

**M**aj. Charles Daniel and Maj. John Pitchford were Dash-2 in a section of AH-1Ws on an afternoon combat flight to reposition aircraft from a forward-operating base in eastern Afghanistan to Bagram Air Base, near Kabul. The 100-mile route, nearly all over hostile territory, required operations up to 10,000 feet for mountain clearance. As the flight progressed into the higher elevations, the crew felt a pronounced two-per-revolution vertical beat. This vertical beat fed back into the collective and increased in intensity until, at approximately 10,000 feet, the vertical beat and the accompanying collective feedback made the aircraft momentarily uncontrollable.

Maj. Pitchford, the pilot at the controls in the front seat, tried to slow the aircraft, and he reduced collective to initiate a descent. The collective was unresponsive to this input. Maj. Daniel then took control of the aircraft and managed to reduce the collective enough to



HMLA-773

Maj. Charles Daniel, Maj. John Pitchford.

# BRAVO Zulu

establish a descent. With the descent established, the airframe and collective feedback subsided. Initially, the crew planned to land immediately, and Maj. Daniel flew toward a cultivated field in a valley.

Beginning his approach, Maj. Daniel tried to increase collective to slow the rate of descent but found the collective was frozen initially. As the aircraft continued its descent through 500 feet AGL (6,500 feet MSL), for reasons unknown, the collective again responded to pilot input. Maj. Daniel leveled the aircraft at 200 feet AGL and 70 knots. At this lower altitude, the AH-1W's flying qualities greatly improved. The airframe's vertical beat and accompanying collective feedback also reduced significantly.

Faced with uncertain controllability and hostile terrain, the crew reconsidered their landing plan. A precautionary-emergency landing in this scenario is full of additional risks. Majors Daniel and Pitchford conducted time-critical ORM and assessed these risks, which included: All suitable landing sites were in close proximity to local nationals of unknown allegiance, a fast approaching sunset, and a delay

of several hours for site security and maintenance recovery. Based on their time-critical-risk analysis, Majors Daniel and Pitchford decided to continue to the nearest safe place to land, Bagram Airbase, which was 60 miles away.

With the lead Cobra flying top cover and helping to guide their wingman along the lowest navigable mountain route, Maj. Daniel flew the Cobra at 100 feet AGL and 60 knots as he picked his way through valleys. Maj. Pitchford, after reviewing NATOPS procedures, monitored systems, navigated, and kept primary threat lookout. The crew landed uneventfully in Bagram. The aircraft was shut down on a taxiway and towed to the line.

On the postflight inspection, maintenance personnel discovered two of the four bolts that attach the collective servo to the aircraft structure had come loose and had fallen out. The two remaining bolts severely were deformed but had held enough to allow the crew to control collective pitch and safely land the aircraft. A hazard report concerning this incident is pending the results of an engineering investigation into the failed components.

From Left to right, Sgt Jeffery Baker, Maj Tony Randall, Sgt Paul O'Brien, Cpl Jayson Maslowski, 1stLt Mark Muaberret and 1stLt. Tara Russell



## HMLA-367

During a day armed-reconnaissance mission near the city of Al Ramadi, Maj. Tony Randall, 1stLt. Tara Russell, Sgt. Paul O'Brien, and Cpl. Jayson Maslowski received enemy small-arms fire to the underside of their Huey. The rounds punctured the No. 1 hydraulic system, eliminating any hydraulic boost to the tail-rotor controls. Maj. Randall and his crew, after assessing the situation and seeing the entry points of the rounds on the tail, decided to make a sliding landing, using minimal pedal inputs. The aircraft's battle damage subsequently was repaired.

One month later, while on a night convoy-escort mission in the same area, Maj. Randall, 1stLt. Mark Mauberret, Sgt. Jeffery Baker and Cpl. Maslowski were in a similar situation with a complete failure of the tail-rotor controls. Maj. Randall and the crew brought the aircraft back to home field, using NVGs, and made an emergency sliding landing. Postflight inspection found a bolt connecting the tail-rotor-control tubes had sheared and rendered the pedals ineffective.

From left to right, Ltjg. Bo Beeman, AW2(AW) Cory Merritt, Cdr. Frank Michael, AWC(AW) Gerard Schwarz.

## HSL-47



Sitting on spot 3 of USS *Abraham Lincoln* (CVN-72), with rotors turning, the crew of Saberhawk 704 just had finished their checklists. They were waiting for sunrise to begin the first of many flights into the tsunami-terrorized Aceh province on the Indonesian island of Sumatra. The schedule would have them drop off several loads of relief workers and volunteers from the *Lincoln's* crew. Then they were to proceed to the ravaged western coast of Sumatra, bringing food, water, and evacuating the injured.

