



Pedro *in the* Jungle

BY COL FREDERICK D. GREGORY, USAF (RET)

Hall of Fame baseball player Yogi Berra once said, "When you come to the fork in the road take it." This phrase has guided my career and my life, and I still follow that advice to this day.

Flight always fascinated me, and like many kids growing up in the 1940s and 1950s I built airplanes out of sticks, paper, and glue. Most of these models only lasted for one flight, but that became incentive to build another one bigger and sleeker. I collected airplane cards from bubble gum packages, and spent time at airports watching the airliners and fast planes take off and land. That is why I went to the United States Air Force Academy — so that I could be a fighter pilot, or more specifically, a Thunderbird pilot (The USAF aerial demonstration team are known as the Thunderbirds). But all my classmates (Class of 1964, the sixth graduating class from the Academy) wanted to do the same thing so there the competition began.

The courses that we took covered the gamut of topics you would expect. We took physics, chemistry, math, and all kinds of engineering, and became awfully familiar with

the operation and power of a slide rule. Beyond the courses that you would expect when attending an engineering university, they also exposed us to law, economics, history, English, political science, and other things whose value would not be appreciated for years to come. The one thing I learned at the Academy was that life presented many forks in the road, and like the Robert Frost poem "The Road Not Taken," "I took the one less traveled by, and that has made all the difference."

I chose helicopters not because they were fast and sleek but because their capability to fly, and hover, and translate fore and aft, and left and right, excited me. And I had never built a helicopter model. There were not many of us that chose that path.

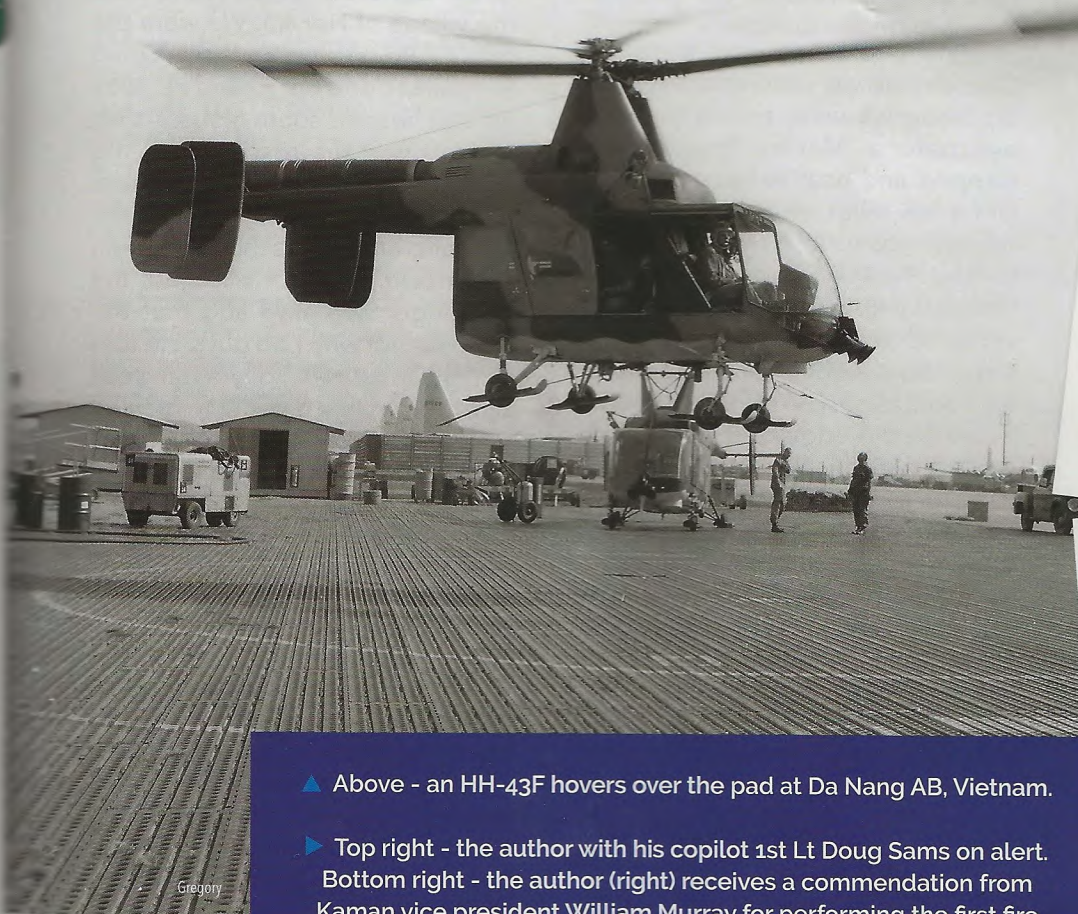
Aeronautical engineer Charles Kaman had developed a new concept of rotor control based on servo-flaps. These were small ailerons added to the edges of the rotor blades to improve helicopter stability. He also proposed intermeshing rotors, which would increase lift while eliminating the tail rotor. These inventions became

