

On 25 April 1977, a 20th UH-1N crew was diverted from a training mission over the Eglin Range to perform search and rescue duty for an F-4 crew. The Huey crew successfully located the downed crew and went in for the recovery as ordnance exploded from burning wreckage of the F-4 nearby. Staff Sergeant James T. Carter won the Cheney Award for his part in the rescue.

In late August 1977, the 20th was called upon to perform search and rescue duty when a Marine F-4 went down over the Gulf of Mexico. An HH-3 from Tyndall AFB near Panama City, Florida was dispatched for a rescue. The H-3 experienced mechanical problems and was forced to ditch in the gulf. The H-3 sank, but its crew and the pilot from the F-4 were picked up by the Coast Guard. The 20th flew sorties over the next several days in an attempt to locate the F-4's backseater. Unfortunately, he was not recovered.

In January 1978, the 20th became involved in a program called J-CATCH. J-CATCH, for "Joint Countering Attack Helicopters", was to develop tactics to counter a growing threat from attack helicopters. Concern over the increased helicopter firepower and numbers in potential adversary nations led Tactical Air Command to outfit 20th UH-1Ns and CH-3Es as aggressors, creating a force that simulated Soviet attack helicopter capabilities and tactics. Scenarios included helicopter-to-helicopter tactics, and helicopter-to-fighter tactics. The J-CATCH helicopters were painted with special camouflage schemes and configured with Mini-TAT chain guns mounted under the fuselage, which were aimed by the co-pilot's hand controlled sight. The weapon system was loaned to the Air Force by the Canadian government. The 20th's aggressor force was known as "Red Force" and adopted a red scarf, which is still worn by the unit today. The red star on the unit patch today is a reminder of the J-CATCH mission, which successfully concluded in 1979. .

In June 1978, the 20th CH-3 section successfully provided pathfinder services for a flight of 22 Army helicopters from Fort Benning, Georgia. Operation NIGHT HAWK marked the first time this type of joint service operation had been attempted..

As 1979 began, however, U.S. Air Force special operations capability was nearing extinction. Special operations forces suffered from meager budgets and resources while Air Force priorities went into modernization of conventional forces. Events in the coming year would eventually bring major changes for special operations in general, and the 20th SOS in particular.

The 20th remained busy with J-CATCH in 1979. They also experienced problems with the weapons system on the CH-3E. Spent brass from the guns was ejected overboard, where it entered the aircraft's slipstream. The slipstream carried the brass into the tail rotor, causing damage to tail blades. The 1st SOW developed a solution and implemented it, preventing damage to aircraft and possible loss of aircraft and lives.

Summer of 1979 found the 20th testing new hardware. In July, an infrared searchlight filter was successfully tested. The system had been developed by the Army and it was modified for use on Air Force helicopters at Hurlburt Field. August began with tests of a long range navigation system built by Teledyne. The tests successfully proved the accuracy of the system.

Later in August, a CH-3E successfully deployed a Zodiac boat and two man combat control team nearly 30 miles out into the Gulf of Mexico. The Zodiac is a light weight craft which can be

powered by either electric motor or gasoline engine. Later in August, another CH-3E deployed a boat and a seven-man Army scuba team simultaneously..

On 13 August, a 20th CH-3E was forced to make an emergency landing in Choctawhatchee Bay near Eglin AFB after an engine failure and fire. The aircraft was recovered safely and towed back to Eglin for repairs. The tow operation took six hours.

On 10 September, the 20th participated in a demonstration of special operations capabilities for base personnel and dependents. Two CH-3Es and three UH-1Ns were tasked for the demonstration. The first CH-3 landed, deploying two combat control personnel, a jeep, and a Fulton surface-to-air recovery kit. The second CH-3 deployed combat controllers in a HALO (high altitude, low opening) parachute jump, while other combat controllers rappelled from the Hueys. The rappellers were recovered by rope ladder aboard the Hueys, while the first combat control team demonstrated a Fulton recovery. With the Fulton kit deployed on the ground, a low flying MC-130E Combat Talon snares a cable suspended by a balloon. The cable trails along behind the fixed-wing aircraft and is then grappled and winched inside. Up to 500 pounds or two personnel can be snatched aboard the Combat Talon in this manner. The demonstration showed what teamwork among Air Force special operations forces could accomplish.

On 24 September, the Air Force approved a Statement of Need for upgraded special operations helicopters to replace the UH-1Ns and aerial refueling probes for the CH-3Es. In October, a briefing to TAC lead to the CORONET CHOPPER test program to develop rapid deployment procedures for UH-1N helicopters.

