passed out from loss of blood. Regaining consciousness, he persisted in his efforts to drag himself to the aid of his fellow crewman. After an agonizing effort, he joined the helicopter crew chief at the side of the helicopter and helped him drag the wounded aircraft commander to safety at a nearby dike. Wetzel assisted his crew chief even though he lost consciousness again during this heroic action. PFC Wetzel displayed extraordinary heroism in his efforts to aid his fellow crewmen. (Ref. 13)

Wetzel, now 64 and living in South Milwaukee, Wisconsin, said, "Maybe I had an inner strength, or whatever, but I just didn't want to die in the slop. Then you hear all this yelling and screaming – there's got to be a stop. Somebody's got to stop it." He currently works as a heavy equipment operator. (Ref. 14)



President Lyndon Johnson presented the Medal of Honor to SP4 Gary Wetzel on November 19, 1968, in a ceremony at the White House. (Photo courtesy of the Army Aviation Hall of Fame.)

Frederick E. Ferguson

CW3 – U.S. Army Huê, RVN January 31, 1968

he beginning of the Tet Offensive came on January 31, 1968, when in the early morning hours, communist forces launched numerous attacks throughout South Vietnam. The battle of Hu became one of the longest and bloodiest single battles of the Vietnam War and would last 25 days. CW3 Frederick Ferguson, assigned to Company C, 227 Aviation Battalion, 1st Cavalry Division (Airmobile), participated in that battle as commander of a UH-1D resupply helicopter.

On that day, he monitored an emergency call from wounded passengers and crewmen of a downed helicopter under heavy attack within the enemy controlled city. Despite warnings from all aircraft to stay clear of the area due to heavy antiaircraft fire, CWO Ferguson began a low-level flight at maximum airspeed along the Perfume River toward the tiny, isolated South Vietnamese Army compound in which the crash survivors had taken refuge. Facing enemy fire from occupied buildings and boats, he landed his aircraft in a confined area while under heavy mortar and smallarms fire. During the loading of the wounded, his UH-1D helicopter suffered severe damage by mortar fragments. CW3 Ferguson still managed to take off

through the hail of continuing mortar fire. Flying his crippled aircraft on the return route through the rain of fire, he safely returned his wounded passengers to friendly control. CWO Ferguson's determination saved the lives of five of his comrades. (Ref. 15)

President Richard Nixon presented CW3 Ferguson with the Medal of Honor on May 17, 1969, making him the first Army Aviator to be so honored in Vietnam and the first in modern Army Aviation history. Promoted to Captain in July of 1969, Ferguson later entered the Arizona Army National Guard in 1972. Promoted to Major in 1975, he served in numerous positions there until 1997. In 1998 he piloted air ambulances for Omni Flight Helicopters. In 1999, Ferguson joined the Arizona Department of Veterans Services, and became Deputy Director of the department in 2000, retiring in 2006. (Ref. 16) He currently lives in Arizona.

James P. Fleming

First Lieutenant – U.S. Air Force Duc Co, RVN November 26, 1968

hile assigned to the 20th Special Operations Squadron, Fleming served as Aircraft Commander of a UH-1F Huey Helicopter. On November 26, his five-ship Green Hornet flight — two Huey gunships and three lightly armed Huey slicks — heard over the radio that a large group of North Vietnamese had



November 1968, Air Force Lieutenant James Fleming lived in the jungles of Vietnam, flying Special Forces teams on long-range reconnaissance patrols deep into enemy territory. (Photo courtesy of HomeOfHeroes.com.)

overrun a Special Forces patrol they had inserted earlier.

They found the patrol surrounded by the enemy on three sides and they were being forced to retreat to a river. The gunships immediately took out two enemy machine guns, but one gunship was hit and went down. One of the slicks rescued the crew and returned to base, accompanied by a second slick running short on fuel. This left one Huey gunship and Fleming's lone slick to rescue the encircled American patrol.

Fleming descended, and balanced his Huey on a river bank with the tail boom hanging over open water, so low that his blades cut the foliage of the trees. Forced to withdraw when the friendly patrol could not penetrate to the landing site, Fleming then, even while dangerously low on fuel, repeated his original landing maneuver. Turning the chopper so that his side gunners could lay down suppressive fire, Fleming then positioned it again over the riverbank so the U.S. soldiers could board it. The patrol set off a series of claymore mines, allowing six of the men to board as enemy shells smashed into Fleming's windscreen.

