

**KAMAN**

# *Rotor Tips*



MEDAL OF HONOR AWARD --- PG14

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## ON THE COVER

Shown is the Kaman-designed K-800 SEACAT. A high-speed compound version of the twin-engine UH-2, it offers the very latest in performance, reliability and mission versatility.

## FEATURES

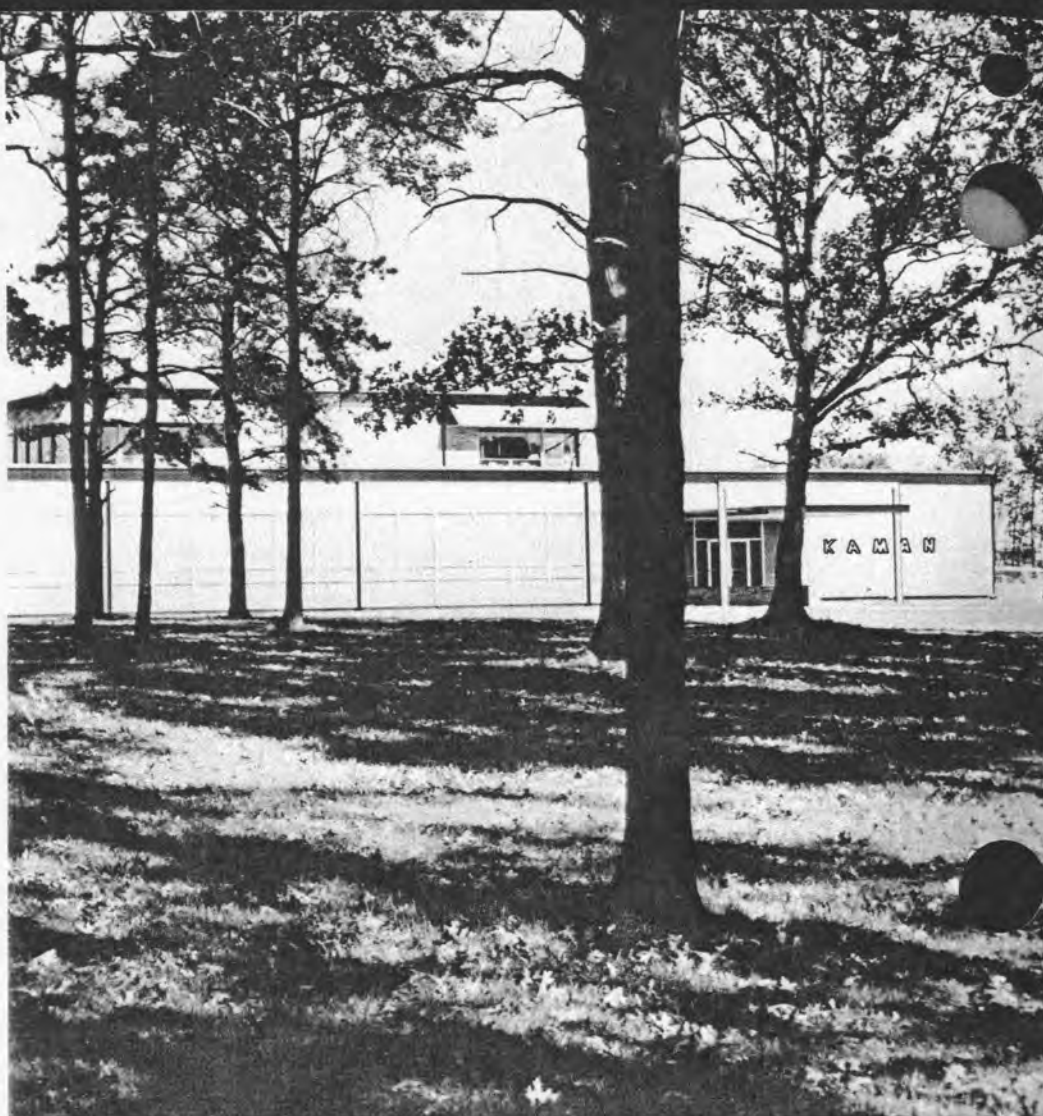
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# SEACAT



The K-800 SEACAT—compound version of the twin-engine UH-2—is the ultimate in performance and reliability, incorporating the latest state-of-the-art advances in all areas including all-weather navigation and avionics equipment.

The SEACAT's teeth have been honed by a design philosophy that firmly dictates: retain that which is proven, and incorporate the latest technology to obtain a vehicle with the maximum potential for recovering downed personnel.

Before describing the SEACAT's anatomy, here is how it performs with a crew of four, armor and armament on board, and fuel for a 200-nautical-mile radius of action. The SEACAT will:

- hover OGE at 4,400 feet at 90°F, immediately after takeoff
- move out at speeds to 215 knots
- hover for 15 minutes at midpoint
- pickup six rescues at midpoint while hovering OGE at 6,000 feet at 90°F and
- return to base with 10 percent fuel reserve

With full internal fuel, crew of four and armor, it has a mission radius of 300 nautical miles at best cruise speed (185 knots) or can provide a maximum endurance of 4.7 hours.

The SEACAT uses twin GE-T58-16 engines (1870 HP each); a 10-foot diameter, three-bladed pusher prop; and a 27-foot wing.

The pusher prop is used in conjunction with the rotor to provide forward thrust, while the wing is used to augment lift and provide external stores mounts on both sides of the fuselage.

## KAMAN

# K-800

*FUTURE CONCEPT—Firing rockets and a turret-mounted 7.62 mm gun, a SEACAT crew makes a ground fire suppression pass prior to rescuing downed aircrewmembers.*

The engine and transmission package are lowered and faired into the fuselage to reduce aerodynamic drag. A turret mounted TAT-102 armament system provides added protection for the combat search and rescue mission.

This twin-engine compound provides a tremendous degree of flight versatility. It is at home in hover as well as high speed with impressive acceleration and deceleration capability. It can fly on one engine or be autorotated to a safe landing, if necessary.

The compound is surprisingly easy to fly as the only additional cockpit control is a propeller pitch control located on the collective. This control is used to vary thrust, as in a fixed wing aircraft, while the collective remains in a preset fixed position. During takeoffs and landings or while hovering, the collective pitch control is used in the normal manner.

There are no critical transition areas between one regime or mode of flight to another as in many V/STOL aircraft. This permits the entire airspeed envelope to be used in a safe uncomplicated manner.

The high-speed compound configuration is not new to Kaman Aircraft. A jet-powered version has been tested to speeds well beyond 200 MPH during an experimental program for the U. S. Army. This program led to the technological advances incorporated in the SEACAT.

The SEACAT retains the relatively compact size of the UH-2 and therefore the capability to effectively operate from small ships and confined areas. Mission versatility is further enhanced by adequate cabin space adaptable to a variety of missions in addition to search and rescue.

This is the K-800 SEACAT—an aircraft that offers the very latest in performance, reliability and mission versatility to meet the rigorous demands of combat support.

# NINE-HOUR MISSION FLOWN BY HH-43 CREWS

In an operation which lasted more than nine hours, three HH-43 "Pedro" crews rescued or evacuated almost two dozen U. S. soldiers from a steep mountain slope covered by dense jungle canopy. During the operation, which was carried out after an Army helicopter was downed in hostile territory, the HH-43's were exposed to enemy automatic weapon and B-40 rocket fire on numerous occasions. In addition, artillery fire and air strikes were also being carried on in the immediate area during the entire period—one series of bursts came within 200 meters of the hovering Pedros! In order to evacuate the survivors, and later, soldiers who had been sent to defend the crash site, the HH-43 pilots hovered the rescue helicopters for as long as 30 minutes. Rotor tip clearances were often less than two feet from the surrounding trees. Some of the pickups were made in total darkness. Most of the rescuees were seriously injured and one was trapped in the wreckage for more than six hours before the rescuemen were able to free him with chain saws and bolt cutters.

The operation involved three 38th ARRSq (MAC) HH-43's—two from Det 13 and the other from Det 9—the joint Search and Rescue Center, a "Crown" HC-130 which controlled the mission, numerous helicopter gunships, the 37th Tactical Fighter Wing, and Army ground personnel.

The tremendous rescue effort began as a Det 13 Pedro was returning to its home base at Phu Cat AB from a Medevac. Word was received that an Army helicopter with eight soldiers aboard had been downed 12 miles from the base by enemy fire. Capt Jack S. Brannan, RCC, immediately headed for the crash scene. With him were 1stLt Wayne A. Grant, CP; Sgt Larry Knefelcamp, medical technician; and SSgt Delbert Dunn, flight engineer. At Phu Cat, two other HH-43 crews also responded. One, another Det 13 Pedro, was manned by Capt Richard J. Bouckout, RCC; Capt Robert S. Morita, CP; A1c Jones Stamey, pararescueman; Sgt Arthur Charlton, helicopter mechanic; Sgt James Degraw, medical technician; and Capt George W. Atkinson, flight surgeon. The other HH-43, from Det 9, Pleiku AB, was at Phu Cat on a parts pickup. The crew consisted of Capt James G. Ellis, RCC; Capt William F. Clark, CP; TSgt Donald Gooding, flight engineer; A1c Lief Arvidson, and Sgt Lonnie C. Conners, pararescueman.

After flying five sorties involving four flight hours and making four combat saves, Captain Bouckout and his crew

were relieved by Maj Juan H. Migia, RCC and detachment commander; Maj Dwight Hageman, CP; SSgt Jesse Franklin, Jr., helicopter mechanic; and Sgt John Henry, medical technician.

At the crash scene it was found that the whole area was saturated with fuel, but the pararescuemen ignored the obvious danger and worked steadily at freeing or aiding the casualties. They were taken to Phu Cat AB or the Qui Nhon Army Airfield hospital by the HH-43's. A man who figured prominently in the rescue of the downed pilot was SSgt Robert E. Rager of the 37th Civil Engineering Squadron's Fire Department. An expert in the use of crash equipment, the Sergeant was lowered from an HH-43 to conduct the delicate operation of removing the seriously injured pilot from the wreckage. He was lying face down in a position which denied the room needed to operate a power saw. The pilot was fitted into a gunner's harness and his torso gently lifted by a block and tackle so the fireman could start cutting his legs free. Later, when freed, the pilot was lowered carefully to a stokes litter and then hoisted to a rescue helicopter. In addition to the survivors, most of the members of the Army ground party were hoisted to the ARRS helicopters. The last 30 minutes of the operation was conducted in total darkness.

Ironically, as the rescuemen pulled one of the injured passengers into the helicopter, he said, "I'm sure glad to see you guys. This is my last day in Vietnam and I'd hate to spend any more time down there. Please get me fixed up fast, I'm due to go home tomorrow."

Five men from an Army helicopter downed in hostile territory were evacuated by two HH-43 "Pedros" from Det 13, 38th ARRSq, at Phu Cat AB. Protection against ground fire was given during the pickups by an F-100 Supersabre and Army gunships. The first Pedro was piloted by Maj Juan H. Migia and Maj Dwight C. Hageman with SSgt Delbert B. Dunn and TSgt Aaron W. Farrior as crewmen. They picked up two of the soldiers. The other three were taken aboard the second HH-43 which was piloted by Capt Richard J. Bouckhout and 1stLt Wayne A. Grant, III, Sgts Arthur I. Chariton and Jimmy E. Applegate were crewmen. Both helicopters made confined area landings between 80-foot trees and the downed helicopter. The ground was also covered with logs and large stumps.

## Kaman K-700 Briefing for USAF Helicopter School Personnel



Andy Foster, center, chief test pilot at Kaman Aircraft, and William E. Zins, director of Customer Service, confer with Capt Donald D. Sams, one of the instructor pilots at Sheppard AFB, Texas. Air Force helicopter school personnel received a briefing on the K-700, the new twin-turbine helicopter being developed at Kaman. The K-700, which can provide the Air Force with increased capability for its local base rescue mission, was described in the January-February, 1969, issue of Rotor Tips. (USAF photo)





**TUSLOG 84 IN ACTION**—Maj J. M. Strayer took this dramatic photograph of Turkish Nationals waiting to be hoisted to an HH-43B. Four were taken aboard the helicopter and later 13 more were evacuated after landings were made on the roof. Turbulence and wind-driven rain hampered earlier evacuations. In right photo, by TSgt J. B. McClughan, Turkish and American Air Force personnel aid refugees aboard a HUSKIE during 96-hour rescue and evacuation operation. Some of the civilians had been homeless and without food for three days. (USAF photos)

## TUSLOG 84 LOGS 86 'SAVES'

*Hundreds of Flood, Snow Victims Aided By Incirlik Unit*

In a 96-hour mission which began the day after Christmas, HH-43B crews from TUSLOG 84, Incirlik AB, Turkey, saved the lives of 72 civilians and evacuated 344 more after the Tarsus/Mersin area was swept by swift-running flood waters. The ARRS helicopter crews, backed up by hardworking maintenance personnel, flew 86 sorties for 22.3 hours—most of them in the rain—while chalking up their impressive total of 416 rescued or evacuated.

Manning the HH-43's were: detachment commander Maj Pasco Parker, Maj Jay M. Strayer, and Capt Gary F. Sanderson, RCC's; SSgt Lafayette Sullivan, SSgt Albert Nash, Jr., and SSgt Jose L. Rodriguez, firefighters; Alc Kenneth D. Dempsey and Sgt Leslie W. Terbeest, helicopter mechanics; SSgt William H. Tyler and SSgt Daniel D. Dempsey, medical technicians; and Maj Mahmut Ozcan, Turkish liaison officer.

Members of the ground maintenance team which backed their efforts were: CMSgt Ronald H. Wibirt, maintenance superintendent; SSgt Carl D. Smith, Jr., and Sgt Mark A. Close, engine specialists; SSgt Charles W. Harper, maintenance clerk; and SSgt Robert G. Cataldo, firefighter.

Time after time the ARRS HUSKIE crews braved hazardous situations in order to save individuals or groups trapped by rising flood waters. In an HH-43 designated as "Pedro One," Major Parker hovered over an area surrounded by wires and poles while three people were hoisted from a rooftop and taken to safety. Captain Sanderson, who had been lowered to assist, learned that another group, including women and babies, was stranded on a gravel bar. To avoid obstacles and refugees, Major Parker landed in a 25-knot crosswind. Captain Sanderson and Airman Dempsey leaped out and helped 14 Turkish survivors aboard. After they were taken to safety, Pedro One returned and hovered over a rooftop. Captain Sanderson was lowered again, and nine more Turks were hoisted aboard.

**TYPICAL SCENES**—In photograph by TSgt F. N. Fensler, HUSKIE is shown after landing in a small village to pick up a group of stranded Turkish Nationals. Wide spread flooding was result of 50-hour rainfall. In second photograph, taken from an HH-43B by Major Strayer, flood victims are shown on rooftop waiting for rescue. The now placid waters bear little resemblance to the swift-running torrent which swept the area the day before. (USAF photos)



Meanwhile, Major Strayer and his two-man crew in the second HUSKIE (designated as Pedro Two), were aiding flood victims in another section. As a USAF C-118 orbited flood-isolated villages, the helicopter crew inspected them for people in need of immediate assistance. Eight persons were evacuated, six of them from hip-deep water. Sergeants Nash and Sullivan also rescued a child from a flooded house. Major Strayer, without a copilot and flying in turbulence and wind-driven rain, was almost constantly faced with the problem of becoming disoriented during the 2.5-hour flight.