the hallmarks of Kaman helicopters to follow.

I chose (with a little encouragement from the Air Force) to fly the Kaman H-43 Husky because it was the path less traveled, and it got me to Da Nang Air Base, Vietnam, quickly.

The HH-43F, a combat version of the HH-43B with added titanium armor, a slight variation of the Lycoming T-53-L11 gas turbine engine and slightly shorter rotor blades, was used as part of a fire/rescue system. The Husky would carry a large bottle of fire suppressant with a hose attached slung underneath along with a rescue crew consisting of the rescue crew commander (RCC), the rescue crew co-pilot (RCCP), and two fire fighters wearing full fire protection suits. When alerted that a battle-damaged airplane was returning to Da Nang, this crew would scramble to their waiting helicopter and could be airborne with the fire suppression kit (FSK) in approximately one minute.

One night, I was RCC holding alert when a McDonnell Douglas F-4C Phantom attempted a landing after losing its utility hydraulic system taking out its brakes, flaps, and



▲ Above - an HH-43F hovers over the pad at Da Nang AB, Vietnam.

▶ Top right - the author with his copilot 1st Lt Doug Sams on alert. Bottom right - the author (right) receives a commendation from Kaman vice president William Murray for performing the first fire suppression rescue using the HH-43.



other essential equipment. My RCCP was 1Lt Doug Sams. The F-4 pilot, Capt Charles Colton, reported that he hoped the Phantom's hook would engage either of the two runway barriers, but it did not. Colton and the weapons system officer, 1Lt Nicolas Ide, departed the far end of the runway at about 100 mph, crossed the perimeter road, crossed a ditch, and ran through a field, before stopping in a second ditch where the F-4 burst into flames.

Almost as soon as the fighter came to a stop, we were flying over it. We hovered in front of it, released the fire suppression kit, (FSK) landed to let the firemen out and hovered again directly in front of the burning Phantom. Lieutenant

Ide immediately evacuated the airplane and later told *Stars and Stripes* (the military newspaper) that the first he knew of the rescue chopper was when the powerful air blast from the rotor almost blew him over. He described the work of the rescue crew and the (fire suppression) kit as "pretty damn good." "This was the first time we used the FSK on anything," the newspaper quoted A1C Wayne L. Boteler, one of the firemen, "and it worked perfectly. We had the fire out before the fire trucks arrived." Colton, who had remained in the craft to shut off various switches, estimated it took him about 10 seconds to get out, but as our crew talked about the incident later, all agreed that he remained in the burning F-4 for more than a minute.

A representative from Kaman soon visited us and commented that, as far as he knew, we performed the first fire suppression rescue using the HH-43. It seemed routine to us. Later we learned that we were in the middle of a mine field.

During our training at Sheppard Air Force Base, Texas, we had concentrated on the H-43 systems, flight control, and fire suppression. I cannot remember being prepared for the other major role that Pedro (an H-43 nickname from their radio call sign) accomplished during its service in Vietnam — search and rescue.