The team leader of the patrol who had been separated from the others,



Shown during the Fall of 1967, Ferguson is on his way back to LZ Baldy to pick up more supplies for the 5/7 Cavalry of the 3rd Brigade, 1st Cavalry Division in the Que Son Valley. (Photo courtesy of Fred Ferguson.)

dove into the river and swam toward the helicopter. He grabbed onto the rope ladder held by a crew member. Fleming made a successful takeoff through a barrage of hostile fire with the team leader dangling in the air and recovered safely at Duc Co. (Ref. 17)

Fleming received the Medal of Honor at a White House ceremony from President Richard Nixon on May 14, 1970. (Ref. 18) He went on to retire as a Colonel in 1996 after more than thirty years of military service. He is now 68 years old and resides in Texas. (Ref. 19)

Rodney James Takashi Yano

Staff Sergeant – U.S. Army Bien Hoa, RVN January 1, 1969

On January 1, 1969, Staff Sergeant Rodney J.T. Yano was just two days short of completing two years in Vietnam, and about to start a third back-to-back tour. (Photo courtesy of the Army Aviation Hall of Fame.)

Tragically, a grenade exploded prematurely, covering Yano with burning phosphorous and leaving him severely wounded. Flaming fragments within the helicopter caused supplies and ammunition to detonate and dense white smoke filled the aircraft, obscuring the pilot's vision, causing him to momentarily lose control. Despite his life-threatening injuries, having the use of only one arm and being partially blinded by the initial explosion, SSG Yano began hurling blazing ammunition from the helicopter. While flinging the ammunition he inflicted additional wounds upon himself, yet he persisted until the danger passed. His selfless courage and profound concern for his fellow crew members averted additional loss of life and injury.

> The chopper rushed to the 93rd Evacuation Hospital at Long Binh with a seriously wounded Yano. A wounded Bahnsen recalls. "Yano's condition had taken a turn for the worse. I'd like to think that he knew we were by his side, but he was heavily sedated and could no longer talk. I held his hand for a long time, offering a silent prayer as I did...The doctors did everything they possibly could to save him: Staff Sergeant Rodney Yano died

from phosphorous poisoning before sunrise." (Ref. 20) He was 26 years old. Awarded the Medal of Honor posthumously a year after his death on April 7, 1970 during a White House ceremony, Yano's parents accepted the medal for their heroic son.

Promoted to the rank of Sergeant First Class and interred in the National Memorial Cemetery of the Pacific, Honolulu, Hawaii, Rodney Yano will be known forever for his valor in the face of incredible personal agony and sacrifice – a true hero. (Ref. 21)

Michael J. Novosel

CW3 – U.S. Army Kien Tuong Province, RVN October 2, 1969

n the morning of October 2, 1969 CWO Michael J. Novosel, while commander of a UH-1 medical evacuation helicopter assigned to the 82d Medical Detachment, 45th Medical Company, 68th Medical Group, learned a large enemy force near the Cambodian border had surrounded a group of South Vietnamese soldiers. These stranded soldiers had lost radio communications and had expended their ammunition. Without air cover or fire support, and despite being wounded in a barrage of intense enemy machine gun fire which caused him to momentarily lose control of his helicopter, Novosel completed 15 hazardous extractions and rescued 29 men that day. (Ref. 22)

Novosel received the Medal of Honor from President Richard Nixon on June 15, 1971. (Ref. 23) His act of valor

occurred during his second tour of duty in Vietnam, once again as a Huey medevac helicopter pilot and he was assigned to the 283rd Medical Detachment. During these tours, Novosel flew 2,543 missions and extracted 5,589 wounded personnel, logging 2,038 hours of combat flying. During his second tour he extracted his own son, also a MEDEVAC pilot in the 82d Medical Detachment, Michael J. Novosel, Jr. His son returned the favor by extracting his father the following week after he had also been shot



direct artillery fire against the enemy



President Richard Nixon posthumously presents the Medal of Honor to Mr. and Mrs. Richard Yano, the parents of Rodney J.T. Yano. (Photo courtesy of HomeOfHeroes.com.)

emplacements.



Michael J. Novosel buckling up for a mission in Vietnam. (Photo courtesy of HomeOfHeroes.com.)

up his rank in the Air Force and joined the Army to fly Huey helicopters as a chief warrant officer. During his retirement ceremony at Fort Rucker, Alabama, the Commanding General, Major General Bobby Maddox, announced that the main street would be named in Novosel's honor.

Following his retirement from the Army, Novosel authored the book, DUSTOFF: The Memoir of an Army Aviator. He spent a lot of time on the lecture circuit, talking about the book and Army Aviation. In all that time, he



Michael J. Novosel, Jr. (left), friend Rex Smith (center) and Michael J. Novosel Sr. at Binh Thuy, Vietnam in 1970. (Photo courtesy of HomeOfHeroes.com.)

down. The Novosels were the only father and son combination to serve in the same aviation unit flying combat missions in Vietnam.