With Captain Sanderson as pilot, Pedro One later delivered 550 pounds of food to an isolated Turkish Army Depot and the Tarsus Train Station where 150 people were stranded. Afterward, still operating in 25-knot winds and continuing rain, Captain Sanderson faced the HH-43 toward a line of nearby trees and hovered as Major Parker was lowered to a rooftop by Airman Dempsey. Five Turks were recovered and flown to safety. Meanwhile, Major Parker began gathering together 25 other refugees who were trapped on the housetops. When the helicopter returned, three flights were needed to complete the evacuation. Each time, Captain Sanderson hovered downwind and then landed on a rooftop with the rotor blades a scant few feet from whipping limbs and debris. Finally, because of darkness, Pedro One returned to Incirlik after 10 sorties, 56 saves and 4.7 hours of flying.

At the close of flying activity, Chief Master Sergeant Wibirt gathered his forces to return the two helicopters to operational status. They worked far into the night to accomplish their purpose for both HH-43's had been damaged during the numerous sorties.

The support received from CMSgt Ronald H. Wibirt, maintenance superintendent, and other ground personnel during the most active period in the flood-rescue work brought forth the following praise from Major Parker "These individuals did not participate as crew members, but their maintenance efforts into the night of 26 December were directly responsible for having an HH-43 ready for flight the morning of 27 December, and 23 Turkish people, 10 of them classified as ARRS saves, owe their well being to these five individuals as well as members of the crews that recovered them from the floods." Participating in the all-out effort with Master Sergeant Wibirt were SSgt Carl D. Smith, Jr., and Sgt Mark A. Close, engine specialists; SSgt Charles W. Harper, maintenance clerk, and SSgt Robert G. Cataldo, firefighter.

The next day the weather cleared and Pedro One took off and, again aided by the C-118, searched the flooded area. Aboard were Major Strayer, RCC; Captain Sanderson as copilot; Sergeant Tyler and Major Ozcan. Seventeen persons were located. They had been stranded on the second floor of a house for three days. Major Ozcan was lowered and four women were hoisted to the helicopter. Afterward Major Strayer landed the HUSKIE on the roof and the remaining persons were evacuated. Six more people were located later and again a rooftop landing was made to pick them up. Bad weather then caused a temporary halt to flight operations. The next day it was found that the dam at Lake Adana was in danger of being weakened by erosion and overflow. Turkish officials ordered the evacuation of two villages and the setting up of a refugee camp at Tarsus College. After a combined Turkish/American briefing, Pedro One left for the Tarsus area. Aboard were Major Parker, Major Strayer and Sergeant Terbeest. Two Turkish Air Force helicopters left at the same time and were later joined by two others. Pedro

Two, piloted by Captain Sanderson, launched 15 minutes later. With him were Sergeant Dempsey, Airman Dempsey and Sergeant Rodriguez. The combined helicopter force of two USAF HH-43B's and four Turkish helicopters worked throughout the day to carry out the evacuation. At the close of activity a total of 548 people had been taken to a safe area—approximately 40 percent of them were children.

A few weeks later Det 84 conducted a second rescue and evacuation operation after a heavy snowfall isolated the tiny village of Arslankoy, 5,000 feet high in the mountains and 58 nautical miles from Incirlik AB. Houses had collapsed from the 15 to 18 feet of snow that drifted over the village and doctors were needed for the ill, injured and several pregnant women. Food and fuel oil were also urgently required.

Helicopter refueling and other arrangements were made and then the HH-43 took off with Major Strayer as rescue commander; Major Parker, copilot; and Airman Dempsey, flight engineer. Major Ozcan, who had given invaluable aid during the flood rescue operation, was also aboard.

The flight to Arslankoy was made over rugged mountainous terrain at 4,000 feet and a landing was made in waist-deep snow in the middle of the village. After Majors Parker and Ozcan conferred with the mayor, evacuation began of those isolated and in immediate need. With four evacuees aboard, the HH-43 left for the hospital at Mersin. The flight was through 7,000-foot, cloud-obscured mountain passes.

On the return flight, the HUSKIE carried in a team of five doctors and nurses, medical supplies and 50 pounds of bread. Again it was necessary to navigate through the cloud-shrouded valleys and a landing was made in the schoolyard serving as the central point for the operation. Three sick and injured were loaded aboard and a fourth evacuee was picked up after another landing was made in strong gusting winds. Again the HH-43 crew made the hazardous flight through the mountains.

For the third trip to Arslankoy, Major Parker and Major Strayer exchanged crew positions as the aircraft was serviced and loaded with 1,400 pounds of food. The food was delivered to the schoolyard and six more persons taken aboard for the flight to the hospital.

For the last trip to the distressed village, a sling load of 1,100 pounds of fuel oil was delivered. Takeoff was in the face of the worst weather encountered. Major Strayer "picked" his way through the mountain passes and overcast skies to the mile-high valley where Arslankoy is situated. After offloading the fuel oil, the HUSKIE picked up the hard-working medical team and again departed for Mersin amid the cheers and applause of hundreds of grateful Turks.

During the mercy mission, the ARRS crew: Refueled the HH-43 three times; recorded 14 saves; carried 10 medical personnel passengers; carried 1,400 pounds of food and medical supplies; carried 1,100 pounds of fuel oil; flew 6.9 hours out of a 10-hour period; flew 15 sorties at high altitude under "less than desirable" weather conditions and over rough, mountainous terrain.

With the completion of this mission, TUSLOG Det 84 gained the distinction of having saved 86 lives within a 30-day period. This is believed to be an Aerospace Rescue and Recovery Service record, Major Parker said.



# Timely Tips

## Servo Valve Replacement (UH-2)

Recent reports from the field indicate servo valves are sometimes changed two or three times in an effort to correct an ASE problem. Each valve change resulted in only temporary relief because the basic problem was contaminated hydraulic fluid. Experience has shown that a new valve, when installed in a contaminated system, will function properly for a period of time. Consequently, the ASE functions properly and the problem appears solved. However, as fluid-borne contaminants clog the new valve, it malfunctions and the original ASE problem returns. Because of this, it is recommended that the contamination level of the fluid be checked BEFORE installing a new servo valve. Check for contamination in accordance with NAVAIR 01-260HCA-2-3.

*C. D. Morse, Service Engineer*

## Grounding Wire Connections (UH-2)

If the aircraft's external DC or starter ground connections are loose, dirty or corroded, the resulting high resistance will cause excessive current and heat at the connections. This heat may be sufficient to burn a hole in the airframe rib thus allowing the ground wire to drop free and open the circuit. Preventative maintenance should include a periodic inspection of the following grounding connections:

UH-2A/B/C -External ground wire #P42A2N  
UH-2A/B ---Starter ground wire #K7A2  
UH-2C-----Starter ground wires: No. 1 engine: #K50B2N  
No. 2 engine: #K45B2N

*J. J. McMahon, Service Engineer*

## Pitch Control Beams (UH-2)

Reports from overhaul shops indicate that some of the pitch control beams, P/N K659531-7, are twisted at the outboard clevis. This twist can occur during replacement of a main rotor blade damper assembly if the rotor blade is allowed to lead or lag too far with the damper disconnected. If, when the damper retainer bolt is removed, the blade starts to move, it is too late! To prevent this twisting, either disconnect the tracking turnbuckle (vertical link) from the pitch control beam prior to replacing the damper, or positively restrict the rotor blade movement.

*W. J. Wagemaker, Service Engineer*

## Fuel Cell Debris (UH-2)

Flickering fuel transfer light, boost pressure light and emergency pump caution lights strongly suggests the presence of excessive foreign matter in the fuel cells. It is possible for cotter pins, washers, or pieces of string or cloth to fall unnoticed into the cell when the cell is opened for maintenance. Also, whenever a cloth rag is used to wipe the interior of the cell, it could leave lint which probably wouldn't be noticed. (The best precaution is to use extreme care, especially relative to cleanliness, whenever servicing fuel cells.) If this foreign material enters the cells, the resulting build-up on the pump inlet screens will adversely affect fuel flow and the fuel pressure may be reduced enough for the lights to be alternately activated and de-activated. Contamination of this magnitude requires cleaning of all the airframe and engine filters, the fuel tanks, and an inspection of the pumps for foreign matter or damage which requires pump replacement.

*J. J. McMahon, Service Engineer*

## Fuel System Diverter Valve (UH-2)

Two paragraphs concerning the fuel system-diverter valve in NAVAIR 01-260HCA-2-4 (dated 1 October 1967, changed 1 February 1968) are subject to future scheduled handbook changes. On page 29, about halfway through paragraph 2-33 these statements will be added, "Position 1 and Position 2 are visible on the valve body adjacent to the handle. Position 1 is for normal fuel feed; Position 2 is for emergency fuel feed." The information will immediately follow that portion of the paragraph which reads "(see figure 2-22)." On page 296, paragraph 8-180, the CAUTION after step b will contain the following information: "Make certain that the valve handle is in Position 1 and is secured with shear lockwire."

*R. H. Chapdelaine, Supervisor, Service Publications*

## Indexing Rotor Blade Flaps (HH-43, UH-2)

Prior to removing a flap for cleaning or component replacement, mark it so it may be reinstalled onto the same blade. (Some Det's use chalk, tags, or matching colored tape.) The small amount of time used to index flaps to blades will pay off when establishing rotor blade track at the next run-up. Although blade flaps are held to close tolerance during manufacture, slight differences can exist which may effect blade track. Therefore, if rotor blade flaps are interchanged, adjustments will necessarily be required to bring the blades back into good track.

*W. J. Wagemaker, Service Engineer*



## SEASPRITE ACTIVITIES

... Two survivors of a helicopter crash were rescued shortly before midnight by a UH-2C crew from HC-1's Det 63 deployed aboard the USS Kitty Hawk. A foggy moonless night hampered the search as LCdr D. P. Myers and his crew, flying at 100 feet over the two-foot waves, conducted a search with landing and floodlights. Soon after a search began, a distress flare and then a blinking light were seen. Aided by the copilot, Lt S. F. Milner, LtCommander Myers made an instrument approach through the fog to the area where the rescuees waited in their life rafts. He transitioned to a visual approach and then to a hover which he was able to maintain despite the vertigo-inducing "milk bottle effect" of the fog and haze. G. E. Wall, ADJAN, first crewman aboard the SEASPRITE, lowered R. E. Watkins, AE3, to the water and he swam to the aid of the survivors. The recoveries were made without incident.

... A civilian heart attack victim was evacuated from his snowbound home by a UH-2 crew from HC-2, NAS Lakehurst, N. J. Cdr J. H. Hartley, commanding officer of the squadron, first landed the UH-2 in a snow-covered field three miles from Freehold, N. J., to pick up two ambulance attendants. After a short flight, Commander Hartley landed in another field and the heart attack patient and his wife were taken aboard the SEASPRITE. The helicopter then returned to the first field and the waiting ambulance. With Commander Hartley on the mercy mission were LCdr H. W. Lineback, copilot; and AMS2 D. G. Wainright, crewman.

... While on a local training hop, a UH-2 crew from the SAR unit at MCAS Beaufort, S. C., was notified that a patient in the hospital on the air station had to be taken to the Charleston Naval Hospital immediately. Capt Hurston Hall landed on the helipad near the Beaufort medical facility and the patient was placed aboard. Although heavy smoke over Charleston cut visibility down to a quarter of a mile, the landing was made without difficulty. The helo returned to Beaufort without incident. With Captain Hall were SSgt A. R. McCann, Sgt M. E. Brossett, Lt R. D. Hamer (MC), and R. D. Wride, HM2.

... In a pre-dawn rescue, a sailor who was blown from the deck of the USS Ticonderoga by a jet blast was plucked from the sea by a UH-2C crew from HC-1's Det 14 deployed aboard the carrier. The helicopter was on plane guard when the accident occurred. The rescuee, Larry C. Stillwell, AN, said later the "recovery was fast and to me, very beautiful." Members of the rescue crew were Lt D. L. Morgan, pilot; Lt(jg) C. W. Davis, copilot; ADJ2 D. R. Tracht and ADJAN J. N. Green, crewmen. One unusual circumstance was reported during the rescue. As the helicopter hovered 20 to 35 feet over the completely calm sea, apparently a considerable amount of water was picked up in the rotor wash. "It appeared that we were inside a plastic bag with a light on," Lieutenant Morgan said.

... Rapid response by a Det 14 crew prevented possible tragedy after a routine man-overboard drill aboard the Ticonderoga turned into the real thing. SEASPRITE pilot Lt(jg) H. C. Newman, Jr., and his crew expeditiously rescued five men from choppy seas after a life boat capsized during the drill. All the men were hoisted aboard without incident. Others aboard the UH-2C were Lieutenant Davis, Petty Officer Tracht and J. D. Burnett, ADJAN. Afterward, Tracht went into the water to save "Oscar," another participant in the drill. Oscar is the dummy used during man-overboard drills.

... A 13-year-old boy whose small boat overturned in Bayou Grande, Warrington, Fla., was rescued by a UH-2 from the SAR unit at NAS Pensacola. Don L. Barnes, ACCS/AP, and his crew took off at 1601 and headed for the scene of the accident less than a mile away. The boy was located in the choppy water less than four minutes later and hoisted to safety. With Chief Barnes were Lt P. F. Macon (MC), flight surgeon, and crewmen J. D. Beals, AMH2; and A. J. Poloff, ADR3. ... In another NAS Pensacola mission, an aviation officer candidate whose T-34 crashed in a field, was taken to the dispensary for a checkup by a UH-2 crew from the Sherman Field rescue unit. Afterwards, the SEASPRITE carried three members of the accident board to the crash scene. LCdr James T. Denny was pilot of the rescue helicopter. Others aboard were Lt R. W. Taylor (MC), a flight surgeon, and two crewmen, Beals and R. M. Beitler, ADJ1.

... Eleven minutes after notification that an A-4 pilot had ejected 36 miles from the USS Forrestal, a UH-2 crew from HC-2's Det 59 aboard the carrier was hoisting the survivor from his life raft. Lt(jg) C. G. Tourigny headed the SEASPRITE crew. Lt(jg) D. O. Dinwiddie was copilot; AN T. E. Hollis, 1st aircrewman; AMS2 M. W. Smith, Jr., second crewman. ... A pilot who ejected from an A-7 was plucked from the water a few minutes later by a UH-2C crew from HC-1's Det 64 aboard the USS Constellation. Manning the SEASPRITE were Lt R. A. Smith, pilot; Lt R. A. Fitzsimmons, copilot; ADJ3 W. A. Matthes and ADJ2 M. W. Crosley. Petty Officer Crosley was lowered into the water to aid the survivor. ...



