## **ONE IN A MILLION**

By <u>H. Morgan Miller</u>

Thirty-six years ago, I was the first Cobra Pilot to shake the hand of a surviving Cobra Pilot who lost his tail rotor assembly while on a Hunter-Killer mission in South Vietnam. It was a hot, humid day at Quan Loi. I was an in-country trained Cobra maintenance officer for A Troop 3/ 17 Air Cav and Operation Lam Son 719 had been underway for weeks. The siren went off, which meant one of our Helicopters was down. I ran to the command bunker to see if it was a Cobra. Sure enough, it was 202, piloted by Rick Norman. The second half of the Hunter-Killer team, flying an OH-58, was circling the downed Cobra and reported, "He crash landed in a small clearing 20 miles north of An Loc."

Spur 6, Major David Russell, got in his Huey and headed for the crash site. Three Hueys with our Aero Rifle Platoon, and two Cobras, were also en route. I waited in the command bunker with my boss, Captain Harry MacDonald. After the Major reached the crash site and inserted the Aero Rifle Platoon, he told the operations officer to "get MacDonald and Miller out here." MacDonald and I jumped into an OH-58 and headed out to the downed Cobra. The Major and Captain MacDonald were discussing the situation and making a plan during the trip. I heard the Major say both pilots were OK. It was decided that I needed to be put in the Landing Zone to see if the ship was salvageable. If the ship had major airframe damage, the Infantry would pull out the radios and mini gun. Then the Air Force A-37s would destroy the ship. Captain MacDonald had less than two weeks to go in-country and I could tell he was not happy about heading for that Landing Zone. As he made his approach for landing, I could see Rick, the Aero Rifle Platoon leader, and the downed Cobra. At first glance, and much to my surprise, the Cobra looked undamaged. After landing, while I was walking up to it, I noticed the tail rotor and 90 degree gear box were missing. Rick Norman met me halfway and I said, "You are a lucky s.o.b. How did you get this machine on the ground? Jesus! You have got to be the only Cobra Pilot to have ever survived this kind of mechanical failure." After I inspected the Cobra, I told my boss the aircraft would be flyable in a week. "All we need is a new tail boom and tail rotor assembly." He passed the word to the Major.

The Major made the necessary arrangements for a Heavy Lift Helicopter to extract the Cobra. There were six hours of daylight left, the weather was good and there was no enemy activity. Captain MacDonald, Rick Norman and I headed back to Quan Loi. Norman's co-pilot left when the Infantry was dropped off during the insertion. He was pretty badly shaken up. The Infantry stayed with the downed Cobra and waited for the extraction. Two other Cobras stayed on-station for added protection. While flying back to Quan Loi, I heard over the radio that a Chinook was en route from Phu Loi.

On the way back, I was thinking about the accident. Rick Norman was a 3rd tour Helicopter Pilot attached to the training command at Vung Tau. I went through Cobra transition there and he was my instructor. Six months later, the Army closed the Cobra Transition School and Rick was transferred to our unit, A Troop 3/17 Air Cav. After a month of Area of Operations training, he was promoted to Aircraft Commander.

The Cobra, also known as the "Widow Maker", has always had a mysterious reputation ever since it entered country in the fall of 1968. I can remember hearing from other Pilots that the AH-1G had mechanical problems. There was the problem of running out of tail rotor control while in a hovering quartering tailwind. There was also the problem with Stability Control

Augmentation System hard-overs. In December of '70 we lost two Cobra pilots on a night visual reconnaissance mission. When we examined the crash site the next day; there was nothing left of the Aircraft. We don't know what happened, or why, and there was no radio call.

After landing back at Quan Loi, Rick and I headed to the infirmary to check on the co-pilot. The medic there said he checked him out OK, and sent him to the Officers' Club for a stiff one. We went to the club and found him on his third Rum and Coke. He was still a little upset, but eager to hear from Rick about what happened.

Rick said, "The scout called receiving fire. I rolled in where the Willie Pete smoke was coming up from the jungle. While making my break, I noticed tracers coming in our direction. I must have pulled in too much torque, because the aircraft started to spin with a nose-low attitude. I immediately entered autorotation to stop the spin, and with full aft cyclic, guided the ship into the only clearing. Where we landed was a miracle. If that clearing had not been off my nose, we would have gone down in the trees." It truly was "one in a million!"

We continued our discussion about Rick's coolness and his ability to get the machine on the ground. Rick said that one of the emergencies we taught in flight school was landing without tail rotor control; but there was no procedure for landing without a tail rotor! He explained that the tail rotor is about 27 feet aft of the center of gravity, and it weighs approximately 90 pounds. I knew with this kind of balance change, plus the loss of anti-torque, Mr. Norman was in a bad position.

While in the Club, we heard the noise from the Chinook. We went outside to watch the drop-off of 202. After the Chinook departed, we headed to the aircraft for further inspection. The next day, representatives from Bell Helicopter and Army Maintenance came to investigate 202. It was decided that 202 would be put on a flat-bed and taken to Tan Son Nhut for flight to the States. I left country two months later and a year later went to Ft. Bliss, Texas for an A troop 3/17 Air Cav Reunion. While there, I got to see the new retro-fit that Bell Helicopter came up with to solve the tail rotor problem. They put the tail rotor on the opposite side and it rotated in the opposite direction. This was supposed to reduce the torque on the tail boom. The tail fin of the tail rotor, along with the 90 degree housing, was also strengthened. I always thought the AH-1G Pilots in Vietnam were just a group of test pilots, proving out the design flaws that the helicopter came with originally. What would be interesting to me is to find out what other problems were corrected during the evolution of the "Widow Maker". Thanks to Rick Norman, one of the major problems with the Cobra was discovered and many lives were saved.