When CW4 Novosel retired from the U.S. Army on November 30, 1984, he had served 42 years as a military aviator and was the last World War II military aviator to remain on active flight status. In 1945, as a Captain in the Army Air Corps, he flew the B-29 Superfortress on raids over the Japanese Empire and above ceremonies on the USS Missouri when Japan surrendered. He left the service following WWII for a brief time, but later joined the Air Force Reserves serving in Korea and later rising to the rank of Lieutenant Colonel. In 1963, at the age of 41, inspired by a deep sense of patriotism following President Kennedy's assassination, Novosel gave

never wavered in his support of the Army or its troops—not even when he became ill with cancer in November 2005. "Even when he was in bad health, he would constantly honor those calls for appearances and speaking engagements" said Skippy Cassel, a former Golden Knight skydiver and Army pilot. "You'd never know anything was wrong. He was really an ambassador for Army Aviation. He just loved Army Aviation." (Ref. 24)

Throughout his long fight, he continued to be an ambassador for the Army. In his last days at Walter Reed Army Medical Center in Washington, D.C., he was an inspiration to the wounded troops recuperating there. "He took time during his own battle to serve others," former Army Vice-Chief of Staff, Richard Cody noted. "He is the

reason we [the Army] wrote the Warrior Ethos." (Ref. 24)

The Warrior Ethos is a set of four statements every soldier is expected to live by:

I will always place the mission first.
I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

Novosel died on April 2, 2006 and was interred at Arlington National Cemetery on April 13, 2006. U.S. Army Vice Chief of Staff General Richard Cody presented an American flag to Michael J. Novosel, Jr., at his father's funeral service. (Ref. 25)

William E. Adams

Major – U.S. Army Kontum Province, RVN May 25, 1971

n May 25, 1971, while serving as a UH-1H helicopter pilot in Kontum Province in the Republic of Vietnam, Major Adams volunteered to fly a lightly armed helicopter to attempt evacuation of three seriously wounded soldiers from a small fire base under enemy attack. He made this decision in full knowledge of numerous anti-aircraft weapons positioned around the base and that the especially clear weather gave enemy gunners the advantage of unobstructed views of all routes into the base.

As Major Adams approached, the enemy gunners opened fire with heavy machine guns, rocket-propelled grenades, and small arms. He continued his approach determined to accomplish the mission, further directing the attacks of supporting gunships. Landing his Huey at the fire base despite the everincreasing enemy fire, he then waited until all the wounded soldiers had been placed on board.

Struck and seriously damaged by enemy anti-aircraft fire, his aircraft began descending immediately after departing from the fire base. Immediately regaining control of the crippled aircraft, Major Adams attempted a controlled landing. Despite his most valiant efforts, the helicopter



Major William E. Adams, A/227th Assault Helicopter Company, 52d Aviation Battalion, 1st Aviation Brigade. (Photo courtesy of The Virtual Wall Vietnam Veterans Memorial.)

exploded, overturned, and plummeted to earth amid the hail of enemy fire. (Ref. 26)

Vice President Gerald Ford posthumously awarded the Medal of Honor to Major Adams' family on August 8, 1974. Adams is interred in Fort Logan National Cemetery in Denver County, Colorado. (Ref. 27)

Summary

total of 246 awards of the Medal of Honor were made for actions during the Vietnam War; 10 recipients flew in the UH-1. According to the extensive records of the VHPA, 11,827 helicopters of all makes and models served in Vietnam and 7,013 (59%) of these were Hueys. Records also show 3,305 UH-1s lost in combat with 1,074 UH-1 pilots killed in action and 1,103 additional crewmen lost. (Ref. 1) Truly the "Helicopter War," Vietnam saw Huey crews doing much of the fighting and regretfully, much of the dying...they were all as noble and selfless as any who have ever worn our nation's uniform.