The U.S. Embassy in Tehran, Iran was overrun and seized by Iranian students on 4 November 1979. Many Embassy personnel were captured and held as hostages and the U.S. immediately set about planning a rescue. Most special operations air assets were owned by the 1st SOW at Hurlburt and the MC-130 Combat Talons and AC-130 Spectre gunships were tasked for the rescue attempt. Helicopters were required as well, but the 20th's Hueys and CH-3Es were not capable of the demands the rescue mission required. As a result, Navy and Marine RH-53D Sea Stallions with Marine crews were selected for the mission. Eight aircraft were assigned and at least six were required to complete the mission.

The mission was set into operation in late April 1980. The fixed-wing aircraft, four MC-130 Combat Talons carrying troops and three EC-130s carrying fuel bladders to refuel the helicopters would stage from a base in Oman, while the choppers would stage from the aircraft carrier USS Nimitz. The aircraft would rendezvous at a site known as Desert One. The RH-53s would refuel and take the troops on board. the helicopters would then take off for another site, while the fixed-wing aircraft would leave Iran.

The helicopter assault force would drop off their troops and then the helicopter crews would move their aircraft to a hiding place some fifty miles outside Tehran. There they would remain overnight. The assault force would secure the Embassy, while additional forces would attack and secure an airfield outside Tehran, using MC-130 Combat Talons for the assault with AC-130 gunships for close air support. C-141 Starlifter transports would land at the airfield once it was secure and the choppers would airlift the hostages and assault force from the Embassy to the

airfield. The freed hostages, the assault force and the chopper crews would board the C-141s for home. The abandoned choppers would be destroyed.

Early on, the mission experienced problems. The Marine helicopter aircrews were not experienced in desert flying or flying while using night vision goggles. The RH-53 was prone to mechanical problems and the different components of the force had not practiced together.

As the mission began on the evening of 24 April 1980, it began to unravel. Soon after the helicopters crossed the coast into Iran, one chopper experienced a malfunction indicating a possible main rotor blade failure. The aircraft was abandoned and its crew was picked up by another chopper. The helicopters available had decreased to seven. They were also fifteen minutes behind schedule now.

A desert storm limiting visibility forced two RH-53s to turn back and land when they lost sight of the other aircraft and the ground. The remaining five choppers pressed on. The pilots of the two choppers on the ground decided to make another attempt after a forty five minute wait. Shortly after entering the storm, the first helicopter experienced a failure of the second stage hydraulic system. The pilot elected to continue on. The second aircraft's compass and pitch and roll indicators both failed, along with a malfunction of the inertial navigation system. The second chopper turned around and headed back to the Nimitz. Now only six aircraft remained.

Shortly after midnight on the 25th, the first two choppers landed at Desert One. The sixth and last chopper landed just before 0100. The choppers were nearly two hours behind schedule now, but began to refuel from the EC-130s.

The chopper which had experienced the hydraulic failure was deemed un-flyable by the senior Marine helicopter pilot. The mission now had only five choppers to do the job of six. The mission commander ordered the mission aborted and the ground forces began to re-board the C-130s. At 0225 on the morning of 25 April, tragedy struck in the Iranian desert. One of the choppers pulled into a hover to make room for another one to be refueled. The crew experienced a "brown-out" as the rotor wash kicked up dust and obscured visibility. The RH-53 collided with the cockpit of an EC-130 and both aircraft burst into flames, killing crewmen aboard both the chopper and the EC-130. The survivors boarded the remaining planes, abandoned the choppers and aborted the mission.

After the failure of the Iranian hostage rescue attempt, the Vice Chief of Staff of the Air Force ordered the reassignment of nine HH-53H Pave Lows from the Aerospace Rescue and Recovery Service to the 1st SOW on 14 May 1980. By 17 May, eight of the aircraft had been transferred from Kirtland AFB, New Mexico to the 20th SOS at Hurlburt Field. The ninth aircraft was still undergoing modification at Naval Air Station Pensacola, Florida.

The HH-53H Pave Lows, which had become operational only a few months earlier, were the result of a number of upgrades of the old HH-53 Super Jolly Green Giant rescue helicopter. The modification program was code named "Pave Low" and the name stuck on the helicopter. The Pave Low program had actually begun in the late 1970s to augment combat rescue forces with an all weather, nighttime, low level capability.