# UH-2C RESCUES FOUR DURING ENTERPRISE FIRE

Just before fire and explosions swept a portion of the flight deck of the USS Enterprise earlier this year, a UH-2C crew deployed aboard the carrier was preparing for takeoff. Suddenly a tremendous explosion rocked the helicopter and the crew, all from HC-1's Det 65, saw that the entire aft section of the flight deck was engulfed in flames and black smoke. Although the Enterprise was turning at the time, SEASPRITE pilot LCdr Jess M. Harris was given tower clearance to launch in order to search for personnel who might have jumped or been blown overboard. The UH-2C headed toward the ship's wake but when another explosion hurled debris and shrapnel in the direction of the helo, the pilot was forced to turn away. As he did so, the copilot, Lt(jg) R. J. Helten, spotted two men in the water. As the helicopter hovered overhead, the "swimmer," AMH2 James A. Zils, dropped in to the eight-foot swells to aid the survivors. A few minutes later both they and the swimmer had been hoisted aboard by AN Herbert A. Eckardt and the search continued.

Soon another survivor in a partially inflated liferaft was sighted and Petty Officer Zils again dropped into the water. This rescue was much more difficult, however, as

the man was seriously burned, had a broken arm and was in shock. The swells and gusty winds also made it harder for LtCommander Harris to maintain a stable hover. After Zils and the injured survivor were brought aboard, the UH-2C headed for the ship. Although the aft section of the flight deck was "a raging inferno of flames and flying debris," LtCommander Harris was able to land and discharge the three survivors. He immediately took off again to renew the search.

Soon afterward a man was sighted in another raft. Again the swimmer was dropped and then he and the survivor were hoisted aboard the helicopter without difficulty. After conducting a low level search for another 50 minutes, the UH-2C flew to the USS Rogers, a destroyer, for in-flight refueling and to pick up some extra blankets. The search continued for another hour without success and then the helo returned to the Enterprise, discharged the survivor and switched flight crews.

LtCommander Harris said afterward that he felt the success of the rescue effort was due "mainly to the outstanding efforts of my swimmer, AMH Zils, who entered the water on three occasions and rescued four people." The pilot also praised the highly professional manner in which Lieutenant Helten and Eckhardt performed during the mission.

"Their efforts are tangible proof of the exceptional dedication and motivation of helicopter rescue crews," Lt Commander Harris said.

## Det 66 OIC Awarded Commendation Medal

LCdr Thomas S. Hale, of HC-2, NAS Lakehurst, N. J., was awarded the Navy Commendation Medal with Combat "V" recently. The citation read as follows: "For meritorious achievement while attached to Helicopter Combat Support Squadron TWO, Detachment SIXTY-SIX embarked in USS AMERICA (CVA-66) as Officer in Charge from 31 May to 29 October 1968 during combat operations against the enemy. Lieutenant Commander Hale, through exemplary leadership, professionalism and devotion to duty, maintained his helicopter detachment in an extraordinarily high state of readiness. Under his leadership, routine logistic and plane guard missions were consistently performed in a highly reliable and effective manner. He also developed within his unit an unusually high state of responsiveness which resulted in seven successful rescues. Lieutenant Commander Hale's inspirational leadership and devotion to duty reflected great credit upon himself and were in keeping with the highest traditions of the United States Naval Service."



LCdr Thomas S. Hale

LCdr Hale has been in HC-2 since November of 1967 and will be the Operations Officer for the duration of his time with the squadron.

An article written about Detachment 66 by JOC Dale L. Kite, USN, of the USS America will appear in the next issue of Kaman Rotor Tips. Lieutenant Commander Hale was OIC of the detachment at the time the material was prepared by Chief Kite. (USN photo)

In an earlier Det 65 mission, a UH-2C crew conducted a hazardous night search for the survivors of a helicopter crash approximately 10 miles from the Enterprise. The survivors were located after a night signal flare was sighted. Two were being picked up by another helo, so Lt(jg) J. L. Bergheld the SEASPRITE in a hover over the third survivor while a crewman, AMSAN C. J. Pennise, went into the water to his aid. Both men were then hoisted aboard by the other crewman, ADJ3 P. L. Swantz. Aided by the UH-2C crewmen, LCdr D. N. Sim (MC), a flight surgeon, treated the seriously injured rescuee as the helicopter headed back toward the Enterprise. Copilot on the mission was Lt(jg) J. L. Turner.

## Adak UH-2 Crew Saves Sailor

Flying at night in rain and snow driven by 25 to 45-knot winds, a UH-2 crew from the SAR unit at NS Adak, Alaska, evacuated a sailor who had broken his leg at the knee while with a hunting party. One member of the four-man party hiked six miles through the storm to get help.

Due to the weather, it took the helicopter 30 minutes to locate the tiny group on the ground. The area was so rocky and the wind so high, however, that the UH-2 pilot, Lt(jg) Rudd Thabes, decided to set the SEASPRITE down on the beach approximately a mile away. AMS3 Lentz, the crewman, left the helo and made his way over the ice and snow-covered rocks to the group. When he arrived, Lentz was so exhausted that he could not return to the helicopter.

Lieutenant Thabes took off and with the aid of the copilot, LCdr Stanley Briggs, hovered the UH-2 over the rocks and the injured man and his companions were taken aboard. Suddenly an especially fierce gust of wind hit the helicopter and the right-hand landing gear slammed into the rocks, breaking the ship-against switch. Lieutenant Thabes was able to recover, however, and a second or two later the UH-2 headed for the hospital at NS Adak. Doctors said afterward that they doubted the injured man could have been successfully transported if the helo had not been available.

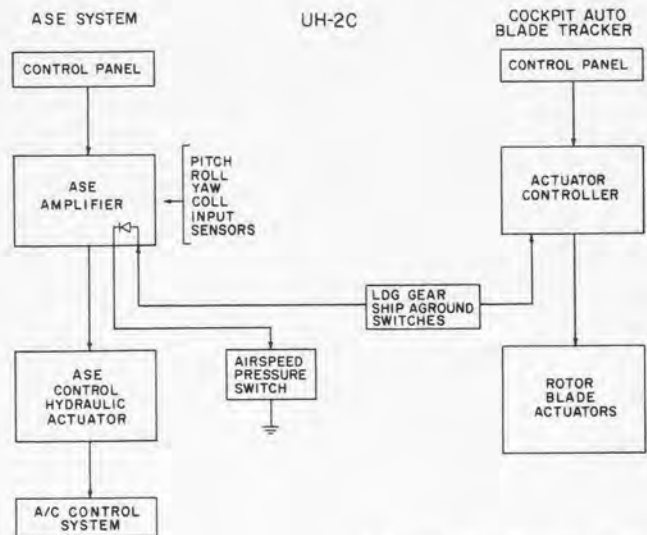
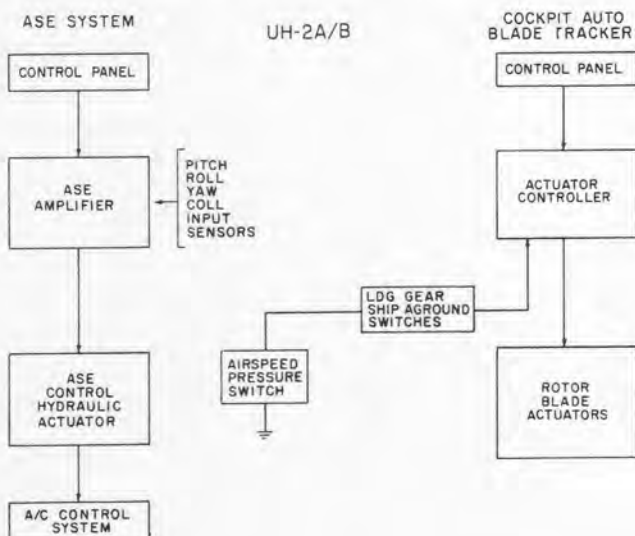
# Q's AND A's

If you have a question regarding Kaman Aircraft maintenance, send it along to Rotor Tips. The Service Department's engineers will be glad to answer it.

**Q.** (Applies UH-2) SHOULD UH-2C ASE AMPLIFIERS BE INTERCHANGED WITH UH-2A AND UH-2B ASE AMPLIFIERS?

**A.** No. ASE amplifiers should not be interchanged for the following reasons: (Refer to the accompanying block diagrams.) ASE amplifier, P/N K687703-1(FSN RH6615-880-1239BH7X), which is stencilled "UH-2C ONLY," is wired in series with a portion of the cockpit automatic blade tracker. The ASE amplifier, P/N 9616-10-04(FSN 2RH6615-955-0784BH7X), used on the UH-2A and UH-2B helicopters is not wired in series. Therefore, if an amplifier designed for installation in the A/B helicopter were to be installed in a UH-2C helicopter, the UH-2C's automatic blade tracker would not function. In addition, the following symptoms may also be noticed:

- A. UH-2A/UH-2B amplifier installed in a UH-2C.
  1. Inoperative cockpit blade tracking system. (Refer to NAVAIR 01-260HCA-2-5, Figure 4-11.)
  2. Loss of dual trim speed with or without stick force.
  3. No yaw damping.
  4. Attitude hold would become noticeably "mushy."
  5. Reduced ASE maneuvering control.
- B. UH-2C amplifier installed in a UH-2A/UH-2B.
  1. No yaw damping.
  2. Stick force signals in both attitude and groundspeed mode, have delayed outputs with no diode "slicer" circuits benefits. (Refer to NAVAIR 01-260HCA-2-5.)
  3. A more sensitive lateral stick input to the tail rotor in coordinated turn mode (less lateral stick travel for more tail rotor pitch).
  4. Reduced ASE maneuvering control.



J. J. McMahon, Service Engineer

**Q.** (Applies UH-2; HH-43) WHAT IS THE DIFFERENCE BETWEEN THE "NOMINAL" AND THE "ABSOLUTE" MICRON RATINGS GIVEN TO HYDRAULIC FILTERS?

**A.** Both ratings, which refer to the degree of filtration, can be explained as follows: Nominal rating: A manufacturer's arbitrary rating which indicates that the filter, under maximum flow conditions, can remove up to 98% (by weight) of fluid-borne particles. This rating does NOT define the largest size particle which the filter will pass. Absolute rating: A laboratory-established rating which indicates the size of the LARGEST hard spherical particle which will pass through the filter. In the early days of manufacturing filters, the industry had no accurate means of determining the EXACT size of the holes in the filter element. Consequently, manufacturers had to determine filtration by measuring what percent of contaminants, by weight, a given filter element would remove. When fluid systems became complex and the variables (loads, flow rate, degree of contaminants, etc.) became increasingly important, a more conclusive means of defining the effectiveness of a filter had to be found. As better measuring devices became available, the absolute rating method was developed. This rating is a more accurate standard for determining the effectiveness of a filter, regardless of the type of system in which it will be used.

C. D. Morse, Service Engineer

**Q.** (Applies UH-2) SHOULD THE K614001-205 AND -207 TAIL ROTOR BLADES BE USED IN "SHIP SETS" ONLY OR MAY THEY BE INTERCHANGED?

**A.** Tail rotor blades -205 and -207 may be interchanged or used in ship sets, as conditions warrant. Naturally, it would be easier for maintenance crews if three identical blades were installed because lube requirements would be the same for all three blades. However, if three -207 blades are not available, one or more -205 blades may be installed. A -207 tail rotor blade is a standard -205 blade which conforms to Interim Airframe Bulletin 141. IAFB 141 installs new flapping bearings, new rock-pins, and changes the lube requirement to the end of flight operations for the day. (The -205 blade is lubed after every 5 flight hours.) It should be noted that the retirement life is the same for both the -205 and the -207 blades.

W. J. Wagemaker, Service Engineer



**Q.** (Applies UH-2A/B) SHOULD SELF-LOCKING CASTELLATED NUTS, P/N MS17825 AND MS17826, BE USED ON THE THROTTLE SYSTEM?

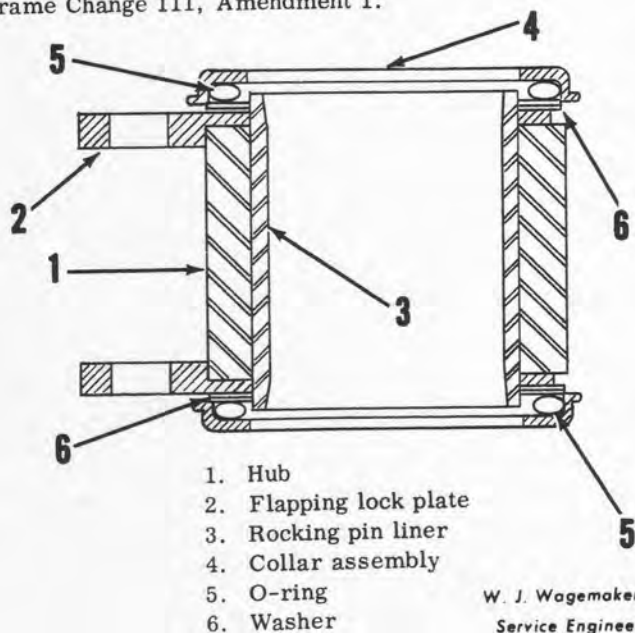
**A.** Yes. According to General Airframe Change 3, Revision A, Dated 20 January, 1967, all AN310 and AN320 castellated nuts are to be replaced by the MS nuts. The change was deemed necessary in order to utilize the additional retention provided by the self-locking MS nuts. (Cotter pins must still be used to secure the nuts.) Also, when an MS self-locking castellated nut is removed, it should be discarded. During installation of the linkage, install new MS nuts. The information contained here will be incorporated into NAVAIR 01-260HCA-4-2 by a future change, and can be used as a procurement and installation aid.

P/N	FSN	TORQUE (inch-pounds)
MS17825-3	9Z5310-785-1755	24-29
-4	9Z5310-961-8390	60-80
-5	2RS5310-052-1692	130-170
-6	9Z5310-961-8391	170-210
-7	9Z5310-761-6426	480-530
-8	9Z5310-871-8758	665-765
MS17826-3	9Z5310-066-4289	16-19
-4	9Z5310-226-3911	35-45
-5	9Z5310-961-8393	80-105
-6	9Z5310-961-8394	110-125
-7	9Z5310-961-8395	295-320
-8	9Z5310-961-8396	320-440

H. Zubkoff, Service Engineer

**Q.** (Applies UH-2) DO THE TAIL ROTOR COLLARS, P/N K616275-1, BEAR AGAINST THE ROCKING PIN LINERS IN THE TAIL ROTOR HUB?

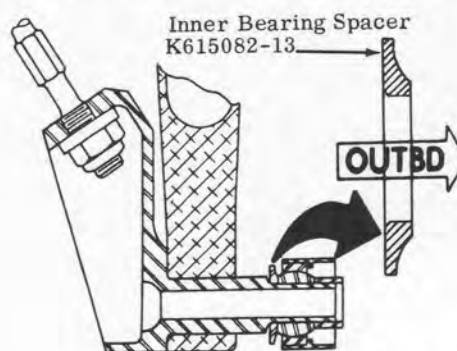
**A.** No. The collars bear against O-rings and washers. The illustration below is a cross section of a tail rotor hub with the relationship between the collars, washers and O-rings clearly shown. More detailed information is available in H-2 Airframe Change 111, and H-2 Airframe Change 111, Amendment 1.