Flown by special men, the Huey earned an enduring legacy in Vietnam, and in many ways deserves a special designation for its instrumental support

of the Medal of Honor recipients honored here, whose unrivaled valor and courage stand as examples of what it truly means to be noble men. The words of PFC Gary Wetzel say it best, "It took them about two weeks to convince me that I was going down to get the Medal of Honor because I had gotten the Distinguished Service Cross in country which is the second highest medal...Who figures you're going to get the Medal of Honor? To go back, a little bit about the Medal of Honorwhen I was in Tokyo (in the hospital) and they took out over 400 stitches, tubes that I had had everywhere were all taken out...Some of the guys that I had pulled out were recovering from their wounds and found out that I was

there...They would walk up to the bunk and here I am, a skinny little piece of meat and they'd say, "Are you Gary Wetzel?" and I'd say, "Yeah" and then they would pull out their wallet and show me pictures of their wife, kids, or girlfriends... "Hey man, because of you-THIS is what I got to go back to!" and THAT's what the Medal means... those were the guys that put me in for it. I don't know if I should thank them or whatever but there is a lot of responsibility that goes on with that blue ribbon and people think you're Superman, but you're not: You're just a guy doing his job." (Ref. 28)

About the Author

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References

- Gary Roush, "Helicopter Losses During the Vietnam War," Vietnam Helicopter Pilots Association, http://www.vhpa.org/heliloss.pdf.
- Lieutenant General Harold G. Moore and Joseph L. Galloway, We Were Soldiers Once...and Young, New York: Random House, 1992.
- Major Bruce P. Crandall Medal of Honor Vietnam War, President's Remarks, http://www.army.mil/medalofhonor/crandall/citation/president.html.
- Ed W. Freeman Medal of Honor Citation, http://www.mishalov.com/ Freeman.html.
- Medal of Honor: Ed W. Freeman, The Daily Nightly on MSNBC.com, http://dailynightly.msnbc.msn.com/ _news/2007/07/11/4371926-medalof-honor-ed-w-freeman.
- Jessie L. Bonner, "Medal of Honor Veteran Dies in Idaho," The Seattle Times, August 20, 2008.
- Leo Shane III, "Vietnam War Helicopter Pilot is Awarded Medal of Honor," Stars and Stripes, February 28, 2007.
- Stephen W. Pless Medal of Honor Citation, http://www.mishalov.com/ Pless.html.
- Official Biography, Major Stephen W. Pless, USMC Medal of Honor Recipient, http://www.valorremembered.org/SWP Pursuit.htm.
- Patrick Henry Brady and Meghan Brady Smith, Dead Men Flying: Victory in Viet Nam, The Legend of Dust Off: America's Battlefield Angels, Bennington, Vermont, Merriam Press, 2010.
- Patrick Henry Brady Medal of Honor Citation, http://www.mishalov.com/ Brady.html.
- Major General Carl H. McNair, Jr., Book Review - DEAD MEN FLYING, by Patrick Henry Brady with Meghan Brady Smith, ARMY AVIA-TION Magazine, May 31, 2010.

 Gary George Wetzel Medal of Honor Citation, http://www.mishalov.com/ Wetzel.html.

14. Howard Reich, "Medal of Honor

- recipients: You can be a hero too," Chicago Tribune, September 13, 2009, http://www.chicagotribune.com/entertainment/music/chi-heroes_honorsep13,0,1934409.story?page=1.
- Frederick Edgar Ferguson Medal of Honor Citation, http://www.mishalov.com/ Ferguson.html.
- CWO Frederick Ferguson, Hall of Heroes, http://www.freerepublic.com/ focus/f-news/2609385/posts.
- James P. Fleming Medal of Honor Citation, http://www.mishalov.com/ Yano.html.

- James P. Fleming, Medal of Honor Speak Out!, http://www.medalofhonorspeakout .org/bio/james-fleming.
- Lynne Lynch, "Giving the Medal of Honor," The Columbia Basin Herald, September 15, 2011.
- Brigadier General John C. "Doc" Bahnsen, American Warrior, A Combat Memoir of Vietnam, New York, Citadel Press Books, 2007.
- Rodney J.T. Yano Medal of Honor Citation, http://www.mishalov.com/ Fleming.html.
- Michael J. Novosel Medal of Honor Citation, http://www.mishalov.com/ Novosel.html.
- Michael J. Novosel, DUSTOFF: The Memoir of an Army Aviator, Novato, California, Presidio Press, Inc., 1999.
- Staff Sergeant Marie Schult, "Family, Heroes, Knights Bid Medal of Honor

- Recipient Farewell," American Forces Press Service, April 14, 2006. http://www.freerepublic.com/focus/f-news/1615340/posts.
- Michael J. Novosel, Arlington National Cemetery Website, http://www.arlingtoncemetery.net/ mjnovoselsr.htm.
- William E. Adams Medal of Honor Citation, http://www.mishalov.com/ Adams.html.
- Major William E. Adams Army Aviation Hall of Fame Induction, http://www.quad-a.org/ index.php?option=com_content&view=article&id=71<emid=76.
- 28. "Gary Wetzel," D.C. Everest Area Schools, Oral History Program http://www.dce.k12.wi.us/srhigh/socialstudies/histday/Vietnam/weztel.htm.



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