

Date:
29 August 2020

Aircraft:
AS350 D2 N160SH

Pilot:
Jonathan Larrivee U.S. CPL [REDACTED]

Location:
High Gold Drill Program - Johnson Creek Alaska Peninsula.

Atmospheric Conditions:
High broken-overcast cloud layer ~8.000 msl and clear below, no wind. Temperature ~ 6 DegC.

Started preflight at approx. 0625. Ryan the mechanic had already removed the M/R ties, T/R hub block and inlet cover.

I completed a full preflight with no discrepancies noted. I had taken a fuel sample from the main tank sump and the two in-line fuel filters and the fuel was clear of water and sediments. I had the Tanis pre-heating system and a heater in the cabin running for the night, un-plugged and removed cords.

I did not refuel the helicopter prior to flight that morning as I still had just under 40% (~55 U.S. Gal.) from the last flight the evening before, plenty to conduct the morning crew change flight (~8 minutes flight time return with 10 minutes at ground idle) and still be well above the 20% minimum fuel reserve.

Started Helicopter ~ 0648, Normal start and warm-up.

Took-off with four HyTech drillers onboard for crew change in the Johnson tract deposit. Dropped off two drillers at the lower drill pad, then the two drillers at the higher drill pad at the head of the valley, Once they were out and had their gear from the cargo basket, they gave me the 'All Clear' thumbs up and I lifted off and landed at a nice flat spot 1/3 mile away.

The HyTech top drill helipad is at ~2750 msl and is dug into the hillside, ~35 degree slope. The crews always get out on the aircraft left side and I leave as the track to the drill is out of the right and there is no safe way to get around the helicopter. Also the track goes up from the helipad to the drill above, so I never wait below to eliminate any risk of debris being kicked loose from above while the helicopter is on the pad.

Once I saw the drill night crew approaching the pad from the drill (~0712), I wound the machine back up to flight idle and lifted off to pick them up. As I approached the helipad (~25 feet away horizontally, very low forward airspeed, slightly above the level of the pad the engine flamed out. I immediately let the yaw to the right continue, and entered autorotation. I very quickly realised that I was not going to make the flatter terrain of the basin below ~ 500 feet below me, and began to try and pull the nose up slightly and pull in collective before contact was made with the terrain. I hit with the nose pointing downslope, and could feel the skids sliding downhill briefly before a skid caught a rock and rolled the helicopter over. The fuselage came to rest on it's side on a break of the slope ~ 300 feet below the helipad. It ended up right on site of the next intended pad for the drill which had some material set on it the day before.

Once the fuselage was at rest, I pulled the fuel cut-off to the off position. I then depressed the master electrical cut-off switch. I checked the ELT remote switch light which was not flashing. I then released my seatbelt, and departed the wreckage. About that time the two drillers that I was about to pick-up arrived on the scene. They yelled up that I was fine to the Driller at the rig to relay to

camp. There was some Jet-A streaming out of the filler neck of the tank, and some hydraulic fluid dripping off the head.

Soon it was apparent that there was no fire danger. I re-entered the cockpit, pulled the throttle off (confirmed it had been in the 'locked' and turned off at least some of the electrical switches. I also grabbed some of my personal belongings from under the seat.

The drillers waiting for me on the pad said when the engine flamed out there was simultaneously a big puff of white smoke out of the exhaust and then they could hear the alarms going off inside the machine. They said once it struck the ground and the skid caught it rolled 3 or 4 times before it came to rest.