KAMAN SERVICE ENGINEERING SECTION - R. L. Bassett, Supervisor; G. M. Legault, Asst. Supervisor

**Q.** (Applies UH-2) WHAT IS THE CORRECT POSITION OF THE INNER BEARING SPACER, P/N K615082-13, ON THE ROTOR BLADE INBOARD FLAP SUPPORT BRACKET?

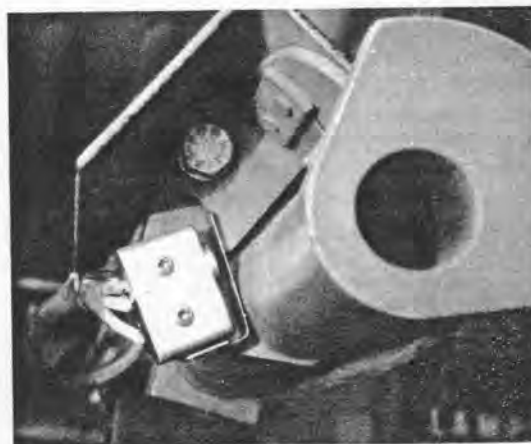
**A.** Always install the inner bearing spacer on the inboard flap support bracket with the cone side (small diameter end) facing outboard as shown in the drawing. Improper installation will restrict bearing operation and may possibly lead to premature bearing replacement or induce a slight "one-per-rev" into the rotor system.



W. J. Wagemaker, Service Engineer

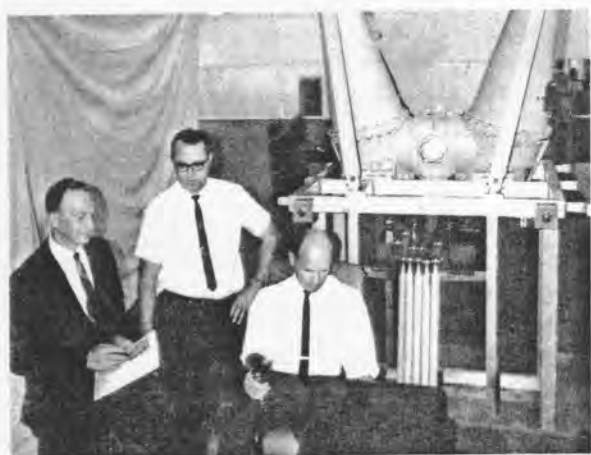
**Q.** (Applies UH-2) WHY IS IT NECESSARY TO KEEP THE PILOT'S AND THE COPILOT'S HEADING HOLD SWITCHES CLEAN AND PROPERLY ADJUSTED?

**A.** It is absolutely essential that all four switches be adjusted properly and kept clean in order to make electrical contact when foot pressure is removed from the rudder pedals. All four switches, in series, must operate in order to complete the circuit which engages ASE heading hold. With ASE engaged, the pilot or copilot initiates a turn or change of heading by applying pressure to a rudder pedal (disconnecting heading hold). When foot pressure is removed from the pedals, the switches make contact and ASE heading hold again functions. The photo shows a pedal switch with no pressure on the pedal; two things are apparent: First, the switch leaf is not operating the plunger, and second, the area is clean. These switches must always be kept free of grease, dirt and other foreign material. For complete cleaning and adjusting procedures, refer to NAVAIR 01-260HCA-2-2.1.



C. D. Morse, Service Engineer

# KAMAN TRAINER DELIVERED TO IRANIAN ARMY



**HH-43 TRAINER**—Versatile helicopter trainer produced by Kaman Aircraft for the Imperial Iranian Army is shown in top photo. Below, Leonard Foss, assistant supervisor, Service Engineering Design, makes final check of controls before trainer is crated for delivery. Looking on are Ronald Holden, coordinator, and Robert J. Myer, left, manager of the Customer Service Department. In third photo, Service Design group leaders Don Ranheim and William Miller check out the in-flight tracking system.

A versatile helicopter trainer which can be used for pilot familiarization and mechanic instruction has been produced by Kaman Aircraft for the Imperial Iranian Army. The trainer, which contains all the controls, basic switches and a majority of the components found in the HH-43B/F HUSKIE, was completed in December, 1968. Although it was the first of its kind, the HH-43 trainer was designed, developed and manufactured in only six months. Helpful to the program was the experience gained earlier in producing other units—particularly the UH-2 maintenance trainers for the U. S. Navy. Last year one of these trainers, which have been in use since 1960, was retrofitted at Kaman Aircraft to reflect the UH-2C's twin-engine configuration.

Realism combined with safety was carefully blended during development of the HH-43 trainer design and operating concept. Instead of providing a single on-off switch in the rotor drive system circuit, Kaman engineers designed the trainers so that the pilot or other operator must go through an actual start procedure to actuate the drive and rotor systems. At the same time, a second person in a position to ensure that the rotor path is clear, must also depress a safety start switch located at the main electrical power panel. When power is being supplied to the motor, the gas producer tachometer will register ground idle RPM. The throttle can then be turned to the desired rotor speed position; a maximum of 16 rotor RPM can be attained which will indicate approximately 260 RPM on the rotor tachometer. A functioning "beep" switch on the pilot's collective stick provides simulated RPM increase or decrease signals to the gas generator tachometer indicator.

Once again with safety in mind, emergency stop switches have been incorporated on the trainer immediately behind the pilot and copilot positions. When either of these switches are depressed the rotor drive system motor is shut down. During normal operation, rotor blade rotation is stopped by placing the throttle in the ground idle position and the rotor drive system is stopped by placing the throttle in the cut-off position.

The trainer contains a completely functioning control system including cyclic trim, in-flight rotor tracking, tail rudders and horizontal control surfaces. It also has provisions for a completely functional Directional Stabilization Augmentation System. Rudder movement is caused by directional pedal application or attitude change simulation by manually moving the spring-mounted Stability Control Unit about the longitudinal axis. All major components are mounted in the trainer frame essentially in the same manner as on the helicopter. This will permit complete maintenance instruction including removal, installation, alignment/adjustment and functional check-out. The addition of this unit to the IIA training facility will aid greatly in meeting HH-43 pilot and mechanic initial and cross-training requirements.

HH-43F's were first delivered to the Imperial Iranian Forces in 1964 and since that time have performed a wide variety of duties for the IIA and IIAF including assistance to ground forces in setting up mountain-top radio relay stations located at approximately 11,000 feet; aiding the Gendarmerie in locating and apprehending outlaws; and flying doctors and medicine to isolated villages. One Iranian Army HH-43F crew rescued 18 soldiers at one time from the top of a 9,390-foot mountain.



# UH-2—COPILOT, CARGO, AND PILOT/RESCUE DOORS

by H. Zubkoff, Service Engineer

Proper function and operation of the cockpit and cabin sliding doors should never be assumed just because the doors appear to be in place and because they open and close. First, correct INITIAL assembly and installation of the doors must be accomplished in accordance with NAVAIR 01-260HCA-2-2. Next, in order to insure function and operation "as advertised," the Preflight and Daily inspections should be performed as directed in Periodic Maintenance Requirements Manuals, (NAVAIR 01-260 HCA-6 for UH-2A and UH-2B aircraft; NAVAIR 01-260 HCB-6 for UH-2C aircraft). A conscientious Daily Inspection of all doors can be accomplished in a few minutes. When performing the Preflight and Daily inspections, it is recommended that visual inspection of the rollers and visible portions of the roller arms and brackets be made using a flashlight directed onto the rollers from below, above, and from the track ends. The Daily inspection should include but not be limited to the following:

1. Vigorously shake the doors up and down. Look for excessive vertical movement which could allow the lower rollers to slip down and out of the track.

2. Look for broken rollers, cracked arms and/or broken springs.

3. Check door latch engagement in all latched positions.

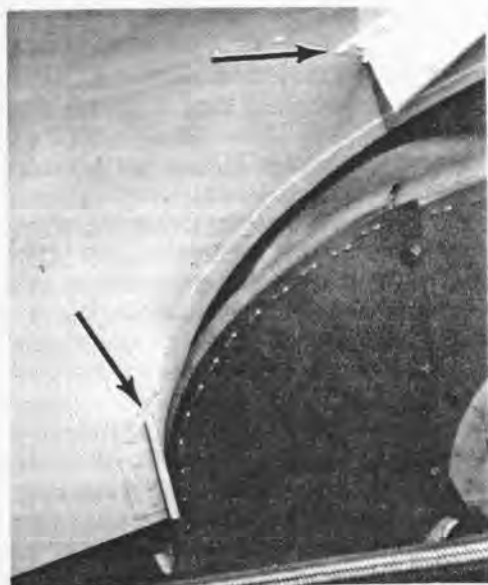
4. Check condition and proper function of the door full-open stops. On the cargo door, the latch stop plate should contact the door frame. Make sure the track stops are installed on both the upper and lower tracks. On the pilot/rescue door and the copilot's door, the aft upper roller should make contact with the bumper when the door is fully opened and latched. In this position, the lower track stop should NOT contact the roller hardware. If the lower stop (arrester) is in contact, the door is improperly rigged.

Whenever doors are removed for any reason, or whenever the door roller bracket fairings are removed, carefully check the bracket assembly for security and condition. (Brackets suspected of being cracked should be dye-checked and replaced if necessary.) Doors are also discussed in the MAY-JUNE-JULY 1968 issue and the JANUARY-FEBRUARY 1969 issue of ROTOR TIPS.

## UH-2C—CLOSING UPPER NACELLE DOORS

by H. Zubkoff, Service Engineer

When closing the engine nacelle upper center door and the aft lower door (both engines), it is important that the two angle clips on the inside of each door be positioned aft of the firewall. (Photo A was taken from aft looking forward with the upper door about to close. Notice the arrows pointing to the clips; the lower clip is about to take the proper position.) Aft clip positioning is necessary in order to preclude damage to the firewall and to prevent engine heat from entering the speed deaccelerator area. A drawing change has been made that adds a caution-type stencil, to act as a reminder, on both doors (2 doors on each engine). The stencil will be added during future PAR/MOD and onto future UH-2C's entering PAR. Operating activities may add the stencil locally, at their discretion. The legend, in 1/2-inch (0.5-inch) letters, reads as follows: "CHECK TO ASSURE THAT FIREWALL IS FORWARD OF STOPS DURING CLOSING." Apply the legend to the doors with Insignia White, Color No. 17875, in accordance with Federal Standard No. 595. Recommended locations for the legend are as follows: Upper door (see illustration 1), adjacent to the aft latch, between the non-skid strip immediately forward of the latch. Lower door (see illustration 2), just above the existing legend. "DO NOT OPEN WITH ENGINES RUNNING." For comparative purposes, one upper nacelle door and one lower nacelle door is shown; repeat these procedures for both upper and both lower doors. For details of the door assemblies, refer to NAVAIR 01-260HCB-4-2 (figure 14 for upper doors; figure 15 for lower doors).



A

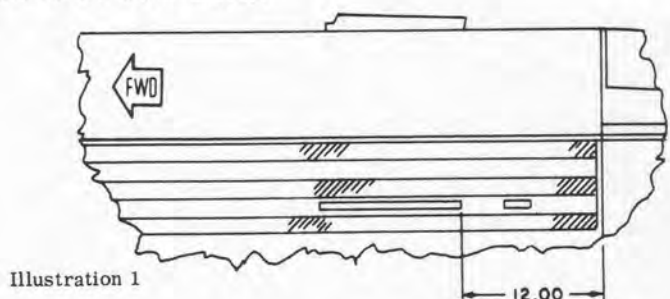


Illustration 1

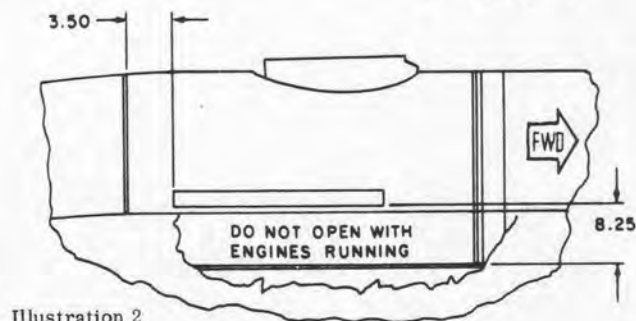


Illustration 2

## LT LASSEN AWARD



MEDAL OF HONOR presentation is shown in top photo. Below, Lieutenant Lassen, third from left, is shown with Cdr Lloyd L. Parthemer, former commanding officer of HC-7; Lt(jg) Clarence L. Cook, copilot on the hazardous mission; and Cdr Ron Hipp, HC-7's present commanding officer. In third photo, the Medal of Honor winner and his wife Linda pose with Kaman Vice President William R. Murray during plant tour.

On the 16th of January, in one of his last official acts as Commander-in-Chief, President Lyndon B. Johnson presented the Medal of Honor to Navy Lt Clyde E. Lassen, a 27-year-old UH-2 pilot from Helicopter Combat Support Squadron Seven, NAS Atsugi, Japan. The nation's highest honor was awarded for Lieutenant Lassen's "conspicuous gallantry and intrepidity at the risk of his own life above and beyond the call of duty" while rescuing two F-4 pilots whose aircraft was downed at night over North Vietnam.

The first Navy helicopter pilot of the Vietnam war to be thus decorated, Lieutenant Lassen wears his award proudly—but also with humility. This was readily apparent during a visit to Kaman Aircraft a few days after the impressive White House ceremony. Kaman Vice President William R. Murray, who has a first-hand knowledge of UH-2 operations off the coast of North Vietnam, escorted the Lieutenant through the plant which had produced the helicopter used on the hazardous flight. Lieutenant Lassen accepted the numerous congratulations appreciatively and with cordial good humor but several times he seized the opportunity to remind his well-wishers that it was not his accomplishment alone—he was "just one man" in a squadron dedicated to saving human life, and that almost daily, other HC-7 helicopter crews were conducting SAR missions within range of enemy guns.

The three men who accompanied Lieutenant Lassen on the rescue mission were also honored. Lt(jg) Clarence L. Cook, who served as copilot, received the second highest decoration possible for a Navyman to receive—the Navy Cross—from VAdm William F. Bringle, CinCPacFlt. Silver Stars were awarded to the two crewmen, AE2 Bruce B. Dallas and ADJ Donald West, for their part in the hazardous night-time rescue. The medals were presented by RADM Harvey P. Lanham, ComFairWestPac.