When I reported to Detachment 7, 38th Air Rescue Squadron, at Da Nang, I was quickly put on the

schedule for area checkout and upgrade to RCC. I reported to the alert trailer the next morning well before sunrise and met my initial upgrade pilot, Captain John Keene, an old guy in his late 20s or early 30s. I also met my flight engineer (FE) and pararescueman (PJ, for parajumper). We were told that we were headed to Khe Sanh to stand alert at a forward operating location. They showed it to me on the map and my only thought was that it was pretty near the bad guys. They then told me that we would not need the fire suppression kit where we were going. This was my introduction to this unknown mission called SAR (search and rescue) which seemed to be in a parallel universe to local base rescue with firemen and the FSK.

At sunrise we departed Da Nang and flew up the coast to the city of Quang Tri on the Quang Tri river. After refueling, our two-ship flight of HH-43Fs, the other piloted by Captain Andy Solberg, followed Route 9, a major road, up a valley to the combat base at Khe Sanh. The Khe Sanh runway was constructed of perforated steel planking and sat on the side of a hill. Airplanes landed uphill and took off downhill — there was no other option. We camped at the top and waited for "Queen," our airborne controller, to alert us if an aircrew required a rescue.

Khe Sanh was interesting, occupied mostly by Marines at that time and nothing was above ground except the top of the tents covering everything. If you stuck your head up from the trenches, you wore your helmet. We were surrounded by mountains and lots of bad guys.

The HH-43F was relatively small and her interior was about the size of a medium van. Normally on SAR alert the crew size was four but there was enough additional space in the rear for three or four others comfortably. We were called many times to assist the Army to help recover some of their forces when

they had exhausted their rescue assets, generally a simple task that we could quickly accomplish so that we could resume our aircrew recovery responsibilities.

One day as we were returning to Da Nang we were called to help evacuate a Marine fire squad trapped and heat exhausted on a cliff a few miles south of Hue. The request was to take these Marines to the Naval Support Activity Hospital (NSAH) at Da Nang. I was vectored to the site and there they were, about eight or nine of them in full combat gear. We established a hover on the edge of the cliff and the Marines quickly entered Pedro, all of them. Some of their gear was tied to our hoist supports. We could not effectively hover because we were now grossly overweight and so we just literally backed up a little and then "fell" down the cliff until we had achieved translational lift. The flight was uneventful but because we were so heavy, we could not perform a normal approach, hover, and landing, so we did a rolling landing. Corpsmen came out to assist the unloading as the Marines tumbled out. There were so many of them, the corpsmen called their friends out to watch. It was like a circus with clowns exiting a little car. It ended up that we had ten fully equipped Marines onboard. We exceeded the allowable max gross weight by several hundred pounds, but Pedro never complained, and we got them all back safely.

There were very few rescue situations that allowed us to land to pick up the airmen; most required the use of the hoist and the forest penetrator. We had about 216 feet of cable on the hoist spool and attached to the end was the forest penetrator, a rescue device with collapsible seats that could penetrate the jungle canopy and accommodate up to three survivors at a time. We deployed it in a folded-up state with clear directions in English on how to use it for rescue. I never thought

English, nor the intuitive use of the forest penetrator, was an issue until our unit was alerted to an aircraft down call south of Da Nang near the village of Hoi An. We were the only Pedro on alert and so Lt Doug Sams and I, and our PJ and FE, took off and headed south alone. As we approached the rescue area, the forward air controller flying a Cessna O-1 Bird Dog let us know that the light aircraft that crashed had been shot down, the pilot killed but the passenger was alive and that the area was hot with bad guys. He told us that Douglas A-1 Skyraiders, call sign Sandy, were enroute to provide suppressive cover, and that he was not sure who the passenger was.

