Frozen with fear:

A Cessna 337 ditches at Baffin

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Sydney Morning Herald Arjun Ramachandran December 9, 2008

An Australian told today of how he thought he was going to die as he spent 18 freezing hours floating on a tiny sheet of ice in the Arctic after his plane crashlanded.

Oliver Edwards-Neil, 25, and his flying partner Troels Hansen, 45, from Sweden, were rescued earlier today (Australian time) by a fishing vessel after an air search was called off the night before.

Before being rescued, the pair survived -20 degree temperatures, threat of attack by polar bears, feelings of despair as search planes flew past without seeing them and the persistent fear the ice could give way beneath them.

Mr Edwards-Neil grew up in Sydney until the age of 15, but is now studying to be a pilot and working for an aviation company in Sweden.

In hospital with frostbite and various body aches, he told smh.com.au by phone how the ordeal began when the twin-engine Cessna Skymaster experienced engine trouble over northern Canada.

Mr Edwards-Neil and Mr Hansen were

flying the plane from the US to Sweden as part of a work mission.

Double engine failure

"We were flying over the north of Canada across a waterway when we had a double engine failure, which is pretty uncommon," he said from the hospital in Iqaluit, Canada. "We sent a distress signal and issued a mayday, and in five to seven minutes we were ditching in the water. "There were these little ice sheets everywhere, and we managed to ditch the plane next to one of those - an ice sheet about five by 10 metres. "As soon as we touched down in the water the plane started sinking like a rock.

"But one wing had rested itself on the ice sheet, the plane had bridged itself to the ice sheet and we managed to climb out onto that. "We were lucky to get out. By the time we got out, the water was up to the ceiling."

Moments later, the plane sank

Just moments after the pair clambered onto the small ice sheet, the plane sank. "So now we were on this ice sheet not having a clue if it would support our weight, hoping to death that it would. "We didn't have any survival gear, or rockets or flare guns because we didn't have time to get it out of the plane." The plane landed about 5pm on Sunday and the sun had set some hours earlier. "It was dark. But after a couple of hours we started seeing choppers and planes, flying back and forth and back and forth, and they eventually came near us.

Rescue plane couldn't see us

"But they just couldn't see us. At one point they flew about 30 metres from us ... we were shouting and screaming and waving our arms but they didn't see us." Search crews told Canadian paper *The Star Phoenix* that rescuers had been hampered by the darkness of the long Artic nights. The pair felt frustrated and their fears of being stranded in the Arctic wilderness intensified. "Once the choppers flew so close and didn't see us. After that I didn't even want to see the rescue plane any more - because it was totally pointless. They were not seeing us at all," Mr Edwards-Neil said. The air search was soon called off, and the pair became more conscious of the bleak surrounds. "After they stopped flying ... I guess it was midnight but we had no watch ... we were just trying to survive everything. "It was -20 degrees and we had these survival suits, which were fantastic and saved our life. "But I never thought I could freeze that much. I was shivering non-stop. "I was sure that I was not going to make it but my mate said 'You're going to get there.' "

Small words of support

Small words of support were crucial in the eight hours the pair spent stranded in the dark, but Mr Edwards-Neil said the two spoke little. "Not a lot, because we were out of energy because of the shivering and the cold. Where we needed to, we kept each other going and supported each other, and we tried to keep each other warm and sheltered each other from the wind ... like penguins." The pair were forced to stand because sitting on the freezing ice was not possible. In the dark, there was just eerie quiet. "It's so remote ... way up next to Greenland. It was just really quiet. Once the rescue choppers left, that was it. There was nothing." The pair did not see much Arctic wildlife, although were aware of the threats they faced.