The following account of the mission was among those featured in the August-September-October, 1968, issue of Rotor Tips. It is republished as a special tribute to these and the other gallant men in Helicopter Combat Support Squadron Seven: ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

When the UH-2 SEASPRITE from HC-7's Det 104 landed at 0240 on the USS Jouett, it marked the end of a rescue mission which began shortly after midnight aboard another SAR ship. In between times the helicopter crew had been the target of bullets, flak and missiles; made an unsuccessful attempt at a hoist pickup; hit a tree while flying in total darkness; and landed three times in rice paddies while under enemy fire. At mission's end the UH-2 was damaged, vibrating and missing a door but the crew was miraculously unhurt, and two very relieved pilots had been snatched from the enemy in a last minute save that rivaled the very best in fiction writing.

The mission started at 0022 when Lt(jg) Clyde E. Lassen lifted the helo off the deck of the USS Preble in response to a SAR alert and headed through the darkness for the enemy shore. With him were Lt(jg) C. L. Cook, the copilot, and aircrewmen Bruce B. Dallas, AE2, and Donald West, ADJ3. Waiting for rescue were two pilots who had ejected from their F-4 after it was struck by a surface-to-air missile. They had landed about 20 miles inland on a small, steep hill which was flanked by villages and rice paddies on three sides and a mountain range on the other.

As the SEASPRITE neared the area, two "balls of flame" thought to be SAM's streaked by the helicopter. A minute later the flaming wreckage of the F-4 was spotted and the position of the survivors located. Lieutenant Lassen landed the helicopter in a rice paddy below the hill and 200 feet from the downed pilots, but as soon as it



## D MEDAL OF HONOR



touched down the waiting enemy opened up with small arms and automatic weapons fire. Taking off, the UH-2 orbited the area and aircraft flying cover for the rescue mission began dropping flares. The survivors were between two large trees about 150 feet apart and other fairly tall trees were also in the area. As Lieutenant Lassen approached a 50-foot hover between the trees, Petty Officer Dallas began lowering the rescue sling. Suddenly the flares went out leaving the area in pitch darkness and the pilot with no visual reference.

"I started retracting the hoist as fast as possible," Dallas said, "and in the process the helo hit a tree on the right side. In my leaning out I was also hit on the face as the tree went by. As soon as the limb hit me I yelled 'get up, get up' and we were out of there and climbing. Nothing but the skill and experience on our pilot's part saved us from crashing."

When Dallas yelled, Lieutenant Lassen quickly added power and was just starting to climb when the helo hit the tree, pitched down and went into a tight starboard turn. Somehow he managed to regain control and lifted the SEASPRITE out of the potential death trap. The helicopter developed a fairly heavy vibration immediately after the collision which had damaged the horizontal stabilizer, tail rotor, antenna and door.

Shaken but undeterred by the narrow escape, the UH-2 crew told the survivors they must leave the hill and get to a clear area. As the downed pilots started down the hill through the thick underbrush, the SEASPRITE made



**HAZARDOUS RESCUE** of downed F-4 pilots by Lieutenant Lassen and his crew is portrayed in painting by aviation illustrator John McCoy, Jr. The artist was commissioned by Kaman Aircraft to depict the event. In top left photo, with Lt Lassen are well wishers Jim Stone, left, General Electric service representative, and Don Delaney, Kaman service representative. In third photo, the Medal of Honor winner, in cockpit, poses with members of HC-7's Det 104. At machine gun is AE2 Bruce B. Dallas, one of his crewmen on the perilous rescue flight. Supporting the sign and holding rifles are ADJ3 Donald West, left, and Lieutenant Cook, the other two members of the crew. Also shown are, front row, left to right, ADJ2 Gary Jennings, AMH3 Joe Chiaramonte, AE3 Tom Moriarty and ADR2 Tom Hitchcock. Standing, at left, is AMH3 Mike Doninetz. AMH2 Gerald Russell is in the helicopter.

pass after pass while the crewmen and copilot fired at the gun flashes below. Then, using the helicopter flood light for illumination, another approach was made to the rice field; however, as the UH-2 touched down it was seen that the survivors were too far away. Enemy fire was also steadily increasing with the light beam as a target. The rescue helicopter took off again, circled the area and headed in for another landing. Another ball of fire went by, narrowly missing the UH-2, but the pilot continued to drop lower until finally he held the helo in a hover with the wheels just touching the soft ground. For three minutes the helicopter hung there as the survivors frantically stumbled and fell their way across the paddy with its criss-crossing dikes. The UH-2 was under fire from two sides at first and then from a third as the enemy closed in on the area vacated a minute before by the rescues. Returning the fire, the helicopter crew silenced at least one position and managed to keep the enemy down until the gasping, mud-spattered survivors clambered aboard.

Lieutenant Lassen immediately lifted off and headed for the sea—for 45 minutes the helicopter had been under fire while pressing the rescue attempt. As the SEASPRITE neared the coast it ran into heavy flak and automatic fire and during subsequent evasive action the damaged door was torn off.

Only 135 pounds of fuel remained when the SEASPRITE landed aboard the Jouett.

# ARRS RESCUE OPERATIONS IN SOUTHEAST ASIA

By Maj Carroll Shershun, USAF  
Information Officer, 3rd ARRGp(MAC)

The following information was extracted from a comprehensive report by Major Shershun on ARRS operations in Southeast Asia. Due to space limitations, it was necessary to choose the portions dealing primarily with statistics or helicopter activities, for presentation in Rotor Tips. Included in the original report were the activities of other Services, groups or individuals whose efforts contributed to the impressive number of military personnel saved from death or capture last year.

**TAN SON NHUT AB, RVN (MAC)**—Every existing record established by the Aerospace Rescue and Recovery Service in a combat environment was eclipsed in 1968. During the past year rescue crews of the 3rd Aerospace Rescue and Recovery Group (ARRGp) whose "soul" mission is the saving of human lives, were responsible for over 900 persons being able to usher in the new year.

In 1968 a total of 915 lives were saved by the rescue unit's "Jolly Green Giant" (HH-3E) and "Pedro" (HH-43) helicopter crews, which are located at more than 20 sites throughout Southeast Asia. A total of 571 combat saves were included in the overall total. A save is credited when an individual would have met certain death or enemy capture if he had not been rescued. The "combat" classification results from the individual being exposed to enemy action or having been recovered from a hostile area.

Since air rescue operations began in Southeast Asia, a total of 2202 persons have been rescued. Of these, 1507 are classified as combat saves. Not all air search and rescues involved downed aircrew members or downed aircraft. In fact, of the combat saves made to date, the largest number have been U. S. Army personnel (472). A total of 449 U. S. Air Force men have been rescued. U. S. Navy and Marine Corps personnel account for 274 combat saves. The remainder have been from other friendly forces including Vietnamese, Thai, Korean and Australian personnel.

Involved in virtually all air rescue behind enemy lines, many as far North as the Hanoi-Haiphong area (prior to the current bombing halt over North Vietnam), have been three different helicopters of the 3rd ARRGp. These are the HH-3E Jolly Green Giant, the HH-43 Pedro, and



**FIRST IN 1969**—Shown making the first helicopter combat evacuation in Vietnam in 1969 is an HH-43 "Pedro" crew from Det 10, 38th ARRSq, Binh Thuy AB. Members of the crew are, left to right, SSgt Gerald H. Jones, A1c Richard C. Stiefken, LtCol Roland E. Speckman and 1stLt Philip H. Kammann. (USAF photo by Sgt Ronald Gimbert)

the HH-53 "Jolly Green Buff," newest addition to the search and rescue chopper team.

Jolly Green Giant crews of the 37th ARRSq and Det 1, 40th ARRSq made a total of 300 combat saves—many over North Vietnam. Of these combat saves, 162 were of downed aircrews. To date the HH-3E crews have made 628 combat saves.

The little HH-43 Pedro, workhorse of the 14 detachments in the 38th ARRSq, and its crews have accounted for 171 combat saves during 1968. Of these, 79 were of downed aircrews. The Pedro's, however, continue to enjoy the



**2, 200th LIFT TO LIFE**—The Cam Ranh Bay AB HH-43 "Pedro" crew which made the 2, 200th helicopter "save" in Southeast Asia is shown after the mission. Left to right are Capt Peter W. Gissing, pilot; Sgt James W. Simmons, flight engineer; Maj Andrew E. Kralj, copilot; and A1c Donald H. Goodlett, Jr., pararescueman. In second photo are the two Det 8 pararescuemen who tended the patients during the 2, 199th and 2, 200 missions. They are Sgt Gary P. Bryant and Airman Goodlett. (USAF photos)







**SILVER STAR PRESENTATION**—A1c Harry M. Krause is presented the Silver Star by Air Force Gen Howell M. Estes, Jr., Military Airlift Command (MAC) commander. (USAF photo)

distinction of having made the greatest number of combat saves in Southeast Asia—732. Stationed in Vietnam since Dec 1, 1964, the 38th ARRSq carried the brunt of the search and rescue mission through 1965. Prior to the advent of the Jolly Green Giants in late 1965, Pedro crews flew into North Vietnam with extra 50-gallon drums of fuel, hand pumping it into the tanks to extend their range far North.

The HH-53 Buff member of the Jolly Green family arrived in Southeast Asia in late 1967 and is assigned to the 40th ARRSq. To date they have made a total of 100 combat saves, all but one during calendar year 1968. Of these, 21 have been aircrew recoveries....

For the 3rd ARRGp, the year has not been without tragedy.... During 1968, members of each of the four standard rescue crew positions (rescue crew commander, copilot, flight engineer, and pararescueman) have made the supreme sacrifice. As many as six rescue men were killed in a single crash during the year. While more than 100 members of the 3rd ARRGp have been killed (21), wounded (71), or declared missing in action (21), at least 60 American Servicemen have been rescued from certain death or enemy capture for each rescueman who has been lost.

The record achieved by the men of the 3rd ARRGp is one of the proudest ever achieved by an Air Force unit in the annals of aviation history. Capt Gerald A. Young, a former 37th ARRGp rescue crew commander, stood at attention on May 14, 1968, as President Lyndon B. Johnson said, "Any man is exalted who stands in the presence of bravery." The event was the dedication of the Hall of Heroes in the Pentagon and the presentation of the Nation's highest award, The Medal of Honor, to the rescueman. On June 19, "Gerald Young Day" was observed at Wichita Falls, Texas, where the captain is now stationed. The mayor of Wichita Falls turned to Captain Young—one of the three living Air Force men who wear the Medal of Honor for Vietnam War actions of heroism—and said, "You are the personification of what every man in this room would like to be." Capt Young, who earned the high honor for his daring action, despite severe burns, at Khe Sanh on Nov 8, 1967, answered, "Don't think of Gerald Young this day. Think of the Jolly Green Giants, air rescue, the Air Force, and the great work being done."

**MARCH-APRIL, 1969**



**PHU CAT (7AF)**—HERE COMES THE FOOD—MSgts James F. Oliver, left, and Theodore J. Smith leave behind a hovering HH-43B "Pedro" helicopter from Det 13, 38th ARRSq and carry a Thanksgiving meal to four men stationed as guards atop Hill 501. The men of the 37th Security Police Squadron, Phu Cat AB, must stand guard on the hill, and their friends back on base decided they should have a good Thanksgiving meal. So with the cooperation of the "Pedro" crew, also from the base, they took a full meal of turkey and all the trimmings to the men. (USAF photo)

He paused, then—as if trying to explain the long-ago decision to fly his aircraft into the maelstrom of bullets on an unknown hill—he said, "There is nothing in the world like the feeling you get when you've saved someone's life."

To date, only six enlisted airmen have been awarded the Air Force Cross, the Nation's second highest military award (equivalent of the Army Distinguished Service Cross and the Navy Cross) for extraordinary courage. Five of



**RESCUING A "WOUNDED" CHOPPER**—Members of Det 12, 38th ARRSq, Nha Trang AB, repair an HH-43 "Pedro" helicopter damaged by enemy fire while evacuating a wounded Marine. The HH-43 hovered for 10 minutes as the wounded man's comrades fastened him to the forest penetrator and he was brought aboard. During this time, the "tops of whole trees were blown apart" less than a 100 feet away as three UH-1D gunships used rockets and miniguns in an attempt to suppress the heavy enemy fire. Two other helicopters had been "shot out of the valley" earlier while trying to evacuate the Marine. When an oil line on the HH-43 was hit, Capt Daniel A. Nicholson managed to fly the rescue helicopter from the battle area and set the chopper down in a jungle clearing. (USAF photo by Sgt Harry Mall)

the six men were presented the award for courageous actions while with the 3rd ARRGp. The first was A1c William H. Pitsenbarger of the 38th ARRSq who died while taking part in an April, 1966, rescue during a jungle battle in South Vietnam.

As of Nov 30, 1968, members of the 3rd ARRGp, which includes a total of 1200 persons, have earned: 1 Medal of Honor; 14 Air Force Crosses; 207 Silver Stars; 4 Legions of Merit; 1041 Distinguished Flying Crosses; 56 Airman's Medals; 268 Bronze Stars; 4193 Air Medals; 841 Air Force Commendation Medals; and 71 Purple Hearts.

While honors have been heaped upon the 3rd ARRGp, the look in the eyes of over 2200 men who have been provided Jolly Green or Pedro rescue "rides"—men who faced certain death or capture—is the greatest reward of all!



**NHA TRANG (7AF)**—Hovering 20 feet above the tree-tops, the rescue helicopter from Det 12, 38th ARRSq shuddered under the impact of small-arms fire. Less than 100 feet away, trees and foliage shattered as mini-gun fire and rockets from helicopter gunships ripped into the jungle. . . Still, the rugged HH-43 "Pedro" hovered! In the door A1c Timothy M. Reynolds, pararescueman, stood by the rescue hoist. Beneath the dense green canopy at the end of the hoist cable, a wounded man held tenaciously to his life line.

Slowly, carefully, Reynolds operated the hoist, easing the cable and its burden upward. Suddenly, a bullet from the ground cut an oil line in the HH-43's engine. Oil from the severed line, driven by the helicopter's rotor wash, sprayed through the open doors. As the injured man cleared the tops of the trees below, Capt Daniel A. Nicholson lifted the damaged aircraft away from the jungle and turned down the valley.

"I was looking for a relatively safe clearing to set down in before the engine froze," he said. "Our oil pressure was zero, and if we lost the engine we would have gone down into the trees."

Nicholson and his crew had scrambled from Nha Trang AB minutes earlier, responding to a call for help from a U. S. Army reconnaissance patrol. The Reconos had made contact with an enemy unit, and one of the team



**BETTER LATE THAN...** This photograph was taken from an HH-43 in September, 1966, during the medevac of a wounded U. S. soldier in the Ia Drang Valley south of Pleiku. Maj (then Capt) Carlton P. Verneys, his chest protector and hand showing in the foreground, supplied the photo. He is now attached to Headquarters, CARRC, Richards Gebaur AFB, Mo. Flying as copilot with him was Capt Richard L. Cardwell. Manning the other HUSKIE, which was making the forest penetrator pickup, were Maj Dale R. Tyree, Capt Darrell A. Lowery and A1c Harry Hull. Both choppers were from Det 9, 38th ARRSq, Pleiku AB.

members was badly wounded in the exchange of fire. The Air Force man's job—pull him out of the jungle, get him to a hospital.