The transfer of the Kirtland Pave Lows, including Kirtland aircrews and maintenance personnel to special operations, began the 20th's transition out of the H-3. The sudden transfer of rescue aircraft and personnel to Tactical Air Command created a lot of hard feelings in the Aerospace Rescue and Recovery Service and its parent Military Airlift Command.

Almost immediately, the Pave Lows and their crews, along with AC-130 gunships and MC-130 Combat Talons were deployed for what was billed as a RED FLAG exercise, but was in reality HONEY BADGER, a project to upgrade the capabilities of SOF aircraft. It was also a rehearsal for a possible second rescue attempt for the hostages in Iran. The new wrinkles in the problem: the Iranians had dispersed the hostages to hamper further rescue attempts and the Soviets had stepped up surveillance of U.S military movements in the U.S. and in the Middle East. Still, after nearly five months of training and the loss of an HH-53H in a tragic crash at Dugway, Utah, HONEY BADGER was ready to go. Plans to press with the rescue were put on hold because estimates put potential losses of rescuers and hostages at an unacceptable 30 percent. The force remained on standby, however, until the hostages were released in January 1981.

While the Pave Low section awaited orders to deploy to Iran, the 20th's UH-1N flight was pressed into rescue duty while deployed to Nellis AFB, Nevada for a RED FLAG exercise. Early on the morning of 21 November 1980, fire broke out in the MGM Grand Hotel in downtown Las Vegas. Within the first thirty minutes after the fire was spotted, a Las Vegas police helicopter, augmented by three civilian helicopters, had rescued between 250 and 300 hotel patrons from the building's roof. Many more were still trapped in the building, perhaps thousands, when a call went out to the Nellis AFB command post for help. Nellis' 57th Tactical Fighter Wing maintained a detachment of UH-1Ns at Indian Springs Auxiliary Air Field, which soon joined the rescue effort. Nellis command post, realizing the dire need for helicopters, also notified the 20th's deployed crews and the 302nd SOS, an Air Force Reserve unit flying CH-3Es deployed to RED FLAG from Luke AFB, Arizona.

Within forty minutes of the call, the 20th's three UH-1Ns were airborne. They joined the three CH-3Es from the 302nd and three UH-1Ns from the 57th's Detachment 1. They began to ferry fire, medical, and rescue personnel and supplies and equipment to the roof of the hotel, returning with exhausted rescue personnel and firemen. 20th crews transported around 150 emergency personnel to or from the roof, along with five survivors. The UH-1N crews from Det 1 pulled 57 survivors from the roof, while the CH-3E crews from the 302nd pulled 17 survivors from balconies with their rescue hoists and forest penetrators.

When the blaze was finally brought under control and extinguished, 84 lives had been lost and nearly 700 persons had been injured in the second deadliest hotel fire in U.S. history. Undoubtedly, many more would have lost their lives if not for the actions of the crews from the 20th, their comrades in Det 1 and the 302nd, and their civilian counterparts. After the rescue, all three Air Force helicopter units were recognized on the national television program "That's Incredible". Co-host John Davidson honored all the Air Force members involved in the rescue, saying "They are truly American heroes." Following the tragic Iranian hostage rescue attempt, a Special Operations Review Group was commissioned and the Air Force began to take a look at its future needs with the Air Force 2000 Study. As a result of the studies, special operations gained new emphasis. Active duty Air Force special operations forces were still aligned under

the Tactical Air Command and consisted of the single wing at Hurlburt Field, and two squadrons overseas.

The Air Force 2000 Study recommended that special operations be placed under HQ USAF as a Special Operations Agency or in a major command as a numbered air force. Military Airlift Command, originally opposed to consolidation, was now a proponent of consolidating special operations and combat rescue forces. MAC argued that placing these assets under MAC control would be the most efficient way to manage both special operations and rescue forces. Since MAC already controlled most C-130 and helicopter aircraft and personnel anyway, MAC argued that it was only logical that MAC should control the special operations assets. The logic of the argument finally convinced TAC commander General Wilbur Creech and in September 1982, TAC agreed that Military Airlift Command should be the sole manager of Air Force Special Operations Forces. In March 1983, MAC established the 23rd Air Force at Scott AFB, Illinois. Aerospace Rescue and Recovery Service and the newly reactivated 2nd Air Division at Hurlburt Field fell under the new numbered air force. The 2nd Air Division was to manage all Air Force special operations forces, including the 1st Special Operations Wing at Hurlburt, the 1st Special Operations Squadron at Clark AB, Republic of the Philippines, the 7th SOS at Sembach, Germany, and a special operations detachment at Howard AB, Panama, along with all Air Force Reserve and Air National Guard units with special operations missions. The 1st Special Operations Wing consisted of three flying squadrons, the 8th SOS, flying MC-130E Combat Talons, the 16th SOS, flying AC-130H Spectre gunships, and the 20th SOS, still flying UH-1Ns and HH-53Hs.

