Preparing for Combat in Vietnam By Phil Courts

As the US Army was preparing to enter the Vietnam War on a massive scale, Army Aviation was concurrently fielding new aircraft; developing new tactics and organizations and expanding the training of new army aviators. I'm sure there are hundreds of stories like mine below about those exciting and sometimes dangerous times when Army Aviation came of age.

I was assigned to the 228th Assault Support Helicopter Battalion at FT Benning, GA in January 1965. I had just completed 18 months of ground duty as an infantry company commander and was looking forward to qualifying in the army's newest cargo helicopter, the CH-47 Chinook. I also wanted to build some flying time and experience before the 228th deployed to Vietnam. At the time I had about 1500 flying hours in helicopters and 300 hours in fixed-wing aircraft. My last flying assignment had been as an instructor pilot in the UH-1A Huey at the Army Aviation School.

My new unit, the 228th had received the Army's first operational Chinooks in 1963-4. As part of the US Army's experimental 11th Air Assault Division, they participated in 2 years of extensive flying. At the completion of the tests they put all 48 Chinooks in the air for a 500-mile formation flight back to Ft. Benning. It was an impressive sight but the helicopters were tired and in need of extensive maintenance when I joined the 228th.

After completing an excellent, 30-day CH-47 ground school in Alabama I rejoined my unit in early February. I was more than ready to start flying but when I met my IP, Chief Warrant Officer (CWO) Clifford Max, he informed me that the aircraft maintenance situation would be a problem. He was right. In the month of February, I logged only 6.9 hours of the 25 needed for qualification. During that period, we would be assigned 2 or 3 helicopters for a flight because invariably a grounding condition would be found during preflight.

CWO Max was one of the most experienced IPs in the Army. He probably had more tandem rotor time than anyone on active duty. I was just the opposite. I had 105 hours in the H-21 (flying banana) before graduation from flight school in 1960 and hadn't been in one since. I mention this because single rotor helicopters require the use of the foot pedals to control the pitch of the tail rotor to offset torque when power is added or decreased. I don't recall having done any autorotations at this stage of my transition in the Chinook. But I did clearly remember the difficulty of doing 180 degree autorotations from traffic pattern altitude in the H-21. If you kept the helicopter in trim and rotor RPM in the green you could easily run out of altitude before completing the turn. The option some instructors taught was rapid deceleration to less than 20 knots, a 180-degree pedal turn to reverse direction of flight followed by a steep dive to regain airspeed and rotor RPM. This maneuver is a thing of beauty when done right but will scare the hell out of every one, even the pilot doing it.

On the morning of 4 March 1965 I met my instructor CWO Max at 0800 in flight operations. We discussed the weather and his plan for today's flight. The plan was a short 10-minute flight to McKenna Army Airfield where we would remain in the pattern working on normal approaches and takeoffs. As we left operations I noted the weather was as forecast, cold and clear with a strong, 20+ knot, westerly wind. Little did we know how important that wind would be later in the morning. The flight engineer, Specialist-5 John Sansing, and crew chief were at the helicopter when we arrived and except for our pre-flight, had things ready to go. Since we had plenty of time CWO Max decided to find out if I was paying attention in ground school. The preflight took at least 45 minutes and confirmed we had a flyable helicopter. As we started to board, the crew chief asked CWO Max if he could stay behind to catchup on paperwork? Max thought for a moment and said OK, but be here when we land at 1130. That decision saved the crew chief's life.

I was flying from the right seat as we took off and established a heading to McKenna Army Airfield. I leveled off at 1,000 feet AGL and 100 knots airspeed. CWO Max called McKenna tower and we were cleared to enter on a right downwind for runway 27. We were number 2 to land following another helicopter on long final. As we entered on downwind I was looking out my right window for the helicopter on final when the flight engineer sitting next to me in the jump seat calmly said "I think number 1 engine just failed". I looked back inside the cockpit thinking this must be the start of my first simulated single engine landing but what caught my attention was that almost every one of the lights on the warning light panel were on. The flight engineer, not so calmly this time said "We have a fire too." He then unbuckled his seat belt, said I'll check it out", unplugged his helmet cord and left. We never saw or heard from him again. Almost simultaneously the cockpit was filled with dense, brown, toxic smoke that smelled like burning hydraulic fluid; CWO Max said: "I've got the aircraft, tell the tower we've got a problem". Before I could call the tower the radios and intercom went out. By this time the smoke was so intense I couldn't see my instructor, the

instruments or the ground. In attempting to open my side window to get fresh air I jettisoned the emergency escape door. Best mistake I ever made.