The location of the downed airplane was marked, and we moved in hovering above the tree canopy just as a flight of two A-1s flew directly above and began to obliterate the forest. It was just like the July 4th fireworks finale only much closer! Our FE lowered the hoist beginning what we thought would be a routine rescue. I looked down about 200 ft below and I saw the passenger but did not recognize his uniform. It was quickly obvious that he did not speak nor read English and had no clue what the folded forest penetrator was or how it worked. He attempted to climb up the cable while the A-1s continued to show the bad guys no mercy. Our FE was able to shake the survivor off of the cable and spooled it back up. The PJ, SSgt John Tobey, then mounted the penetrator and the FE lowered him to the ground. He was able then to safely strap the survivor and himself on the penetrator and the FE spooled them both up. As we maintained the hover I looked down at my knees and they were shaking a mile a minute. I punched Doug Sams and pointed at my knees. We both laughed hysterically.

The HH-43 was an excellent rescue craft, but we had no offensive weapons. Both the RCC and the RCCP had .38 caliber pistols on our hips and each had an M-16 that would have been impossible to use.

The PJ and the FE would have the same, but it was impossible to save lives and protect themselves at the same time. With one exception.

A Martin B-57 Canberra crew ejected from their battle-damaged airplane just off the DaNang coastline. Pedro launched immediately, with 1Lt David Stevenson as the RCC and me as the RCCP. We were quickly on scene and our FE, A2C Dennis Wilson, directed Stevenson over the first man and quickly hoisted him to safety. At the same time, a sampan was fast approaching the second crewman and they had guns. We had a quick discussion and decided, unarmed, to demonstrate who was the Alpha male and so we approached and hovered over the second down crewmember. We presented a full side view of our bird to the sampan and all of us with big toothy grins, stared it down. The boat turned away even with guns in hand. We hoisted the second crewman and then returned to DaNang. The rescue was so quick that during debrief FE Wilson said "We got to them so fast that Clark (one of the B-57 crewmembers) still had his parachute and dingy on when we brought him aboard. I had to cut the gear loose."

One extremely dark night the alert crew was notified that there had been a runway accident. Our crew scrambled with the FSK and the firemen. Doug Sams and I could see the bright glow. When we were airborne and flying toward the glow at the south end of the runway, it became immediately obvious that there probably were no survivors. In front of us we saw a Lockheed C-141 Starlifter completely engulfed in flames. From the burning airplane bolts of flames were being ejected and skittering in many directions. The fire trucks and crews and security forces did not approach. There was nothing that we could do. The next morning, we learned that the C-141 was ending a six-hour flight, exited the runway, and without stopping was attempting to cross the parallel runway. A

Grumman A-6 Intruder had been cleared for takeoff on that runway and impacted the C-141. Most on board the C-141 perished, but the A-6 crew survived. The cargo included many tanks of acetylene (which created the bolts of flames) and munitions. A really bad night at Da Nang.

Da Nang was a triage area for evacuated wounded warriors. We would meet the Fairchild C-123 Providers and Lockheed C-130 Hercules carrying the wounded in. They were transferred to our birds for quick flights to either the NSAH located across the runway or to the Army hospital on the beach near Marble Mountains, south of Da Nang. There were also two U.S. Navy hospital ships that rotated and anchored in Da Nang Bay. They were the Sanctuary and the Repose. Many times, I carried wounded troops to their landing decks. I knew that these guys would and did receive the best care available.

There was a mention in the H-43 handbook that the rotor blades were constructed of wood and a little metal and covered with glued on fabric. There was also a caution to avoid flying in visible moisture because it would cause the fabric to peel off the blade. In a controlled situation, rain could be avoided. Vietnam was not controlled. We took the caution as more of a guideline than a requirement. One foggy and rainy night Capt Warren Keneipp Jr., USMC, bailed out of his Vought F-8 Crusader after he lost communication and navigation equipment and ran out of fuel attempting to fix the problem. We were notified and quickly reconfigured the crew and equipment on board from a mission with firefighters to an open water SAR mission with PJ A2C Duane Hackney, and FE A1C Clyde Chavis. I was the RCC and Doug Sams was the RCCP. To quote from the *Stars and Stripes* article, "The rescue helicopter was directed (to)... track down the beeper signal, with directional assistance provided by



▲ PJ A2C Duane Hackney

the control tower. As the helicopter flew to the area in question, a Marine flare-ship had already arrived and began dropping flares to isolate the general area of the beeper. Gregory (and his crew) began the pickup attempt. After dropping below 1,000 feet, voice contact was made with the survivor, Gregory began flashing his landing lights in hopes the downed pilot would spot them. The pilot did and after a few minutes directed the helicopter to his position. The pilot was hoisted into the helicopter to end the mission."

