



Vice Chief of Staff Gen. Duncan J. McNabb presents Lt. Col. Eugene V. Becker the Koren Kolligian Jr. trophy during a ceremony at the Pentagon June 9. Becker was flying an MH-53M Pave Low helicopter on a training mission in Florida when it suffered a "catastrophic mechanical failure." With the help of his crew, he was able to land the helicopter safely, saving the lives of all aboard.

## Pilot's quick thinking earns Kolligian

By Bruce Rolfsen - Staff writer

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As the massive MH-53M Pave Low flew above a Florida pine forest shortly before midnight Sept. 7, a crew member at the rear of the helicopter felt a vibration.

A few seconds later, the Pave Low hovered about 150 feet above the ground, and the tail scanner realized the vibration was getting worse.

Over the helicopter's intercom, the airman shouted, "Go around," a command signaling the crew that something was wrong.

Over the next 45 seconds, the Pave Low began to fall apart and its rotors lost their grip of the air. It was impossible to avoid a crash landing. The 88-foot-long Pave Low hit the ground, spun around to the right and tilted over — but all seven crew members survived.

Those 45 seconds of quick thinking earned the Pave Low's pilot, Lt. Col. Eugene Becker of Hurlburt Field, Fla., the Air Force's annual award for the most meritorious performance by an airman in a flight emergency, the Kolligian Trophy.

"We got lucky that night," said Becker, who has logged more than 4,500 hours in helicopters and now commands the Air Force's last Pave Low squadron, the 20th Special Operations Squadron at Hurlburt. The Vietnam War-era helicopters are set for retirement by Oct. 1.

The flight last fall was a training flight, considered low risk, with its main goal to requalify the co-pilot, Maj. Scott Yeatman. The airmen also wanted to practice using a cable hoist to lift troops onto the hovering bird.

But when the crew stepped out to prepare its assigned Pave Low, the airmen found that helicopter would not fly because a cockpit warning light problem could not be resolved in time. The airmen moved to the mission's backup Pave Low, a helicopter that has flown more than 12,180 hours since it was built in 1969.

There were minor maintenance delays and the weather held it back, but the team finally launched at 10:05 p.m., returning to Hurlburt about 11:30 to drop off a flight engineer evaluator who wasn't needed for the second leg of the mission.

By 11:36 p.m., the MH-53M was again airborne and on low-level flight to a landing zone about 15 miles north at Florida's Eglin Air Force Base.

The goal was to approach the forest clearing from the west, hover 50 feet above the ground, and practice lowering and raising the hoist.

Yeatman overshot the clearing by about 110 feet, so the crew prepared for a second attempt. That's when the tail scanner and gunner, Airman 1st Class Bradley Jordan, felt the threatening vibration and called out "go around."

There was no hesitation to act, even though the call came from the Pave Low's most junior crew member. "Rank and position have no place on the aircraft — it is teamwork," Becker said.

As Becker took control of the helicopter, the entire crew felt the vibrations. Jordan looked out the back and saw the helicopter's tail flexing downward about 9 inches.

Becker knew he had little time to get the MH-53M on the ground. He steered the Pave Low into a right-hand turn and looked at the cockpit gauges, trying to figure out what the problem was. He ruled out an engine breakdown because power fluctuations were affecting both engines equally.

Another possibility was a malfunction with the "automatic flight control system" — sort of a helicopter equivalent to a power steering system.

But the problems continued — the main rotors sped up and slowed down for no clear reason — even after Becker turned off the system.

What Becker couldn't see was the trouble inside the Pave Low's tail section. A gear box that linked the engines with the tail rotor had separated from its mountings and was breaking apart, causing the engine and tail rotor drive shafts to engage and disengage uncontrollably.

Even if he had known about the gear box, there were no specific procedures for the crew to fall back on. According to a later accident investigation report, no Pave Low gear box had broken up before.

With the crisis growing, Becker radioed "mayday" to air controllers at Eglin, something he had never done before.

While Becker, a pilot for 18 years, focused on cockpit gauges and flight controls, crew members working as scanners declared the Pave Low was clear of the trees and over the landing zone.

But they weren't out of danger yet.

Becker began to set up the Pave Low for a quick touch down but saw the power going to the main rotors drop below 70 percent, too little to keep the helicopter aloft.

“I knew it was just a matter of seconds,” recalled Becker, referring to how much longer the Pave Low — and the airmen — had left in the air.

Just 84 feet up, Becker put the Pave Low into an autorotation landing, pushing down on his control’s collective stick to flatten out the main rotor blades, hoping they would speed up. Then, at about 25 feet, he pulled back the collective, moving the blades to provide maximum lift and cushion the crash landing.

An accident investigation board said that final maneuver slowed the jet helicopter’s descent by about 50 percent.

Hard landing, then tilting

The Pave Low landed. Hard.

Becker compared the force of the impact to landing a helicopter aboard an aircraft carrier. The Pave Low’s landing gear absorbed most of the impact. But the crew wasn’t out of the woods yet.

Probably because its tail rotor wasn’t functioning, the Pave Low went into a right-hand spin of at least 225 degrees as the main blades continued to rotate. The twirling fuselage flung Jordan and flight surgeon Col. Bill Nelson out of the helicopter’s rear ramp. Because the two airmen were attached to tether lines, the spinning helicopter dragged them behind.

Then the fuselage tilted to the left, sending the main rotors into the ground. Finally, the Pave Low tilted to the right before coming to a stop, sitting nearly straight up.

“I realized we were still alive, still conscious,” Becker said.

Then the pilot smelled leaking fuel. “I yelled, ‘Egress. Egress. Egress!’”

Outside the Pave Low, the crew found Jordan conscious but with broken bones. Nelson was banged up but able to care for Jordan until civilian emergency teams arrived about 25 minutes later.

The crew members knew they had been just a few feet or seconds from a worse outcome. “I thought, ‘We are all good. ... I can’t believe it,’” Becker said.

The lieutenant colonel knew his commanders nominated him for the Kolligian Trophy, but Becker did not think much about it — he was focused on preparing for an overseas deployment.

In March, the Air Force Safety Center announced Becker’s selection. Becker could not say much publicly about the crash until after the accident investigation board’s report came out July 10.

Although the rules governing the award limit the honor to one crew member, Becker said he sees the recognition going to all seven airmen who were onboard.

“I can’t fly the aircraft by myself,” he said.