

Accident Report

On Saturday, April 16, 2016, I was flying a Bell 206BIII Jet Ranger (N326AC) for Sky River Helicopters. We were doing powerline inspections at a site about 1 mile north of KBWI on the 311 radial. This was our third day of inspections in this area and we were just beginning our second flight of the day.

After filing my flight plan (via ForeFlight), checking the briefing, checking the KMTN and KBWI TAF and METAR, and having a briefing session with the team, we took off for our mission. We had a cameraman, a lineman, and myself aboard along with some camera equipment, 20lbs of stuff in the baggage compartment, and 75 gallons of fuel. Our mission was to begin at the above mentioned location and work our way south along the powerlines with possible refueling at KFME if needed. We lifted off at 12:25 est from KMTN, climbed to 1000' and proceeded west to the edge of KBWI's airspace where we orbited for several minutes waiting for clearance into bravo. Once cleared we proceeded to the northwest corner of the airport and orbited for several minutes waiting to cross the centerlines of the active runways.

During both of these delays I made note of available wind indicators, monitored BWI's ATIS, and the direction and path of incoming traffic. All indications gave a wind direction of ESE (forgive me if I forget the actual bearing of wind direction) and a wind speed of 6-8kts. I set the heading bug to the expected wind direction and once cleared, proceeded to the first target.

Having left off at this target at the completion of the first flight of the day, I was familiar with the location. I was aware of it being on the lee side of a gentle rise that had some structures on it (the Lockheed Martin plant), I was familiar with the location of possible obstructions, and I felt confident in my knowledge of what winds to expect after descending.

Upon arriving at the first target (the third power pole north of a road that intersected the train tracks, just south of the train station, at approximately 12:50) I reported being on station to KBWI tower and descended to 500' msl, made a high reconnaissance orbit to check the location and height of obstructions and to look for wind indicators closer to the site. Satisfied, I began a slow descent from the north to a location 2+ rotor-widths away from the powerlines, southeast of the pole on a 45° angle, about 30'-40' above the height of the wires (approx. 200' msl). Upon approaching the desired altitude and location I noted that torque was at 95+%, I had a lot of left pedal in, and we were still sinking. It didn't feel good so I initiated a go-around and looked for more wind indicators. Again, we were on the lee side of a rise and the wind had picked up a little since our earlier flight. There was probably a shift in wind direction at lower altitudes due to the rise, trees, and obstructions up wind.

On my second observation lap I noted a plastic bag blowing up the tracks in a northerly direction (far enough away and headed toward me so not likely as a result of my rotorwash) so I made my second approach more to the SE. Upon arriving again at the desired location and altitude I arrested my descent, established a hover, noted 85-90% torque and a reasonable amount of left pedal travel required to feel safe. I then applied slight pressure to the left pedal

to creep the nose left (so the camera man could properly see the target), the aircraft slowly yawed left (about 5° or so) and then began an uncommanded right yaw indicating the onset of ~~TEFL~~ ^{LTEFL}. I initiated slight forward cyclic to begin to fly out of it and slightly lowered collective to reduce torque. Due to our uncommanded yaw and the loss of altitude from the slight lowering of collective, this was bringing us closer to the wires so initially I added slight left cyclic. The aircraft continued to rotate so as the nose cleared (was no longer pointing at) the wires I initiated forward right cyclic (again, trying to fly the rotor disc away from the wires) and continued to milk the collective. Lowering the collective would allow me to slow the rotation and begin to fly out of it, but the loss of altitude would be too great and I would have to add more collective to stay out of the trees.

On our third or fourth rotation our flight path was threatening to put us into the wires so I decided to add significant collective (over torquing the engine and accelerating the spin, but buying us the altitude with which to clear the wires hopefully regain control). Our flight at this point brought us over the wires and to the north side of the railroad tracks. As I continued to attempt to regain control of the aircraft, I kept pushing the helicopter towards the most open spot I could see (away from the wires). After several seconds I began to slow the spin and establish a bit of forward-ish flight. The rotation finally was coming under control but having again reduced collective to remove torque we were in a descent and approaching the tree tops. I added some collective to attempt to arrest the descent but adding much more collective would have initiated yet another spin.

The helicopter was not yawing and creeping forward and I believed I had saved it when I heard the tail go into the trees and felt slight right yaw beginning again. We were also still in a slight descent so the main rotors were going to be in the trees momentarily so I applied aft cyclic in hopes of getting the ship to land aft low and wondered what a broken back was going to feel like.

As hoped, the aircraft descended through the trees nose high with little to no rotation. Once everything stopped moving I yelled "Get out" and watched my lineman climb out through the window. My first attempt to get out was hampered by my seatbelt. As I removed my seatbelt, I heard a cracking noise, then heard Josh (my photographer) off to my right rear say "get back, it's on fire". As I made a second attempt to get out, Josh and my lineman met forward and right of the helicopter and began to move quickly away. My left leg was still caught on something, but seeing that my crew was out and walking was a relief. My third attempt at extrication was successful and I quickly caught up with Josh and the lineman and made a quick assessment of their condition. I then looked back at the helicopter and noted that the wreckage was listing slightly to the left, the main rotor had separated and lying right of and parallel to the aircraft, and the aircraft was fully on fire.

The smell of jet-A was strong and we were in a lot of brush so we distanced ourselves from the aircraft. We circled around the wreckage clockwise to the east, then south and began moving south down the tracks toward the access road. Shortly after arriving at the railroad tracks, we

were met by an off duty police officer and two bystanders. Shortly thereafter police, fire, and emergency crews arrived. I will defer to their statements and reports from this point fourth.

Owen Garnett

[REDACTED]