In May 1983, the 20th SOS UH-1N flight was tasked for drug interdiction in a mission code named Operation BAT. The purpose was to stem the flow of illegal drugs from the Bahamas, Antilles, and Turks Islands in co-operation with the Drug Enforcement Agency and the government of the Bahamas. The 20th's UH-1Ns continued to fly Operation BAT missions until October 1985, when the UH-1Ns and the BAT mission were transferred to Homestead AFB, Florida, and the 48th Aerospace Rescue and Recovery Squadron.

On 4 July 1983, Operation BAT missions resulted in the capture of a Cessna 404 aircraft, its pilot, and 863 pounds of cocaine, plus the capture of a 70 foot motor vessel and more than 3,000 bales of marijuana, weighing more than 30 tons.

In mid 1983, the 20th began to train Aerospace Rescue and Recovery Service crews to perform the Operation BAT mission.

In October 1983, President Reagan ordered U.S. troops to intervene in the Caribbean island nation of Grenada where the Soviet Union and Cuba were establishing a disturbing presence. The resulting operation, URGENT FURY, did not involve 20th aircraft and crews. Problems encountered in the joint service operation lead to a Senate Armed Services Committee study. Identified were a number of inadequacies, such as lack of communications and coordination between Army and Navy forces. The study recommended reorganization of Department of Defense, including the creation of unified commands for transportation and special operations. The recommendations resulted in the eventual formation of the United States Special Operations Command and the Air Force Special Operations Command.

A UH-1N crashed during an Operation BAT mission in January 1984, killing three of the four crewmen aboard. Dead were Captain Dyke H. Whitbeck, First Lieutenant Thomas L. Hamby, and Staff Sergeant Edgardo L. Acha. Staff Sergeant Paul B. Cartter was seriously injured.

Despite the losses, the Green Hornets continued to perform the OpBAT mission. In September, a chase of a DC-6, the civilian version of the Air Force's C-54 cargo plane resulted in the capture of the aircraft and crew and the seizure of an estimated 13,000 pounds of marijuana.

The Pave Low section was busy as well, participating in a number of exercises. In October 1984, Pave Low crews and aircraft deployed to the Republic of the Philippines for Exercise COPE THUNDER 85-1. The deployment ended tragically when a crash destroyed a Pave Low and killed its crew. Dead in the crash were Major James S. Prowell, Captain Michael W. Skeen, Technical Sergeants Thomas M. Ortiz, Jr. and Wayne A. Johnson, Staff Sergeant Robert G. Barker and Sergeant Max B. Lincks, Jr. Just a month later, another Pave Low was destroyed while deployed to Pope AFB, North Carolina. The aircraft suffered a tail rotor failure when the tail rotor and gearbox separated from the aircraft. Only the quick reaction of aircraft commander Lieutenant Colonel Horace "Bo" Johnson saved the lives of the 15 persons on board.

A 20th SOS Operation BAT UH-1N worked with a U.S. Customs aircraft in December 1984, chasing a drug smuggler aircraft from the Bahamas to Seabring, Florida. Two smugglers were arrested and the aircraft and its load of marijuana was seized.

Early 1985 found the 20th's Pave Low crews on the road, training to fly in mountainous terrain. Training was conducted at Dobbins AFB, Georgia and Kirtland AFB, New Mexico.

On 1 October 1985, the 20th officially transferred Operation BAT and its UH-1Ns to the 48th Aerospace Rescue and Recovery Squadron at Homestead AFB, Florida. During Operation BAT, the 20th had flown more than 3,000 sorties which lead to the capture or destruction of more than \$1.5 billion in drugs, and the aircraft, vessels, vehicles and equipment used to smuggle them.

In January 1986, the Air Staff directed that ten H-53s be upgraded to the Pave Low III Enhanced or MH-53J configuration. The MH-53J enhancements included an integrated inertial navigation system, Doppler radar, global positioning system, improved terrain following radar and forward looking infrared systems, a night vision goggle compatible heads up display, range extension provisions for an internal auxiliary fuel tank, improved weapons and defensive systems, and an improved secure communications system. The program was funded with \$59.6 million and completion was scheduled for 1988.