"About five miles from where we were hit," Nicholson continued, "we found a clearing and landed. An Army gunship which was escorting us landed also, took the injured man aboard, and took off again, heading for a hospital at Nha Trang."

Moments later, another HH-43 from Det 12 arrived on the scene.

"We set up a defensive perimeter," Nicholson said, "and tried to make temporary repairs to the downed bird. It was getting pretty dark, though, so we left the plane with a Vietnamese Civilian Irregular Defense Group guard and came back and fixed it the next morning." Other crew members on the flight were Maj Robert J. Kazmerchek, copilot, and Sgt Joseph R. Capper, rescue specialist.

(Photo on page 17)



**KORAT RTAFB THAILAND (MAC)**—Members of Det 4, 38th ARRSq, at this base are shown in front of one of the detachment's HH-43's. Front row, left to right, are SSgt P. J. Delaney, SSgt C. Bazaldua, SSgt R. W. Greer, Sgt D. N. Mason and Sgt B. R. Williamson. Rear row, Maj A. K. Johnson, Maj C. O. Williams, LtCol M. W. Gal-yeen (seated in helicopter), detachment commander; SMSgt W. T. Baize, Sgt V. L. Donn, A1c K. R. Murphy and Sgt T. E. Brown. Rotor Tips welcomes group photographs of personnel who fly and maintain Kaman helicopters. (USAF photo)





**PHAN RANG AB (7AF)**—An idea earned \$300 for Sgt Robert Cruz, a rescue specialist assigned to the 35th Civil Engineering Squadron and attached to Det 1, 38th ARRSq, Phan Rang AB. His idea, submitted through the Military Suggestion Program, was to adapt a trailer kit to carry six 55-gallon drums of firefighting foam and a portable foam pump. This unit could then be towed behind any military vehicle and be used to assist water tankers in reservicing crash vehicles at the scene of a fire. Presenting the award is Col Stanley J. Obarski, air base commander. (USAF photo)

A crewmember from a downed Army helicopter was evacuated by an HH-43 crew from Det 9, Pleiku AB, consisting of Capt James G. Ellis, III, pilot; Maj Robert A. Bunton, copilot; Sgt Luther T. Jones, pararescueman; and Sgt Donald N. Carpenter, flight engineer. To make the medevac, the chopper landed at night in an area considered highly unsecure. In another mission, a seriously injured Army sergeant, one of three crewmen from a downed O-1, was taken to the hospital from the special forces camp at Duc Co in an HH-43 piloted by Capt Derry A. Adamson and Major Bunton. SSgt Frank R. Deck was flight engineer and A1c David L. Patterson, pararescue technician.

**BINH THUY (7AF)**—Det 10, 38th ARRSq (MAC), made the first helicopter combat evacuation in Vietnam for 1969. The HH-43 "Pedro," piloted by LtCol Roland E. Speckman, was scrambled from Binh Thuy to evacuate a wounded sailor from a Navy river patrol boat to the Army's 29th Evacuation Hospital near the base. For Colonel Speckman, the detachment commander, the mission was his last in Vietnam. He has been reassigned to the Western Air Rescue Center.

Arriving on the scene, the Pedro crew lowered a litter to the moving river boat. The HH-43 hovered until the injured sailor was strapped to the litter and he was then hoisted aboard and taken to the hospital.

The departing commander said, "I am certainly proud of the 90 medical evacuations, 69 of which were combat, that our detachment accomplished during the past year. I was particularly proud I flew this mission, since it is the first in Vietnam for the new year and it is my last day of duty."

Other crewmembers were: 1stLt Philip H. Kammann, copilot; SSgt Gerald H. Jones, flight engineer; and A1c Richard C. Stiefken, pararescue specialist.

The month before, Det 10 was credited with nine combat saves and one non-combat save during one week.

In a Christmas Day mission, an HH-43 "Pedro" crew from Det 8, 38th ARRSq (MAC), Cam Ranh Bay AB, evacuated a sailor, suffering from a serious gunshot wound, from the Naval facility at Cam Ranh Bay to the 12th USAF Hospital. Manning Pedro were Capt Bruce K. Ware, pilot; Capt John P. Smariga, copilot; SSgt Benjamin J. Marshall, flight engineer; and Sgt Gary P. Bryant, pararescueman. The next day a similar medevac was carried out after another sailor was critically injured when a piece of heavy construction equipment overturned. Capt Peter W. Gissing and Maj Andrew E. Kralj were pilots of the HH-43. The crewmen were Sgt James W. Simmons, flight en-

*continued on page 22*

## Det 11 'PJ' Awarded Silver Star

**TUY HOA (7AF)**—The young Air Force pararescueman stood ram-rod straight as the Air Force general pinned the Silver Star Medal to his uniform. Just six months before, he stood alone in hostile territory watching his helicopter fly slowly out of sight. On that day, A1c Harry M. Krause helped rescue the pilot of an F-4 Phantom who had been downed by ground fire 18 miles south of Tuy Hoa AB. Krause was the pararescueman of the HH-43 "Pedro" crew, from Det 11, 38th ARRSq which scrambled and headed for the scene.

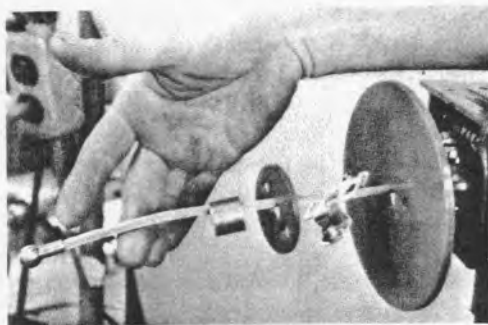
After the pilot was located, Krause was lowered 30 feet through the jungle canopy to the boulder-covered ground. He worked his way to the pilot's location by following the shroud lines from the parachute. "When I got to him he looked at me and sort of half smiled," Krause recalled.

Krause treated the downed pilot for a slight scratch and splinted his arm and leg which appeared to be broken. Then he placed the injured man in a litter lowered from the hovering helicopter. The job was complicated by the huge boulders on which the pilot had landed.

As the injured man was hoisted to the helicopter, the crew realized that it would be impossible to get him into the helicopter while in flight. Using hand signals, they informed Krause that they would have to leave him alone on the ground while they flew to another location with the injured man so that he could be placed in the helicopter. The pararescueman watched as they slowly moved out of sight. He was alone in the heart of an enemy jungle. He knew that they were in the area since the F-4 had been downed by ground fire. Krause also knew that the hovering helicopter had probably attracted attention, so he listened intently for the slightest sound which would betray the advance of the enemy toward his position. After an eternity of listening he heard the helicopter returning to pick him up. The Pedro crew lowered the jungle penetrator, Krause climbed on and was hoisted up to safety.

Krause says of the incident, "I was only doing my job and what I had been trained for." But those agonizing 50 minutes alone on the ground were rewarded when Gen Howell M. Estes Jr., commander, Military Airlift Command, presented the Air Force's third highest decoration for heroism. (Photo on page 17)

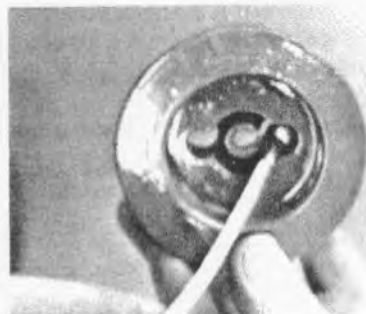
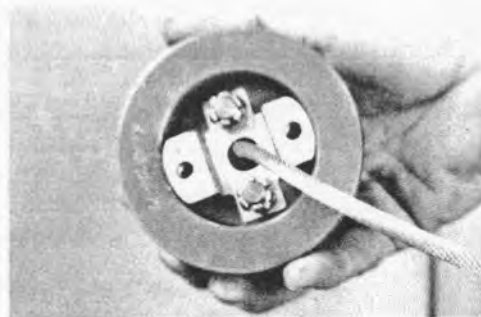
# UH-2C—REMOVABLE RESCUE HOIST BUMPER ASSEMBLY



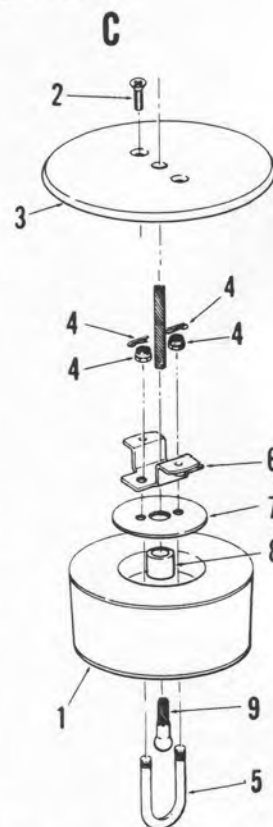
A

by J. A. Dion,

Mechanic, PAR/MOD



B



Kaman P/N	Nomenclature	Wadell P/N	FSN or Source Code
AN505C416R9	Screw	MS51960-82	NA
AN310-5	Nut	WA138-27	9Z5310-167-1286
MS24665-134, -153	Cotter Pin	MS24665-134, -153, or WA1300-2	NA
K682714-1	Bumper Assembly	WA3314	1RM1680-854-1022
-13	Bumper Sleeve	WA3307	MO
-15	U-bolt	WA3309	9Z5306-846-1087
-17	Support	WB3312	X1
-19	Striker	WB3313	X1
-21	Support Plate	WA3306	MO
-25	Striker Cap	WB3315	MF
-3	Retainer Assembly	WA3305	1RS1680-854-1023
K682159-11	Bumper	WB3317	X1

An innovation introduced with the UH-2C is a removable hoist bumper assembly, P/N WA3314. UH-2C aircraft leaving PAR/MOD at Kaman have a removable bumper assembly which is identified as P/N K682714-1. Use of the Kaman part number is an interim measure only and, when replacement parts are ordered, Wadell parts will be furnished. This should not present a problem because the parts are interchangeable, as the following cross-reference list shows. The information contained here will appear in a future Change to NAVAIR 01-260HCA-2-3 and NAVAIR 01-260HCB-4-3. To remove the bumper assembly (1), remove the two screws (2) in the striker cap (3); slide the cap up the cable, away from the bumper. Remove cotter pins and nuts (4) from U-bolt (5); withdraw the U-bolt. Lift out the retainer assembly (6) and support plate (7). Carefully pry out the bumper sleeve (8) and slide removed items (3, 6, 7 and 8) up cable away from the bumper assembly. Push cable ball-end (9) down to release it from its recess in the bumper assembly. When free, slide the ball-end toward the outer hole in the bumper and withdraw the cable. To install a new bumper assembly (1) or related parts, proceed in the following order: Slide items 3, 6, 7, and 8 up the cable (Photo A). Insert the ball-end (9) into the bumper (1). It is necessary to insert the cable end through the outer hole as shown in Photo B, and then slide the cable into the center hole; pulling back on the cable will seat the ball-end in its recess in the bumper. Next, slide the bumper sleeve (8) down into the recess in the bumper (See Photo C). Slide the support plate (7) and retainer assembly (6) into position and secure with nuts (4) as shown in Photo D. Tighten nuts (4) to 100-140 inch-pounds and insert the cotter pins. Finally, slide the striker cap (3) into position and install screws (2).



# IRAN RECEIVES HH-43 AUXILIARY FUEL TANKS



**HH-43 AUX FUEL TANKS**—Top photos show auxiliary fuel tank installation with troop seats in place and with seats raised. Removal or installation of each tank can be made by two men in five minutes. Third photo shows easily accessible fuel filler cap.



Design and development of auxiliary fuel tanks for use with HH-43 helicopters was reported in an earlier issue of *Rotor Tips*. Since then, these units have been tested, produced and delivered. First to utilize the range-stretching tanks is the Imperial Iranian Army which has ordered 26 sets. For those who do not recall the earlier description, the installation consists of two rectangular aluminum alloy tanks having a capacity of 50 gallons each. An increase of approximately 100 miles range is provided with both tanks full.

Baffles have been incorporated in the tanks to prevent excessive slushing of fuel, however, they contain no internal plumbing or pumps. The empty weight of each complete tank assembly is approximately 34 pounds. They are retained in place by means of two adjustable tiedown straps on each tank; one end of the strap is attached to the side of the fuselage and the other end to a fitting on the floor adjacent to the inboard side of the tank.

The tanks are installed in the aft cabin, under the troop seats and, therefore, occupy space which is not otherwise normally used. Each tank incorporates a male adapter fitting which plugs into a corresponding socket fitting in the top of the main internal fuel cell. O-rings and gaskets provide for a fume-proof connection. Each tank includes a filler cap for gravity servicing. Fuel in the auxiliary tanks is gravity fed directly into the main fuel cell where it is then available for normal feed to the engine. Overboard vents are provided in order to maintain a constant atmospheric pressure head to ensure gravity flow.

Provisions for installing the tanks include: modifying the cabin floor panels and the top of the main fuel cell to accept the tank plug-in adapter; installation of the tiedown strap fittings; and installation of guide fittings to facilitate proper positioning of the tanks.

Actual installation or removal of each tank, after the provisions are incorporated in the aircraft, can be accomplished by two men in approximately 5 minutes. When the tanks are not installed, cover plates are furnished for installation over the floor panel cutout for access to the tank-to-main fuel cell coupling adapter socket. "Kick plates," which clip to the troop seat support legs in front of each tank, are provided to prevent scuffing the tanks when carrying cargo or passengers.

## 3rd International Helicopter Meet

The 3rd International Helicopter Rescue Meet will be held in England at the RAF Station Thorney Island, Hants. The Royal Air Force will be host of the five-day event which begins June 9th. Squadron Leader D. A. V. Todman, DFC, RAF, is the officer in charge of the event in which 10 nations will be represented. Sixteen teams, with two crews to each team, and 32 helicopters will participate.

Among the events scheduled for the meet are: precision winching; USAF fire suppression demonstration; manufacturers' helicopter and hovercraft flight demonstrations; manufacturers' rescue equipment display and demonstrations; rescue navigation; rescue mission scramble; and presentation of trophies and awards. The second meet, which was held at Aalborg Air Station, Denmark, was described in the January-February, 1969, issue of *Rotor Tips*. The event was won by the RAF team while the USAF rescue team placed second. At this year's meet, Maj Clyde W. Lemke of the 40th ARRWg (MAC), Ramstein AB, Germany, will again be USAF rescue team chief.

gineer, and Alc Donald J. Goodlett, rescueman. Five days later a U. S. soldier was taken to the hospital after being struck by a construction vehicle seven miles from the base. Captain Gissing landed the helicopter on the road to make the pickup. Major Kralj was copilot on the mission; the flight engineer was Sergeant Simmons and the pararescueman was Sergeant Bryant. In an earlier mission, Captain Ware landed an HH-43 at night by the lights of five Army trucks and a flare to pick up a soldier who had been struck by a piece of heavy equipment. He was taken to the 12th USAF Hospital. With Captain Ware were Capt John F. Patterson, copilot; TSgt Joseph Fernandez, pararescueman; and Sergeant Simmons, flight engineer.

