

Kenneth Dale Johnson



1/07/2015

National Transportation Safety Board

Attn: Christopher A. Hart

490 L'Enfant Plaza East, S.W.

Washington, D.C. 20594

Dear Mr. Hart:

I am writing to petition for further investigation of the NTSB's Final Report WPR12GA106. I am deeply concerned that not all areas of concerns were considered in this investigation. First, I thought that as being the pilot involved in this accident, I would have had been given the opportunity to give more input that may have helped define the cause of the accident. I did talk, post accident, with your investigator Mr. Mike Huhn and he informed me that I would be contacted when the Factual Report was issued.

There are three items that I have questions and concerns with their possible involvement in the loss of control I experienced that day. But before we investigate those items I would like to give you my background experience in the Bell 407 and other Bell products. With over 23,000 first pilot hours in helicopters and the majority of that time in Bell products for which I have personally experienced Loss of Tail Rotor Effectiveness (LTE). Bell versions prior to the Bell 407 were inherent to having LTE. Those models included OH-58A,B, BH206B2,3,L1,2,3, and L4 with the small tail rotor all of which I have hours of experience in. Those experiences in above named models were involved in utility work, hot and high altitude's (6,000 to 14,000 feet) at high gross weight operations of which I personally avoided LTE. When correctly indentifying the onset of LTE the escape is possible. At the onset, you experience a full left pedal indication and a slow right turn which if allowed to continue to turn will increase in speed to the point of no recovery. In my accident, the aircraft made a uncontrolled left turn to about 25 degrees of which I was able to stop but unable to initiate forward cyclic as the aircraft snapped into a rapid right spin (a spin that I was unable to tell where we were in space other than a indication of sky and ground). In addition to that situation there was very little wind if any at all that day. The effectiveness and enhanced performance was greatly improved when Bell introduced the Bell 206L4 with the High Altitude Tail Rotor System which was also introduced as a standard option on the Bell 407. I have at least 5,000 or more hours in the L4's and 407's with that tail rotor system in high and hot operations with high gross weight's and wind conditions of 10 to 20 knots or more at the tail with know indication or loss of control. In the spring of 2012 after my recovery from my injuries, I was able to regain my medical certificate and return to work. Upon my return, I was able to attend a Bell 407 Factory Course that the company I was working for was holding. After two days of classroom attendance, I asked the instructor (a Check and Test Pilot) if he would stay after and discuss questions I had. We went through the accident step by step on the white board. Half way through the discussion he told me that off the record, some people at Bell had been discussing what had happened and were all questioning the reasoning behind the loss of control knowing of that tail rotor's greatly improved effectiveness and enhanced performance.

The first item of concern I had was: Did I have a hard over that could have been caused by air entering the tail rotor hydraulic servo. I have discounted the servo as I am sure I would have noticed a full tail rotor pedal deflection. The second

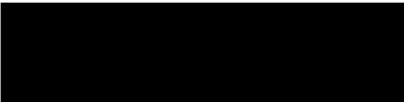
item of focus were the tail rotor blades. After my return to work in the spring, I was able to look at photos of the aircraft. After looking at those photos, I noticed that one of the tail rotor blades was pretty much undamaged while the other was delaminated with small rippling on the leading edge of the blade. Was it a possibility that the blade had delaminated in flight leading to the loss of control? The third item, was brought up to me by a good friend with lots of experience in the industry. Gary Brennan, Inspector Pilot for the Office of Aircraft Services based in Boise Idaho talked to me, at length, about the accident and told me of three other incidents involving Bell 407s and unexplainable loss of control of the tail rotor. His suspicions are that the tail rotor control limiting system inadvertently reduced the tail rotor pitch at a hover causing the loss of control and inconsistency in the left turn then right spin of the aircraft in my accident. In the late 1990s after introducing the Bell 407 there were several accidents involving 407s that were later connected to the tail rotor on the 407. It was discovered that the tail rotor blade could flex and make contact with the aircraft's tailboom. If at high speed, the tail rotor pedals were deflected fully, one way or the other, the blade could make contact with the tailboom which is a semimonocock design which would lead to the collapse and loss of the tailboom. To resolve the problem Bell added a tail rotor limiting system that at approximately 50 knots would take about 40 percent of the authority away and then give that authority back as you decreased airspeed below 50 knots. Given this information, it makes a lot of sense to me that if the limiting system had malfunctioned, it surely could have been the cause of my accident.

I hope that you will take this request as serious as I do! If whatever happened to me, happened again to another pilot when could have been avoided would be unacceptable.

If needed, I can provide to you a long list of fellow pilots and clients I have flown with that can attest to my experience and piloting skills.

I thank you for your interest and help with this request. Please feel free to contact me if you have any questions or needs of additional information.

Sincerely,



Kenneth Dale Johnson,
Commercial Helicopter Pilot
Certificate Number 