


AirMed&Rescue

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A blue and white medical helicopter is the central focus of the cover. It is parked on a tarmac, and the scene is lit with the warm, golden light of a sunset or sunrise. The helicopter's main rotor blades are visible, and the cockpit area is clearly defined. The background shows a clear sky and some distant structures.

ITIC Global 2017

Barcelona conference report

Hurricane Harvey

Evacuating critically-ill neonates

Helijet Air Ambulance

Serving the citizens of British Columbia

Medevac advance in Ukraine

Armed conflict encourages development

Field notes from Belize

Touchdowns and take-offs on a Saturday afternoon



TJ Stewart flying for Wings of Hope in September 2017

Saturday afternoons in the fall have always been my favourite time of the year. Growing up in Ohio, US, as a huge football fan, it meant spending a few hours watching The Ohio State Buckeyes football team play. Last Saturday (30 September) was no different as I turned on the game at the pilots' apartment in Belize City, Belize. After a few quick touchdowns, I was feeling pretty good about our chances of winning – when the phone rang with a request for a flight to Dangriga to pick up a patient. My football addiction is often disturbed by calls dispatching me to fly, so this didn't come as a surprise. I was especially relieved that the patient was in Dangriga, as it is only a short flight, and I figured I could get back in time for the start of the second half. The flight medic arrived promptly, and we made a hasty departure out of the municipal airport in Belize City. Twenty minutes later, we arrived in Dangriga to meet our patient: a baby girl in respiratory distress. She was intubated and unconscious, although just starting to wake up as we loaded her into the airplane. The nurses from Dangriga and our flight medic worked diligently on the hot apron for almost an hour getting the baby girl stable enough to fly. Once I got the go-ahead from the medical professionals, I quickly loaded up the worried mother and took off toward Belize City. After levelling off at

1,500 ft above the Caribbean Sea, I heard the medic say the words that I dread the most: "TJ, the patient is crashing."

I have heard those words many times before, and I can see still the faces of the ones who did not survive the thousands of emergency flights I have performed. I prayed this sweet baby girl wasn't one of them. I figured the only thing that had changed externally for the patient was the altitude. So I quickly descended to a few hundred feet above the choppy sea and, after a few minutes, the baby stabilised and we safely arrived in Belize City. At the airport, we were met by our ground ambulance – which briskly took the baby and mother to the hospital.

After a few hours of cleaning, refuelling and restocking the medical supplies onboard the aircraft, I stopped by the hospital to check on the baby and mother. I found them in the paediatric ward. The baby was resting, but on a breathing machine. The mother was sitting on a plastic chair with her head in her hands, completely exhausted from the day's events. I spent a few minutes talking with her and got her a street burger from outside, after hearing she hadn't eaten all day.

As I exited the hospital with the sun setting and the 'short flight' ending after hours of fighting to keep the child alive and delivering her to a capable medical facility, I couldn't help but think: "I wonder if the Buckeyes won?" ▲

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TJ Stewart is the field director for Wings of Hope in Belize. He spends his days flying medical evacuation flights for the Belize Emergency Response Team.



Batteries are life

Three tips for maximising your drone battery life

If you've been flying for any length of time, you've probably noticed that one piece of equipment on your UAV is the literal lifeblood of the entire system: the batteries. Batteries may seem simple enough; you charge them, and then use the juice. Basic, right? In reality, properly maintaining your drone batteries can mean potentially hundreds of extra hours of flight time. That's why we've put together these three tips for maximising the life of your sUAS batteries.

Don't give 100%

It may seem counter-intuitive, but it's actually best for your batteries to store them as close to 50-per-cent charge as possible. Then, when you're ready to fly, charge them to 100 per cent and go. Of course, this isn't always possible, but it is ideal for maximising battery performance over the long term.

Don't turn up the heat...or the cold

Heat and freezing temperatures are the enemy of long-lasting batteries. That's why you always want to keep your batteries at a stable temperature when storing and transporting. A great insulated carrying case is an important investment as it will keep your batteries safe and at a stable temperature when sitting in a hot or cold environment.

Don't drain them

As a general rule, try to always keep your batteries above 20-per-cent charge. Here at Skyfire, we always ground our UAVs at around 25 per cent to ensure longer battery life, but the rule of thumb is 20 per cent. So, the recap: you should start flying with your batteries at 100 per cent, end your flight with them at about 20 per cent, and store them in a stable environment as close to 50-per-cent charge as possible. ⚠

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