A U. S. civilian suffering from a suspected heart attack was evacuated from Warin RT Army Camp by an HH-43 crew from Det 3, 38th ARRSq, Ubon Afld, Thailand. Capt Arthur C. Plunkett was pilot of the HUSKIE. With him were Sgt William C. Murphy, medical technician, and Sgt Glenn A. Todd, flight engineer.

An HH-43 "Pedro" crew which started out to rescue two pilots from a downed F-4, ended up with three rescues—from an Army UH-1. The alert HH-43 from Det 6, 38th ARRSq, launched from Bien Hoa AB after being notified that the F-4 was down. Aboard were Maj Richard C. Pfadenhauer, RCC; Capt Paul E. Stone, RCCP; Sgt Roland C. Schmidt, pararescueman; and Sgt Glen N. Chafey, flight engineer.

As the HH-43 Pedro drew near the area where the F-4 had gone down, a report was received that an Army helicopter was also down in the vicinity. A minute later the wreckage and three crewmembers were seen. As gunships circled protectively, the HH-43 hovered over the tree tops for 30 minutes while the rescues were brought aboard. Frequent intermittent automatic weapons fire was heard in the vicinity and hostile fire continued to follow the HH-43 as the Army men were taken to a Special Forces compound. The Det 6 chopper then headed back for the area where the F-4 pilots had bailed out; however, it was learned that they and the pilot of the Army helicopter had already been rescued. After rendezvousing with a second Det 6 Pedro, the HH-43 was refueled and inspected for battle damage. Both helicopters then returned to Bien Hoa. The second Pedro, piloted by Maj Price S. Summerhill, had been on a base support mission when word was received that the F-4 had gone down. As quickly as possible, Major Summerhill had headed for the hostile area to support Major Pfadenhauer and his crew. Others manning the second HH-43 were Capt Jon C. Long, RCCP; SSgt James P. Baldwin, flight engineer; and Alc Terry M. Wells, pararescueman.

In another Det 6 mission, an HH-43 crew was credited with eight combat saves after picking up the occupants of an Army CH-47 forced down at night on a field three miles from Bien Hoa. Capt Walter D. Murphy was pilot of the rescue helicopter and Capt Harvey B. Bell was copilot. Airborne firefighters were SSgt William E. Niemann and Sgt Edward S. Bevans. In a third mission, an HH-43 crew from Det 6 scrambled after an A-1 made a forced landing in a rice paddy near the base. The Vietnamese pilot was hoisted to the helicopter on the forest penetrator and then returned to the base. 1st Lt John F. Kolar

was HH-43 pilot; Maj Richard W. Lorey, copilot; SSgts John A. Hudson and Joseph A. Renaud, firefighters.

Three minutes after a battle-damaged F-4 crashed at night near the runway at Danang AB, an HH-43 crew from Det 7, 38th ARRSq, had scrambled and flown to the front of the wreck which was rapidly being engulfed in flames. Crash trucks were approaching the scene, so Capt Robert S. Henderson landed and deployed the two firefighters and pararescueman to look for survivors. Alc Charles R. Ingulli, the pararescueman, located the F-4 pilot near the aircraft. He had apparently broken free of his seat restraining straps and landed in a string of concertina wire, which had tangled about him. Although the pararescueman had no protective clothing on, he made his way through the wire to the pilot, who had stopped breathing, and began mouth-to-mouth resuscitation. Minor explosions were constantly taking place in the wreckage and at one point base firemen withdrew because of the loud explosions—but Ingulli remained where he was!

As the rescueman worked to save the pilot, Captain Henderson and his copilot, Capt Henry E. Hooke, provided cooling rotor wash by hovering over the dangerous fire-lit area which was littered with unexploded ordnance. A short time later, when the firemen determined the "backseater" was not in the F-4, the HH-43 began searching the runway with flood and landing lights. The object of their search was located about 100 meters from the wreckage. He and the F-4 pilot were placed aboard the helicopter and taken to the Naval hospital. Enroute, Airman Ingulli examined the critically-injured backseater and made a fast diagnosis which was relayed to the hospital. The hospital commander later said the aid and accurate diagnosis "contributed substantially to the saving of this individual's life." Despite Ingulli's valiant efforts earlier, the F-4 pilot was dead on arrival at the hospital. Other members of the HH-43 crew were SSgt Kenneth R. Jones, Sgt Samuel D. Hamilton and Sgt Roger D. Elam.



**HONORED BY 3rd ARRGp**—Col Hollon H. Bridges, commander, 3rd ARRGp, presents a certificate of appreciation to Mr. Albert Vo-van-To. Looking on are Sister Robert du Sacre Coeur, superior, and Sister Alice, right, both members of the French order of St. Paul des Chartes. Mr. To was honored for rescuing 10 nuns and 120 children at the Co-Nhi-Vien Viet Hoa orphanage during fierce fighting in Saigon last year. Mr. To enlisted the aid of the International Red Cross and obtained three ambulances and a passenger car. Together with two Swiss doctors, he packed the children, from infants to teenagers, into the vehicles and evacuated them all to safety. Enemy soldiers were only a few feet away as Mr. To carried the children, one at a time, to safety. USAF rescue units throughout the world help contribute to the upkeep of the home. (USAF photo)



## AMBUSHED ARRS CREW REFUSES TO GIVE UP MEDEVAC

Nine times during a 13-hour period 1stLt Philip H. Kammann and his crew braved enemy fire in an attempt to evacuate two seriously injured soldiers from the side of a steep, tree-covered mountain. It wasn't until their HH-43 "Pedro" had almost been "shot out of the sky" that the courageous crew reluctantly decided to abandon the effort and even then, before leaving, they managed to drop two litters which later enabled the wounded to be evacuated by another ARRS helicopter.

The casualties were part of a patrol located approximately 50 miles from Binh Thuy where the Det 10, 38th ARRSq, helicopter is based. The pickups could only be made by flying directly toward the face of the night-shrouded, 2,000-foot-high mountain which was pockmarked with caves. Occupying the caves were enemy troops armed with rockets, 75-mm recoilless rifles, mortars, machine guns and various other kinds of weapons.

Lieutenant Kammann was alerted shortly after 1 a.m. and took off soon afterward. With him were Capt Jack D. Cusano, copilot; TSgt Dudley R. Peckinpaugh, para-rescueman; and SSgt Gordon L. Browning, flight engineer. The backup HH-43, piloted by Capt John Debevec, launched five minutes later. Others aboard were Capt Cecil A. Jessee, copilot; A1c Richard C. Stiefken, para-rescueman; and SSgt Gerald H. Jones, flight engineer.

When the rescue helicopters arrived at the pickup point an AC-47 "Spooky" gunship and a Cobra helicopter team were waiting for them. After the ground party was located by flare light, a Cobra made a low pass over the area. Nothing happened. The HH-43 began to descend through the darkness and when the altimeter indicated 50 feet, Lieutenant Kammann flipped on the floodlights. Immediately hundreds of gun flashes lit the dark mountainside as the patiently waiting enemy opened fire. Almost miraculously, the rescue helicopter escaped into the darkness without being hit. As it disappeared, the Spooky and the Cobras began making fire suppression runs. With Captain Cusano acting as navigator, the HH-43 headed for Chi Lang, refueled, and then returned to the mountain. By this time the area was supposedly "sterile" since the gunships drew no ground fire. The Pedro made a black-out approach without incident but during the transition to hover, heavy enemy fire was again encountered. The HH-43 hurriedly withdrew and the gunships, aided by an AC-130 which had arrived on the scene, began making firing runs.

Lieutenant Kammann requested that the ground party move to a more secure location but was told the casualties could not survive such a move. Pedro went back again over the pickup point and again was driven away. The HH-43 returned to Chi Lang to wait for dawn and a new gunship team. At dawn the determined rescuemen once again headed toward the mountain where they had already had three narrow escapes from death. Although no hostile fire had been received by the ground party since the previous night, the enemy began firing, but with less intensity than before, as soon as the HH-43 came within range. Once again the gunships went to work. The HH-43 made another approach and again came under fire. Two jet fighters arrived and made several bomb-dropping passes which were "right on target." The area appeared secure until Pedro showed up and the entire sequence of events

was repeated. Lieutenant Kammann returned to Chi Lang for fuel while the gunships made more runs.

Shortly after 0900 Pedro was back in the area and two more pickup attempts were made. Both were thwarted by enemy fire and on the second, the helicopter was hit several times. After more suppressive gunship fire, the HH-43 made its ninth try. On the approach Lieutenant Kammann found it extremely difficult to maintain control of the helicopter due to the battle damage. In spite of this, he held the Pedro in a hover and Sergeant Peckinpaugh, who was unprotected at the cabin door, started the cable down with a stokes litter attached to it. Sergeant Browning was at the back of the cabin with an M-16 to protect the rear. The litter was three-quarters of the way down when heavy ground fire erupted and the rescue helicopter took several more hits. Lieutenant Kammann made a maximum power takeoff and left the immediate area. At this time he decided that further attempts would have to be abandoned because of the damage to the HH-43 and the intensity of the ground fire—but there was still one thing he could do to give the wounded below a chance for life.

The HH-43 pilot made a low-level pass with the heavily-damaged, almost uncontrollable helicopter and Sergeant Peckinpaugh dropped two stretchers to the waiting soldiers. The Pedro then headed for Chi Lang where it was discovered that the HH-43 had taken 10 hits—five in the rotor blades—and was unsafe to fly. Later the battle-damaged helicopter was sling-loaded onto a Chinook and carried back to Binh Thuy for extensive repairs.

Meanwhile, the second HH-43 had been able to evacuate the wounded soldiers from the safe landing zone on the mountain. They had been carried there in the litters dropped earlier from the first Pedro. Captain Debevec and his crew disembarked at Chi Lang and Lieutenant Kammann and his crew flew the undamaged HH-43 back to Binh Thuy with the wounded men aboard. On the way Sergeants Peckinpaugh and Browning administered life-saving treatment to the badly wounded soldiers.

More than 14 hours elapsed from the time Lieutenant Kammann, Captain Cusano, Sergeant Peckinpaugh and Sergeant Browning had first responded to a small Army patrol's urgent plea for help.

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### DFC's Awarded HH-43 Crewmen

**TUY HOA**—Two HH-43 crewmen, SSgt Robert A. McAllister and Sgt James A. Nelson, each received the Distinguished Flying Cross recently for heroism during an enemy attack on Tuy Hoa AB last summer.

A band of infiltrators had breached the base perimeter undetected and set off satchel charges on the flight line. McAllister, a rescue specialist with Det 11, 38th ARRSq (MAC), and Nelson, a fire protection and rescue specialist with the 31st Civil Engineering Squadron, were members of the HH-43B "Pedro" crew that scrambled to fight the fires. As base security policemen fought off the attackers, subsequently killing nine of them, McAllister and Nelson exposed themselves to hostile fire while directing firefighting operations. Col Thomas L. Shockley, commander, 41st ARRSWg, Hickam AFB, Hawaii, presented the DFC's to the two sergeants during a special ceremony here.

## Varied Missions for Det 25

An HH-43B crew from Eglin AFB, Fla., scrambled after a pilot in the rear seat of an F-4C suffered upper neck injuries of an unknown nature during a high-G maneuver. The Det 25, EARRC(MAC), HUSKIE covered the landing of the F-4C and then SSgt Felix H. Havis, medical technician, left the helicopter to supervise the delicate job of removing the injured pilot. Sergeant Havis directed a ground party of five men and succeeded in removing the F-4C pilot, who was conscious and in great pain, while keeping his head in a fixed, upright position. At the request of the on-scene flight surgeon, the patient was then carefully placed aboard the helicopter and taken to the hospital. Capt Roland J. Page was pilot of the HUSKIE; SSgt Clinton H. Godown, flight engineer; and Sgt Herbert M. Groth, rescue specialist.

In another Det 25 mission, at night, Maj Charles E. Trapp, Jr., and his crew responded after high winds drove a sailboat onto a sandbar in Choctawhatchee Bay. The rescue helicopter illuminated the area with the floodlights and the loud hailer was used to communicate with the sailboat occupant. He didn't want to abandon the boat so the HUSKIE guided a rescue craft through the shallows and remained on scene while the recovery attempt was made.

The winds thwarted the attempt, however, and the man was taken aboard the other boat. Again the HUSKIE illuminated the area and directed the craft through the shallows. With Major Trapp were Captain Page, copilot; Alc Glenn A. Mumpower, medical technician; and TSgt Charles H. Herring, crewchief.

In a similar situation, a Det 25 HUSKIE went to the aid of a 30-foot cabin cruiser stranded, at night, in the bay. The HH-43 called for a surface vessel, illuminated the area, and then guided the rescue craft to the scene. Four persons were taken aboard the vessel. Captain Page was RCC of the HUSKIE and Maj Alma L. Williams was copilot. Crewmen were Sgt James L. Rarey, medical technician; SSgt David J. Blazic, crew chief; Sgt Daniel T. Shepherd and Sergeant Groth, rescue specialists. In a

fourth mission, Major Trapp and his crew took an injured crewman to the hospital after a C-123 crashed to the side of the runway at Hurlburt Field. Total time from initial response until the injured man was delivered to the Eglin Main Hospital—a total distance of 18 nautical miles—was 15 minutes. Others aboard the HUSKIE were Sgt James L. Dickey, medical technician; SSgt Roy J. Taylor and Sgt Albert T. Grant, rescue specialists.

## 1000-Hour Pilot Awards

Four more pilots have joined those who have logged 1,000 hours in helicopters produced by Kaman Aircraft. Thousand-hour plaques have been awarded by the company to: HH-43 HUSKIE - Maj Zack L. Stockett, 3638th Flying Training Squadron, Sheppard AFB, Texas; Maj Ralph H. Bush, Det 5, 40th ARRWg (MAC), Hahn AB, Germany. UH-2 SEASPRITE - Lt Frank "Skip" Dirren, HC-2, NAS Lakehurst, N. J.; Lt Russell A. Jobst, HC-5, NAS Imperial Beach, Calif.

## 25th Anniversary For Sheppard

Sheppard AFB, Tex. . . The U. S. Air Force Helicopter Pilot School will observe its 25th anniversary at Sheppard AFB, Texas, on June 7, 1969. The Silver Helicopter celebration will feature an open house at the Sheppard school which will include static displays of rotary wing aircraft, helicopter equipment and components and a number of aerial demonstrations. All graduates and instructors of the Helicopter School and others associated with rotary wing aircraft are invited to attend the afternoon program and the reunion banquet which will be held that evening.

The School was originally founded at Freeman Field, Indiana, in 1944 and received its first helicopter, a Sikorsky R-4, in May of that year. Since that time it has moved nine different times to seven different locations, returning to Sheppard AFB in 1966. At the present time, the school trains approximately 400 helicopter pilots each year in eight classes. It flies HH-43B, CH-3C and TH-1F helicopters in its training operations.