I remember the heat of the flares as they floated closely by as we descended in instrument flight rules conditions (generally meaning low cloud ceiling and low visibility). The flares created a bright milk-bowl effect disrupting our night vision. The weather conditions with drizzle and fog were so bad that I almost lost control of Pedro on our climb out after the rescue and without the help of Doug Sams we might have. The H-43 was designed to be flown in visual conditions only. The entire mission from notification, to Captain Keneipp safely back on the ground at Da Nang was three and a half hours. The ground crew replaced the rotor blades



NMUSAF photo

HH-43 FIRE SUPPRESSION KIT

This 1,000-pound fire suppression kit could be carried by HH-43 helicopters to provide quick aid in fighting aircraft crash fires. The tank contained 83 gallons of water and foam, but when this mixture reached the air at the nozzle, it

expanded to more than eight times its volume to produce about 690 gallons of fire-fighting foam. In an emergency, the kit would be airlifted in a cargo sling by the hovering helicopter and carried to the crash site. Firefighters at the scene would quickly unhook the kit and deployed it to extinguish the fire.

WALT DISNEY HH-43 SQUADRON INSIGNIA

This unit insignia was created by Walt Disney Productions in 1966 for the 38th Aerospace Rescue and Recovery Squadron stationed at Da Nang Air Base, Republic of Vietnam. The insignia's anthropomorphic HH-43 "Pedro" is depicted carrying a medical kit and fire bucket, representing the helicopters role in rescue/aeromedical evacuation and firefighting.



NMUSAF photo

because the blade covering fabric was damaged from the rain.

With few exceptions, crews remained together. I was extremely lucky to have been paired with Doug Sams as the up-front team and our friendship has continued on these many decades. Our firemen would rotate as did our PJ's and when the Jolly Greens arrived in the fall of 1966, the PJ's also flew as part of their crews. I could never complain about a lack of courage, humor, professionalism and patriotism displayed by anyone at any time. It was a big family. We were prohibited from leaving the base unless we had official business, which I never had. Our world was the Da Nang Officers Open Mess (the DOOM Club), the theater, our barracks, and the flight line for the entire tour except for an occasional but extremely rare opportunity for R&R. I met my six-month-old baby girl in Hawaii while on R&R. I saw more than 150 movies and had more steak and beer than you could imagine. The theater was popular with all because it was air conditioned. The steak and beer were a magnet for the crews of chartered flights flying into and out of Da Nang. We would trade steak and beer for real ice cream, milk products, and fresh vegetables. It was a way for us to get firsthand knowledge of what was really going on back home and the story was not always good.

The HH-43 was not fast, nor did it have an acceptable combat radius. Pedro showed up in Vietnam and Thailand the summer of 1964 and remained the only and largest rescue helicopter until the Sikorsky H-3 Jolly Green Giants began to arrive a year and a half later. Nothing could be done to increase its airspeed (about 110 mph tops), but an attempt was made to increase its endurance by installing two 50-gallon barrels of jet fuel gravity fed into the aircraft's fuel system. There were only three minor problems: the barrels were not self-sealing; they

took up valuable space and they reduced Pedro cruise speed by approximately 5 mph because of the added weight. I commented once that we were so slow when those barrels were used that the bad guys would aim at us and then lead us before they fired. I guess you had to be there to understand the humor.

There are many stories in the early days of these little birds flying long distances and under very hostile conditions bringing crews back to safety, but unfortunately some did not come back at all.

I wish that I could tell you that everything we did was successful, but it was not. We recovered and returned an awful lot of heroes who fought and died for their country. We made certain that they were not forgotten.

