

12/11/2022

R22 Beta II N14HT MSN:4040 (Built 2006)

PIC / Instructor: Prem Pakabunto Certificate: [REDACTED]

Student: Mark Shikowitz Certificate:

Startup Fuel: 15 US Gallons

Startup Time: Approximately 1630Z (11:30 EST) Accident approx. 50 mins after startup

N14HT based out of Republic Airport, started up on the Charlie Ramp, close by G3 taxiway. Crew got ATIS echo on startup and called Republic Ground for to taxi to G3 for a south east departure, ground gave the taxi clearance. The windsock shows wind direction around 090-100 magnetic, so we decided to takeoff to the south parallel to 19 due to less obstacles and no landing/departing traffic. On climbout past approximately 300 feet above mean sea level, turned to heading east to avoid overflying helicopter traffic landing at numbers of Runway 32, then turned south east, visually aiming for Bergen Point Golf Course.

Approaching shoreline, turned right towards Cedar Island to practice quick stop maneuvers. We continued to monitor the Republic Tower frequency on 118.800 MHz in case of traffic on right base to Runway 1 or traffic coming into Runway 32.

We judged the wind was coming from the east and turned west to enter a downwind for a left traffic pattern to Cedar Island. Ground speed increases on turn downwind, confirming winds are approximately from 090 magnetic in the area.

Made an approach to a hover over Cedar Island and proceeded with 2 quick-stops facing east along the marsh.

After quick-stops, we took off to the east and did another left pattern to Cedar Island to do a straight in autorotation to a hover from 600 feet above mean sea level indicated.

Student used proper cyclic and pedal input to maintain the target 65 knots indicated air speed in the autorotation but is overcorrecting collective for target RPM initially, RPM stabilized by 300 feet above mean sea level indicated.

Took off for another left traffic pattern to Cedar Island for another autorotation. Student uses smaller collective correction, improving RPM control and terminates maneuver in a hover. Repeated 1 more pattern with straight in autorotation and then took off to overfly Fox Island to survey the spot and prepare for landing there for hover work. After overflying Fox Island, to the East, we made a left traffic pattern to set up for landing on Fox Island. Winds are confirmed to be steady from the East, approximately 15 knots.

The time since startup when turning to final approach for Fox Island was 45 minutes reading from the stopwatch on the instructor's watch.

Student terminates the approach in a hover and then sets down on a sandy patch on Fox Island. Then he, picks up to hover taxi to another sandy patch to practice power failures in a hover. After setting down on the new spot and determining proper surface flatness, firmness and wind condition, student picks up to a hover to practice power failures in a hover. The student hovers at approximately 3ft above ground level, heading approximately East, and then smoothly rolls off throttle and uses pedals to maintain heading within 10 degrees and the helicopter settles on the spot.

Instructor compliments the pedal and cyclic coordination and recommends using some more collective to cushion the touchdown.

Instructor rolls throttle back up and lets governor control throttle and picks up into a hover to demonstrate one power failure in a hover. Instructor rolls off throttle, applies right pedal and cyclic and uses more collective just before touchdown to cushion landing.

Student rolls throttle back up and lifts helicopter into a hover at approximately 3 feet above ground level.

From a stable hover, the student counts down from 3 to the initiation of his simulated power failure practice.

Student rolled throttle off and applied right pedal and cyclic, holding heading constant. At approximately 1-2 feet above ground level, a wind gust from the starboard side of the helicopter caused a left roll and left drift.

Instructor takes control and applies right cyclic to level the helicopter's attitude. The left bank was decreasing when the left skid impacted the ground with the helicopter drifting left. The helicopter started yawing right and started a rapid left roll. The instructor applied right cyclic and lowered collective. The left roll rate decreased, but the left bank angle continued to increase until the main rotor blades impacted the ground.

The helicopter continues a left roll and right yaw until coming to a rest on its port side on a southerly heading. Instructor glances to check student is ok and gets a verbal confirmation. Instructor reaches to switch the battery and alternator off, reaches behind to pull the fuel shutoff valve and then pulls the mixture to idle cutoff and turns the ignition key to off and removes it from the key slot.

Instructor looks for no signs of fire and unbuckles seatbelt, before assisting student in standing on the port door and unbuckling his seatbelt. Instructor reaches up to starboard door and opens the latch, looking out to confirm no signs of fire and climbs out, then assists student climbing out. Instructor grabs fire extinguisher from the helicopter, student and instructor grabs coats from storage compartment beneath the seats, then both proceed approximately 20 feet east of the helicopter to observe no signs of fire and danger.

The instructor calls the operator on the phone to inform of the accident and takes shelter from the wind chill with the student by some bushes. After several minutes, instructor proceeds to helicopter to confirm fuel valves, battery and alternator are actually off and retrieves own and student's headset and keyboards from the helicopter.

Some time later, a Suffolk Police Department helicopter arrives at the site and orbits the island several times before landing, student and instructor stands clear on the side, remaining visible and leaving staying clear of possible landing areas for the PD helicopter.

The Suffolk PD helicopter lands and shuts down, the instructor and student informs the pilot that all occupants are accounted for and uninjured and that no fires have been observed by the helicopter.

The PD pilot offered to ferry the accident helicopter's crew back to Republic Airport which they accepted. The PD pilot inspected the accident site to confirm the status of any fluid leaks or dangers on site.

The PD pilot, instructor and student took off shortly after from Fox Island on the Suffolk PD helicopter and flew back to Republic Airport. Instructor recalled being back at the Modern Aviation FBO at Republic Airport around approximately 1815Z (13:15 EST).