Polar bears

"We saw a couple of seals in the morning ... apparently there are polar bears but thank God we didn't see them." The pair were also without any food or water for the entire 18 hours. "We just managed without it, we didn't have any time to take anything from the plane. "I took a lick of ice - I was hoping that somehow it would take the taste of salt away from my mouth, but it just wasn't my cup of tea." Eventually, the sun rose and the pair - aware there is little more than four hours of light in December - were spurred to action. "Daylight came and we said: 'This is our chance to be found.' "But half an hour later there were no rescue choppers, which was strange. We didn't know they'd called the search off. "We started to think about how to save ourselves. We knew we couldn't survive another night on the ice because there was no shelter. We were all frostbitten on both feet because we were standing non-stop on ice.

Hopping from ice sheets

"So we started to hop from one ice sheet to another to get to shore [which they could see in the distance]." Half an hour later, a fishing vessel - the Atlantic Enterprise - rescued the pair as they were walking on the ice. "They were crying and all that. They were happy to see the boat," captain Bo Mortensen told local media. "They looked good. They were in good shape. They were a little bit frostbitten on the feet, but they were in good shape." The Atlantic Enterprise was reportedly fishing for shrimp when it received the mayday call at 5pm on Sunday. "They were 180 miles away, so they just set the throttle to max and were going until the next day to find us, even though the others called it off," Mr Edwards-Neil said.

Comment from Doug Ritter - www.equipped.org

Two pilots flying a Cessna 337 to Sweden from Canada survived a harrowing 18-hour ordeal recently after they ditched in frigid waters south of Baffin Island, Canada and climbed onto an ice floe. They have received a great deal of well-deserved credit in the general media for surviving and not giving up.

The more we find out about their experience, the more it seems that they survived despite make some very basic preparation mistakes, so there are some critical lessons to be learned, or perhaps reinforced, from this event. Of course, any conclusions drawn here are based only on the limited information we have so far from these media reports and interviews, and their accuracy is always a bit suspect. Some inconsistencies are obvious, but even so, the lessons are there to be learned. I apologize if I have jumped to any incorrect conclusions based on these reports.

NOTE: Here on ETS we have a <u>great deal of information about ditching and water survival</u> <u>equipment</u> including an article "Surviving A Splashdown" and others. Recommended reading for anyone who might have to deal with a ditching scenario.

In my opinion, the most important lesson to take away from this, at least with regards survival preparations, is that, as I often say, if it isn't with you, it cannot save you^{TM} . These pilots escaped their aircraft with nothing except their survival suits.

It isn't entirely clear what specific survival and signaling equipment they carried in the aircraft, beyond comments that they didn't get their raft or any survival equipment out. Nor do we know the quality of the gear. However, that none of it was attached to their person is pretty clear. It also isn't yet known why they weren't able to retrieve their raft or any other survival equipment, but that failure alone damn near cost them their lives and certainly contributed to their frostbite injuries from a delayed rescue.

The following quotes from one of the survivors, 25-year-old Oliver Edwards-Neil, sheds some light on the futility of their situation not long after they survived the initial ditching:

"It was dark. But after a couple of hours we started seeing choppers and planes, flying back and forth and back and forth, and they eventually came near us. "But they just couldn't see us. At one point they flew about 30 metres (sic) from us ... we were shouting and screaming and waving our arms but they didn't see us." "Once the choppers flew so close and didn't see us. After that I didn't even want to see the rescue plane any more – because it was totally pointless. They were not seeing us at all,"

Sometimes being lucky is better than being prepared (but you cannot plan on being lucky). Although they didn't have a 406 MHz PLB, or even the less robust SPOT Satellite Messenger (if

might have survived the dunking, possibly), with them to provide a distress alert and location, and the Cessna's ELT went down with the plane, they did get out a timely Mayday call with an accurate GPS location and heading.

That gave the Rescue Coordination Center in Halifax enough information to get Search and Rescue aircraft into the area. To a certain extent, they were lucky to have gotten the mayday call heard in such a relatively remote area, a PLB would have provided a more robust and reliable means of distress alerting and location, particularly one with GPS. There's just no excuse not to carry a PLB on one's person, even more so on a flight such as this. But, once they have a location, SAR still have to actually locate you and at night that is especially difficult if you cannot signal them somehow, as these survivors discovered to their chagrin.