While the crew of Hawk 704 waited patiently for daylight, they were startled by an unusual call over the flight-deck public-address system, "Man overboard. Man overboard. Port side. This is not a drill!"

Instantly, the flight deck sprang into frenzy. Cdr. Frank Michael, the aircraft commander, directed his crew to prepare for search and rescue (SAR). Ltjg. Bo Beeman, copilot, and AWC(AW) Gerard Schwarz, aircrewman, quickly changed the aircraft from a passenger-transport configuration to SAR mode. Almost immediately, their SAR swimmer, AW2 Cory Merritt, from HS-2, arrived and began to change into his wet gear. Saberhawk 704 launched to find the stranded Sailor.

Eight minutes later, two smoke markers flew out of the cabin door and

brightly ignited in the water. Hawk 704 had located the survivor bobbing in the water, less than a mile behind the *Abraham Lincoln*. The crew flew down low and deployed their swimmer, who quickly secured the survivor and gave the pickup signal. Cdr. Michael kept a steady 80-foot hover as AWC Schwarz operated the rescue hoist. On board *Lincoln*, the entire crew watched the PLAT as AW2 Merritt and the survivor dangled on the rescue hoist. With the survivor safely inside the aircraft, Cdr. Michael departed his hover. Minutes later, Hawk 704 was back on spot two, and, as soon as chocks and chains were set, a medical team rushed underneath the rotor arc. The

survivor quickly was brought to medical, shaken but alive, and was treated for exposure.

The early morning rescue by the Hawk 704 crew was a great example of flexibility. The crew thoroughly had prepared for an intense mission over foreign territory but, within seconds, seamlessly transitioned into a search-and-rescue mission. The ability of HS-2 and HSL-47 aircrew to work together illustrates the importance of standardization. Standard SAR procedures allowed the crew members, who had never worked together, to easily complete the rescue. Any delay in the mission could have cost the Sailor his life.

During a section external-load mission returning to Bagram Air Field, Afghanistan, Ironman 43, a CH-53E Super Stallion helicopter from Marine Heavy Helicopter Squadron 462, experienced an engine failure. Flying at 6,000 feet, the aircraft carried seven passengers and a 4,500-pound 105 mm howitzer slung under the aircraft with a single-point pendant.

Nineteen miles from the airfield, the pilot-at-controls, Maj. Kevin Cortes, felt a yaw-kick as the No. 2 engine dropped offline. One of the crew chiefs, Cpl. Carl Mehaffie, said over the ICS the No. 2 engine had dropped off-line and the T5 (turbine temperature) was increasing above limits. Capt. Christian Robertson, the aircraft commander, immediately took the controls and pulled back the cyclic. He reduced airspeed (and power required) to the precalculated dual-engine airspeed of 60 KIAS. Maj. Cortes then increased the Nos. 1 and 3 engines to full power to sustain level flight. Once level flight was established, Maj. Cortes secured the No. 2 engine as the other crew chief, SSgt. Brian Scott, told the pilots smoke was inside the cabin.

Capt. Robertson told Ironman 42, the section leader, of the situation and asked them to circle back to check the No. 2 engine exhaust. Once Ironman confirmed the engine was not on fire. Capt. Robertson flew the aircraft to a non-populated area and dumped fuel to NATOPS minimums to reduce the aircraft gross weight, which allowed for a safe drop-off of the sling load.

Both pilots took turns calculating the power required to safely drop off the howitzer at Bagram. Ironman 43 would have a four-percent power margin, in a 40-foot hover, with minimum fuel on board. Capt. Robertson made sure the aircrew agreed with the plan: to drop off the howitzer on the sling-load area at Bagram with only two operable engines, and then sidestep to the runway and land. Capt. Robertson asked the section leader to tell Bagram tower of the emergency.

Flying a steep approach, Capt. Robertson maintained five

knots groundspeed, while SSgt. Scott called the aircraft down one to three feet off the sling-load area for the drop-off. SSgt. Scott released the howitzer about six inches from the ground, and it landed on both wheels undamaged. Following the drop-off, Capt. Robertson maneuvered the aircraft and landed on the runway.

An engine loss at those altitudes and weights could have resulted in catastrophe. Were it not for the immediate and appropriate actions of the aircrew, 12 souls, an aircraft, and a 105 mm howitzer might have been lost.

## HMH-462

From L to R: CW02 Matthew Sosnoski (AO), Cpl Carl Mehaffie (CC), SSgt Brian Scott (CC), Capt Christian Robertson (HAC), Maj Kevin Cortes (H2P)