The Jolly Greens began their move to Da Nang in August 1966, becoming part of the 38th Aerospace Rescue and Recovery Squadron (ARRS), joining the Pedros. Soon they became the 37th ARRS as the unit's Grumman HU-16 Albatrosses (amphibious aircraft) departed permanently. For many missions, the Pedros joined them as either a high or low bird during rescues. The low bird was typically the helicopter attempting the rescue, and the high bird flew guard above. By November of that same year there were enough HH-3s so that the HH-43 was no longer required. The HH-3s, and subsequently the HH-53s, were built for long-distance, high-speed rescue infiltration and exfiltration, could air-to-air refuel and they were armed. The size of the crews grew adding positions such as gunners. The Jolly's and Super Jolly's performed miracles. In life though, we lost friends.

We never counted rescue saves like they do now, and all official records of flight missions logged between June 1964, when the first HH-43B arrived, and 1975, when

the last one departed, have been lost. I have seen spreadsheets showing missions, saves, med-evacs, community relations and many other miscellaneous missions of mercy but it is difficult to find the original source of the data. I can say with certainty that the HH-43 Husky was the first Air Force rescue helicopter in Southeast Asia and the last to depart and Pedro and her crews demonstrated daily for more than ten years the motto "That Others May Live."

A2C William Hart Pitsenbarger was born in Piqua, Ohio. Pitsenbarger completed more than 250 missions, including one in which he hung from an HH-43's cable to rescue a wounded South Vietnamese soldier from a burning minefield. This action earned him the Airman's Medal and the Republic of Vietnam's Medal of Military Merit and Gallantry Cross with Bronze Palm. The story of the events of April 11, 1966, for which Pitsenbarger was awarded the Medal of Honor are related on page 29. This story has been presented in the movie *The Last Full Measure*. Unfortunately, an HH-43F was not used during the filming. Instead they used a Bell UH-1 Iroquois, better known as a Huey. Shame!

Charlie Kaman designed a helicopter that could efficiently dispense insecticides but what he really designed was a utility helicopter that served in multiple roles and did each superbly. Pedro many times came to the fork in the road and took it, "...And that has made all the difference." Of all the aircraft that I have flown in my life, Pedro was then and still is my absolute favorite!

In August 1966, I wrote to Walt Disney and described the role and significance of our little bird asking for them to create a cartoon of Pedro. Walt Disney Productions sent back immediately their vision of her and either the original or a copy of that cartoon is on display at the National Museum of the United States Air Force™. ✨

Author Frederick D. Gregory was an HH-43F Rescue Combat Crew Commander at Da Nang AB, June 1966 to June 1967 and flew approximately 550 rescue mission during that year. After his Vietnam tour, he trained as an F-4 pilot, attended the Naval Test Pilot School, flew as a test pilot for the Air Force and for NASA. He was selected as a NASA Space Shuttle Pilot, flying three space missions, twice as the Commander. Moved to NASA Headquarters serving as the Associate Administrator for Safety and Mission Assurance, then as the Associate Administrator for Human Space Flight. He retired from NASA as it's Deputy Administrator in 2005 and is currently living in Annapolis, Maryland.

Contributor Donald "Doug" Sams served as an HH-43F pilot assigned to Detachment 7, 38th ARRS, Da Nang AB, South Vietnam in 1966-1967. Lt. Col., Ret., Sams served in the United States Air Force From 1962 to 1985 and held a variety of positions including Dual Qualified Standardization and Evaluation IP in the H-43 and H-1, Sheppard AFB; Chief of the VSTOL Branch, Instrument Flight Center; Helicopter Operations and Training Advisor to the Royal Saudi Arabian Air Force; and Instructor Pilot and Chief of H-1 Academics, 1550 Aircrew Training and Test Wing. His last assignments included Commander of a Component Repair Squadron, Commander of an Aircraft Generation Squadron and Assistant Deputy Commander for Maintenance. He has over 3,000 hours in a variety of fixed and rotary wing aircraft. His military decorations include the Distinguished Flying Cross, Meritorious Service Medal with two Oak Leaf Clusters, Air Medal with 14 Oak Leaf Clusters, and the Air Force Commendation Medal. He is currently living in Chattanooga TN.