In mid-March 1986, testing began to develop maintenance procedures for shipboard operations with the H-53. Unlike Navy and Marine versions on the H-53, the Air Force version was not equipped with a fold system to allow the helicopter to be stored below decks on an aircraft carrier. A twelve man maintenance team deployed with on HH-53H to NAS Norfolk, Virginia for tests on the USS Saipan.

Shortly after the tests began at Norfolk, the 20th received a short-notice tasking for POWERFUL GAZE, an important joint service exercise. Aircraft and crews were recalled from deployments

to Kirtland, Dobbins, and Norfolk. With only five days notice, the 20th aircrews and maintenance unit prepared the aircraft, packed the support bins, and redeployed to Pope AFB to successfully participate in the exercise.

May 1986 found the Pave Lows back on the road, this time in the Southwestern U.S. for an exercise named ELATED CYCLONE. The deployment, which began on 13 May, was conducted under bare base field conditions. The scenario was designed to test the limits of the aircraft and crews. Sadly, the exercise terminated following the death of Major Richard C. Brims in an HH-53H accident on 21 May.

The tragedy in May did not slow the pace of operations for long. In June, five aircraft deployed to Kirtland for a 60 day TDY to upgrade crews and to verify new formation flight procedures. In October, three aircraft deployed to NAS Jacksonville, Florida for deck landing qualification where 20th crews trained to perform shipboard operations.

In January 1987, testing of the titanium spar main rotor blade on the HH-53H began at Robins AFB, Georgia. A single aircraft deployed for the test. The test was to determine the feasibility of using the titanium spar blades on the Air Force version of the H-53. The blade had been in use on Navy and Marine H-53s, but never tested with the different rotor head used by the Air Force. Tests resulted in the approval of titanium spar blades on the Pave Low. The advantages to the new blade included lighter weight and greater lift.

1987 was a busy year for the 20th. In March, three aircraft deployed to Pope AFB for U.S. Army Ranger sustainment training. In July and August, 20th crews and aircraft deployed to Knoxville, Tennessee for mountain training and to NAS Norfolk for water training. They also deployed to MacDill AFB, Florida for weapons and tactics training and Lawson Army Air Field, Georgia for Ranger sustainment training. November 1987 found the 20th with six aircraft deployed to Martinsburg, West Virginia for Exercise CASINO GAMBIT. The long range capability of the Pave Low was amply demonstrated when a mission scenario included a short-notice tasking to recover Special Forces teams near the Canadian border. The teams were successfully recovered following an 800 nautical mile flight to their pick up point.

January 1988 began with six aircraft deployed for a joint readiness training exercise, followed by a three aircraft deployment to Colorado and Washington for mountain training in February and March. Six aircraft were deployed for mountain training again in July. September and October saw four aircraft deployed for Exercise ALASKAN HUSKY, while another four deployed to Panama for Exercise PAVE JUNGLE.

During a deployment to Fort Pickett, Virginia in October, a Pave Low crash resulted in damage to the aircraft, but no fatalities. Cost of repair was estimated to exceed \$6.7 million.

The next year opened with a major exercise. JAGUAR BITE was the 1st Special Operations Wing operational readiness inspection and designed to test the wing's ability to perform a variety of missions from a variety of locations. The 20th was heavily involved. Operations in extreme cold and snow and ice conditions taxed both the personnel and machines. The exercise earned an overall rating of "Excellent".

Following JAGUAR BITE, operations returned to normal for the 20th. In March, three Pave Lows deployed to the USS Charleston for deck landing qualifications. April saw the 20th deploy four aircraft for capabilities exercise and June saw the return of four Pave Lows to the USS Charleston, again for deck landing qualification training.

In October, the 20th deployed for joint special operations exercise KNIFE BLADE, which heavily taxed airframes, aircrews, and maintainers. The exercise involved redeploying to several different locations and included teardown of the Pave Lows, transport aboard C-5 Galaxy cargo planes, and reassembly and flight testing at the new operating location, followed by heavy mission taskings.

November was no less hectic with heavy commitments for a joint readiness exercise at Pope AFB, North Carolina and Hurlburt Field.

As Christmas 1989 approached, the 20th SOS had just completed a major training exercise when they were tasked for a real world mission: Operation JUST CAUSE.