Whether or not Edwards-Neil's distance estimate is accurate, obviously the SAR aircraft were very close and there's no question that even the most basic nighttime signaling devices would likely have cut short their ordeal. The SAR resources arrived in short order and they would have been rescued if only they could have signaled them. A laser flare or even a modestly bright flashlight would have made a world of difference. Even a simple locator light or strobe light attached to their survival suit would likely have done it. And, while I am no fan of them, even pyrotechnic flares would have likely resulted in their being noticed that night. Heck, for that matter, the sparks from the Spark-Lite fire starter in one of my Pocket Survival Paks might well have been visible, particularly if the searchers had night vision equipment.

Upping the ante, they should have had a handheld VHF transceiver in the aircraft, the majority of pilots carry one as back-up and for ground communications, but they aren't waterproof. If they had placed it in a waterproof pouch, and taken it with them when they egressed, they would have been able to communicate with the search aircraft. As it was, the aerial search was called off, at least for the night, and they were damn lucky to be rescued the next day by a commercial vessel.

As a side note, "shouting and screaming" at search aircraft is an utterly pointless exercise that only serves to waste precious energy. There's no question that this is a reflexive reaction, but better to keep your wits about you and conserve your limited resources. They can't hear you. At night, they also probably cannot see you waving. In any normal ditching, if properly prepared and trained, it isn't really all that difficult to get survival equipment out of the aircraft, even assuming it's sinking and filled with water. That assumes both proper training and preparations and that you do the right things without panic. So, what happened after they ditched?

From one of the articles, "Edwards-Neil said he braced for impact by holding his door open, ready to get out of the plane before it sank. The windshield smashed on impact, and forced his door shut, but he managed to stick his head far enough out of the window and smash the glass with his back. The water was to the roof in five seconds, he said." This doesn't make a lot of sense as written, as the windscreen caving in should not have affected the door at all, but I think I can guess what may have really happened, or at least use this to make my point. It is impossible to "hold" the door open in a ditching of a high-wing aircraft like this Cessna. It can be difficult, at best, on any aircraft. There is simply too much water flowing past. I and all the ditching instructors I know teach that you jettison the door(s) (on those few aircraft that provide for that) or you either block the door open with something (a book of approach plates is often a readily available choice) or lock it open (on those aircraft that allow for this).

This ensures the door cannot be wedged shut by the airframe being twisted. Assuming the quote is close to correct, this suggests that either he didn't listen closely in class, or he hadn't received good instruction (or never attended class nor read any good ditching information), or, perhaps, he panicked and simply forgot what he was taught, a common side effect of panic.

However, that's only step one. Assuming a well-executed ditching in a high-wing aircraft, such as this Cessna, or if your low-wing aircraft flips, another thing you are taught is that you cannot open the door until the water pressure equalizes. Nobody is that strong, not even Arnold. That is one of the potential drawbacks of a high-wing aircraft in a ditching. Unless it flips over just right (and don't bet your life on that), you are not going to just open the door and step out onto the wing, as is often the case with a low-wing aircraft after the ditching. You have to either be patient and wait for the water to come in before you exit, underwater possibly, or, if there's time and you are small enough, perhaps go out through a window before the water rises that high, a poor alternative.

For whatever the reason, again the same possibilities exist, he chose the window. That's a tight fit at best, more so if you're wearing a bulky survival suit. That likely contributed to the reason why he didn't take any survival equipment with him.

I could go on at length about this, but other matters are pressing. The fact that these pilots survived proves only that they are lucky and that the old saw about never giving up will often be the difference between life and death. Bottom line take away from this incident is simple. If you are going to attempt risky endeavors such as flying the North Atlantic, make sure you are well trained for potential survival situations (which helps reduce panic and poor decisions in the midst of the emergency) and are well equipped with the right survival gear, carried in a manner that it might actually be available if needed. Remember, if it isn't with you, it cannot save you.

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