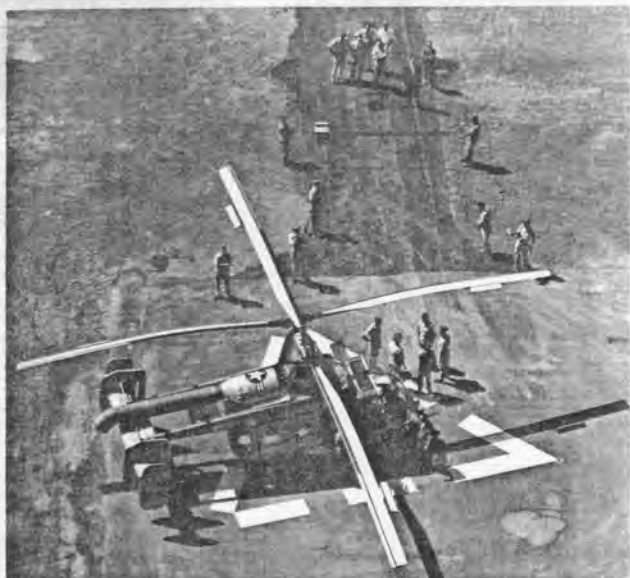
## CURRENT CHANGES

This list reflects the latest changes to the handbooks. Consult applicable "A" page for changes issued prior to those listed below.

	Issue Date		Issue Date
H-2 Airframe Change 114 - Amend 1, Electrical System, UH-2C DROOP STOP LIGHT	12 December 1968	NAVAIR 01-260HCA-3 - Manual, Structural Repair, Navy Models UH-2A/UH-2B/UH-2C Helicopters	1 October 1967
H-2 Airframe Change 153 - ASE AMPLIFIER, MODIFICATION OF	20 December 1968		changed 15 January 1969
H-2 Airframe Change 157 - Communication System, INSTALLATION OF AN/ALQ-98 ELECTRONIC COUNTERMEASURE SYSTEM	20 December 1968	NAVAIR 03-65-51 - Manual, Overhaul Instructions, WINCH WITHOUT MOTOR, WE3131A, WE3131A2	15 April 1968
H-2 Airframe Change 160 - Part 1, Equipment, INSTALLATION OF 200-FOOT RESCUE HOIST SYSTEM IN UH-2C HELICOPTERS	15 December 1968		changed 15 January 1969
H-2 Airframe Change 163 - UH-2C Electric Throttle Quadrant, SUBSTITUTE ELECTRIC THROTTLE POTENTIOMETERS	27 December 1968	NAVAIR 03-65-54 - Illustrated Parts Breakdown, WINCH WITHOUT MOTOR, WE3131A2	15 January 1969
H-2 Airframe Change 167 - UH-2C HELICOPTER, CENTER NACELLE SLIDING PANEL ASSEMBLY, P/N K636707-5, LATCH P/N H-9125S; INSPECTION AND REWORK OF	17 January 1969	NAVAIR 17-15KL-1 - Manual, Operation and Service Instructions with Illustrated Parts Breakdown, AMPLIFIER BENCH TEST SET, P/N K604603-2, -6	15 November 1965
H-2 Airframe Change 53 - Amend 1, Furnishings, CARGO HOOK INSTALLATION, MODIFICATION OF	6 December 1968		changed 15 November 1968
		NAVAIR 17-15KL-3 - Manual, Operation and Service Instructions with Illustrated Parts Breakdown, SENSOR UNIT BENCH TEST SET, P/N K604609-2, -4	15 December 1968
		Support Equipment Change 1255 - MODIFICATION OF UH-2C ENGINE AIR INTAKE PLUG, P/N K604042-1	2 January 1969

R. H. Chapdelaine, Supervisor, Service Publications





**OFFICIALLY OPENED**—Myrtle Beach Mayor Mark C. Garner officially opens the new helicopter landing pad at Myrtle Beach AFB, S. C. Located directly across the street from the base hospital, the new landing pad allows Det 8, EARRC, to land its "choppers" within walking distance of the hospital. This provides for quick, easy delivery and pickup of emergency patients. In right photo, the pilot and crew of an HH-43B HUSKIE rush a fire suppression kit to an accident scene. This is one example of the activities performed by Det 8, which is commanded by Maj Adolph E. Selch. (USAF photos)

With the completion of a new hospital wing at Myrtle Beach AFB, the last remaining open area for Det 8 to land its HH-43B HUSKIE helicopters was eliminated. Intensive planning began for construction of a new helicopter landing pad adjacent to the medical facility. Completed at a cost of \$3,700, the new helicopter landing pad, located across the street from the hospital, enables the detachment to quickly deliver and pick up emergency patients and accident casualties.

Displaying the strong community relations between the military and local civilian population, Myrtle Beach Mayor Mark C. Garner officially opened the base's new "chopper" landing pad. Mayor Garner was flown to the pad by Det 8's commander, Maj Adolph Selch. The copter carrying Mayor Garner touched down before a group of assembled base and hospital staff members. At the ceremony, the Mayor said, "It is a real pleasure for me to be here and participate in this occasion. Once again,

this is indicative of the wonderful spirit of cooperation which has existed in the past and continues to exist between the military at Myrtle Beach AFB and the civilian community."

## Det 8 Rescuers Meet SEA Rescuer



LtCol James C. Ketcham, left, chief of safety for the 363d Tactical Reconnaissance Wing, Shaw AFB, S. C., talks over old times with two members of an HH-43B crew which rescued him in 1967 after he ejected from his RF-101 over Vietnam. Capt Fernand M. Espiau, in cockpit, and SSgt Robert O. Smith, second from right, were among those in the HUSKIE which made the rescue in Southeast Asia. Both are now attached to Det 8, EARRC(MAC), Myrtle Beach, S. C. Other members of the HH-43 crew which made the rescue in Vietnam were 1st Lt Joe E. Lindsey and SSgts Fred Rogalio and Kenneth Kaufman.

Colonel Ketcham was reunited with two of his rescuers at a Shaw accident investigation meeting convened after an RF-101 ditched at sea. Captain Espiau and TSgt Charles M. Holmes, right, also from Det 8, were in the HH-43 which rescued the 363d pilot. Other Det 8 personnel with them on the mission were SSgt James D. Wells and Sgt Mitchell T. McInchak, rescue specialists. (USAF photo)

## Crew, RAF Controllers Praised

After successfully completing a medevac flight recently, Capt David Dean had nothing but praise for the "fine job" done by HH-43 crewmen SSgt Gene L. Cole, the flight engineer, and SSgt Robert L. Lauman, a medical technician. The HUSKIE pilot was also grateful for the assistance of the "very professional" controllers at RAF Wyton, England, who made the 56 nautical-mile flight possible despite marginal weather.

The mercy mission began for the Det 3, 40th ARRWg, helicopter crew when a medevac flight was requested from RAF Lakenheath, where the detachment is based, to RAF Alconbury, 28 NM away. A USAF sergeant had to be taken to a British cardiac center for intensive care and possible surgery. It was felt an ambulance ride would be fatal for the patient. Throughout the flight, Sergeants Cole and Lauman helped the doctor administer oxygen and intravenous fluid. They also aided in other ways. Visibility during the flight, made at high altitudes of 300-400 feet, was very poor but, Captain Dean said, the "excellent radar assistance from RAF radar controllers at RAF Wyton made things easy" for the helicopter pilots. Copilot on the flight was Capt Peter J. Connelly.

# Huskie Happenings



...Notified that one of a party of Boy Scouts was missing in the Superstition Mountains, Capt Laurence W. Conover and his crew took off at 1750 in freezing weather to join in the search. The rescuemen, from Det 16, WARRC (MAC), Williams AFB, Ariz., flew over the route travelled through a canyon by the scouts and at 1825 a flashing light was spotted in a ravine. After determining that it was a flashlight signal, the exact location was pinpointed and the ground search party notified. The scout, in good condition except for the cold, was found within 200 yards of the position given by the HH-43 crew. With Capt Conover were Maj Ronald K. Dalrymple and Sgt Duboise Gooden.

...In a second mission, a 69-year-old man with a broken leg was evacuated from a rugged canyon area in the Superstition Mountains by a Det 16 HH-43 crew. MSgt Woodrow D. Speckles, medical technician, was lowered to the ground and splinted the survivor's broken leg. Both men were then hoisted aboard the HUSKIE and the patient was taken to the hospital at Mesa. Major Walter C. McMeen was pilot of the rescue helicopter; TSgt Larry L. Holocker, flight engineer; and Sergeant Acreman, medical technician.

...A soldier who suffered serious injuries in a bulldozer accident at a radar site was evacuated by an HH-43B crew from Det 5, 41st ARRWg, Suwon AB, Korea. Less than half an hour after scrambling, the HUSKIE crew delivered the patient to the hospital at Ascom. Maj David B. Hightower was RCC; Capt Lorenzo M. Crowell, Jr., copilot; Sgt Charles L. Colbert, pararescueman; Sgt Douglas M. Baker, firefighter; and SSgt George E. Hubbard, flight engineer. ...In another Det 5 evacuation, an HH-43 crew took a seriously-injured Korean girl to Ascom Hospital. Enroute, the patient stopped breathing but was revived by mouth-to-mouth resuscitation. Capt Troy G. Irvin was HUSKIE pilot, Captain Crowell, copilot; MSgt Patrick J. Rippingham, medical technician; and Sergeant Hubbard, flight engineer...

...Flying through light rain and heavy fog patches, an HH-43B crew from Det 18, CARRC(MAC), Little Rock AFB, Ark., evacuated two members of a missile crew who had been seriously injured in a vehicle accident. Pilot on the mercy mission was Capt Donald E. VanMeter. Weather conditions during the 50 nautical mile flight, over heavy rolling hills and ridge lines, were "extremely marginal," and a constant watch had to be kept for power lines, radio antennas and other obstacles. Capt Joe E. Lindsay, the copilot, gave navigational and occasional instrument flight assistance to the pilot. Other members of the HUSKIE crew were Alc Glenn C. McKim, crewchief; SSgt Robert Austin, fireman; and Capt Dexter D. Whittemore (MC), flight medical officer....

...Capt Gary E. Robertson and his HH-43B crew from Det 14, WARRC(MAC), Nellis AFB, Nev., scrambled after they saw an F-111 explode in the air while, at the same time, a parachute opened above the fighter-bomber's escape module. A minute later the HUSKIE landed beside the module, the two survivors were helped into the helicopter by Sgts Kenneth Birgholtz and Leonard L. Stowell, airborne firefighters, and taken to the hospital.

...An elderly couple, snowbound in a cabin more than 100 miles from McChord AFB, Wash., was evacuated by an HH-43B crew from Det 5, WARRC(MAC), which is stationed at the base. A ground party from the Snohomish County Sheriff's office had reached the cabin after a three-hour snowmobile ride in response to a call that the elderly man had suffered a possible heart attack. The HUSKIE landed in the back yard of the cabin on deep snow which had been packed down by the snowmobiles. Capt Thomas D. Precious, RCC, made a steep approach to the site to minimize the white-out conditions that result from blowing snow. The couple, their baggage and three dogs were loaded aboard and the HUSKIE delivered them to the town of Darrington. Maj Erling R. Drangstveit was copilot of the HH-43B; TSgt James L. Johnson, crew chief; and SSgt Martin E. Treese, medical technician.

...While enroute back to MacDill AFB, Fla., after rescuing and delivering two injured pilots to Avon Park Airfield (see January-February, 1969, issue of Rotor Tips), an HH-43B crew from Det 14, EARRC(MAC), answered a "mayday" call from a Navy A-7 pilot. He had ejected from his crippled aircraft 40 miles from Jacksonville. Close coordination with the A-7's wing man and the McCoy AFB control tower resulted in the immediate location of the downed pilot. A helicopter from NAS Cecil Field was vectored in for the pickup. Pilot of the HUSKIE was Capt Thomas F. Madden; copilot, Capt Billy C. Marcontell; medical technician, SSgt Terrance C. Henry; flight engineer, TSgt Larry K. Henderson; firefighters, Sgt Jerry R. Evans and Cleveland L. Bishop.





**RARE COINCIDENCE**—Nine years ago, three Air Force pilots were training in an HH-43 HUSKIE at Kaman Aircraft Corp., Bloomfield, Conn. Recently they not only met by coincidence at Osan AB, Republic of Korea, but found the HUSKIE, number 81846, in which they were trained was also at Osan. The pilots, left to right, Maj Ryland R. Dreibelbis, Maj Earle D. Williams, and Maj Walter C. McMeen went through training at Kaman in March, 1960. Major McMeen is at Osan on temporary duty from Williams AFB, Ariz., and Major Dreibelbis is on temporary duty from George AFB, Calif. Major Williams is commander of Det 11, 41st ARRWg, at Kunsan AB, ROK. Major McMeen set an altitude record in an HH-43 HUSKIE in 1961, breaking the record held by the Russians, when he reached an altitude of 26,369 feet with a load of 2,205 pounds. (USAF photo)



**SAFETY AWARD**—Recognition for his flying record was given to Capt E. E. "Henry" Wallace recently in a flight line ceremony at Det 15, WARRC, Luke AFB, Ariz. Presenting the coveted Military Airlift Command's 5000-Hour Flying Safety Award to Captain Wallace is Col Thomas K. Potter, commander of the Western Aerospace Rescue and Recovery Center at Hamilton AFB, Calif. It was Colonel Potter's first visit to the detachment. In the second photo, LtCol Winfield C. McFarland, left, commander of Det 15, is shown welcoming the Colonel. The pilot in the HH-43's left seat is Capt Dave Webber from Det 16, WARRC, Williams AFB, Ariz. (USAF photos)



**RECORD RESCUE FOR HUSKIE?**—At what is probably the highest altitude—12,500 feet—that an HH-43 crew has carried out a rescue mission, two downed Navy fliers were saved, and a pararescueman evacuated, from the snow-covered slopes of Mt. Kaweah, Calif. The rescue effort began after the engine failed on an A-1E Skyraider and the aircraft crash-landed on a narrow ridge (see photo). The pararescueman, MSgt Guy F. Roberts, USAF, was taken to the scene in an Army helicopter but "white out" conditions caused by the rotor downwash made it impossible to hold position long enough for the injured survivors to be placed aboard; a rescue hoist pickup was necessary. Sergeant Roberts stayed with the survivors through the long, sub-zero night.

Shortly after dawn, an HH-43 from Det 12, WARRC (MAC), arrived from George AFB 150 miles away. Aboard the rescue helicopter were Maj Ryland R. Dreibelbis (see top photo), pilot; Capt Troy G. Irvin, copilot; and SSgt John H. Hazzard, Jr., flight mechanic. The weather was clear at the site but winds were gusting to 50 knots and the turbulence was so great that, in attempting to maintain a 10-foot hover, Major Dreibelbis almost continually utilized full travel of all controls. At one point the HH-43 was ascending at over 2,000 feet a minute with full down collective, and several times rotor blade and tail clearances decreased to inches. The strong gusts not only "bounced" the helicopter but also kept blowing the sling away from the survivors. Despite the conditions, all three men were brought safely aboard the HUSKIE by the Det 12 rescuemen. (USN photo by Lt Mike Eddy, USN, NAS Lemoore, Calif.)