When CWO Max saw what had happened he shouted "I still can't see, you've got the controls". I couldn't see the instruments but I was able to get my head outside of the door frame. Smoke was streaming out behind my back but I had clear view of the ground. What I saw was that we had lost several hundred feet of altitude, it felt like we still had power in the number 2 engine and we had drifted closer to the runway. I could only guess at our airspeed but the ground speed confirmed we had a strong tailwind. I had no idea where the helicopter on final was. This is where previous training and a lot of luck took over.

I pulled the cyclic back, slowly lowered the collective. That gained us several hundred feet. At the top of the climb, when the airspeed "felt" slow enough I was able to execute a 180-degree pedal turn.

Now we were set-up for a normal straight in autorotation. Only there was nothing normal about it. We were on fire. The pilot of the helicopter that we cut off on final later said there were flames 100 feet behind us. At this point my only thought was get on the ground fast. I pushed the cyclic forward and bottomed the collective. Our rate of decent seemed much too fast, but then I'd never done an autorotation with my head out the window and no reference to the instruments. At what looked like a hundred feet I started slowing with aft cyclic and pulling initial pitch. This ended my contribution to the landing. The 20+ knot head wind was really helping slow our ground speed. What I didn't know is that this is when the aft rotor and transmission left the helicopter. The lift in the front rotor caused us to pitch straight up and then settle almost vertical, much like a failed rocket settles on the launch pad. I'm convinced landing tail first, allowing the fuselage to cushion our vertical drop, saved us in the cockpit. When we hit the ground the helicopter initially rolled onto the right side. Then the still turning front rotor violently dug into the ground causing the fuselage to roll to the left, coming to rest on the left side. I sat there stunned for a couple of seconds. It was silent at first, then I became aware of an increasing roar of the fuel tanks starting to burn. I unfastened my shoulder harness and rolled out the escape hatch onto the ground. I ran for about 50 feet before stopping and turning around. I then realized that Max and Sansing must still be in the helicopter. I could hear the siren of the crash rescue vehicle as I started back to the helicopter. The strong wind was keeping the fire aft of the cockpit bulkhead and I could see Max slumped over the controls and not moving. I was able to get his emergency door open and seat belt unfastened but couldn't pull him out because his feet were tangled in the foot

pedals. Finally, after what seemed like minutes but was probably only seconds his feet broke free and I was able drag him away and upwind from the fire. About this time the crash-rescue crew arrived and started putting foam on the fire. I told them Sansing was in the rear of the cargo area when we crashed and that I doubted he survived the crash. That is where they found his body after the fire was extinguished.

John Sansing's instant response to leave his station to find the source of the smoke was truly a selfless act. Had he remained in his jump seat I believe he would have survived the crash since we hit the ground with very little forward speed. I always wondered if he was attempting to open the rear ramp to dissipate the smoke? Since the time from "we have a fire" to the crash was no more than 20 seconds there really was little that could be done other than get on the ground.

As a result of this accident all Chinooks were grounded for several months. The cause was determined to be the failure of the 90-degree gearbox. This gearbox is attached to the front of each turbine engine and transfers power to the combining gearbox inside the fuselage. The parts from the failed gearbox went into the number 1 engine causing it to fail sending turbine blades into the aft pylon severing several 3000 psi hydraulic lines. In other words, the aft pylon became a blow torch weakening the aft transmission mounts causing the aft rotor system to leave the aircraft just prior to impact. Probably when I pulled initial pitch.

CWO Max regained conscious in the medevac helicopter on the way to the hospital. After several weeks in the hospital he returned to flight status and would spend a tour in Vietnam flying Chinooks.

I was not injured in the crash but did have a clear imprint of my shoulder harness on my chest for several weeks. I never did finish my Chinook qualification. At my request I was reassigned to an assault helicopter unit where I served as an instructor in UH-1D Huey. Nothing I experienced in my two tours and over 1050 flying hours in Vietnam came close to my first and last autorotation in a Chinook. To be fair, the first production CH-47 Chinooks, like most new aircraft, had some problems, but they were resolved. The Chinook has been for some 50 years now, a safe, reliable and very capable helicopter for the US Army.

The following pictures are from the crash.

Phil Courts DuPont, WA















Ben.my Airian Dies, 2 Hurt in **Copter Crash**

COLUMBUS, Ga. (P-A CH47 Chinook helicopter of the 11th Air Assault Division crashed and burned here Thursday, kill-ing the crew chief and injuring the pilot and co-pilot. Spec. 5-C John Sansing of Co-lumbus was pronounced dead on arrival at the army hospital here

here.

Officials identified the injured as Capt. Phillip E. Courts, pilot, and CWO Clifford Max, co-pilot. Both are being treated at Martin Army Hospital.

The crash occurred at Ft. Benning's McKenna Army airfield. Spokesmen said the aircraft crashed and burned on a routine training flight.