

// In September 2020, Matt Rogatski (left) and Heath Bagnall (right) were awarded the Royal Humane Society of New Zealand Silver Medal award for courage by the Governor-General Dame Patsy Reedy.

When two jet boat occupants were thrown into a fast-flowing river, ag pilot Heath Bagnall and his crewman Matt Rogatski leapt into lifesaving action. Despite the adrenalin rush, they never lost sight of what it meant to operate safely.

In late September 2020, the Governor-General, Dame Patsy Reddy, pinned a courage medal on the chests of Ahaura Helicopters pilot Heath Bagnall and crewman Matt Rogatski.

The New Zealand Police nominated the two men for the Royal Humane Society award after they rescued a man from the fast-flowing Taramakau River, near Kumara, in May 2019.

They also tried to save a second man.

Heath – who has 8000 hours' flying experience – said he and Matt were on a weed spraying operation on 17 May last year, when Matt heard a bang and the engine stop of a jet boat that had been joyriding the Taramakau River for about an hour.

He radioed Heath, about five kilometres away, and told him he'd better come back should they be needed. "About 10 seconds later," says Heath, "Matt called me again and said he could see two guys in the river, without lifejackets, and I should get back as soon as I could."

Heath jettisoned chemicals and water over some gorse to lighten the R44 and headed back to the load site on the banks of the river.

Matt, who'd already organised two empty fuel cans as makeshift flotation devices, climbed aboard just as the first man – about 80 metres ahead of the second – was being swept by in the dirty, swollen and fast-moving water – too fast for the men to swim to the bank.

"So we hovered up over this guy," says Heath, "and were flying backwards to keep the helicopter into wind. The reverse flow also held the passenger door open.

"We were matching his speed – I'm guessing about 10 knots. » // I had to slow things down in my mind and constantly assess the risks of where we were and if we were safe. At the end of the day you're the pilot in control. If you can help, you help, but you don't just bore in there.

// The Taramakau River about a year after the May 2019 tragedy. The William Stewart Bridge is in the background and Heath and Matt's load site is on the bank on the right. "The river didn't look like this at that time," says Heath. "It was dirty and swollen with recent heavy rain and snow melt". "Matt got out onto the skid and threw out the first fuel can."

The two men had been in the cold water for a few minutes by then.

"We found out later this guy's name was Dan and he was just too weak and tired to grab the can. So Matt threw out the second one but Dan just couldn't get his arms out of the water."

So Matt climbed down and sat on the skid, and Heath lowered the helicopter so Matt's legs were in the water. Matt tried to grab Dan's shirt, and Dan was trying to grab Matt's leg.

"And then he just went under," says Heath. "I was in a pedal turn (hovering turn) looking out the passenger's door, and I saw him porpoise up but then he disappeared again. After he didn't resurface after about 20 seconds, we knew we couldn't do anything more for him."

The two men then had to make a most difficult decision. If they didn't now go to the second man, they may lose him too.

They hovered over to where he was furiously dog-paddling and struggling in the current.

"Again, we matched his speed flying backwards down the river. Matt was on the skid, hanging on to the fuselage, his legs in the water. But this time he managed to grab the guy and hold on to him."

Heath couldn't simply pick both men up out of the water and fly to the bank because of the likely impact on the helicopter's centre of gravity.

"The aircraft couldn't have handled it – too much forward weight. Matt wouldn't have been able to hang on to him in the flow either.

"I left them half-submerged and I just worked my way slowly to the bank. "Matt and I were communicating the whole time. Every 10 seconds I was calling to Matt, 'you all right?' and he was looking right at me and calling back, 'yeah!'

"We've worked together for 12 years and I could look at him and we'd know what each was thinking, but we were still really vocal that day.

"I was making sure he got the message. I wasn't just assuming. I'd look at him in the eye, and make sure he understood and that he looked back at me and responded.

"He's a commercial pilot too and well aware of the forward load factors at play, so I knew that if I'd said, 'drop him', or 'I'm running out of CG', he would have dropped the guy, no questions asked.

"Tough call but we couldn't risk three lives to save one."

Heath was also worried about becoming disoriented by constantly staring at the water rushing backwards at 10 knots, so repeatedly turned his gaze to the riverbank, to give him perspective.

It was an exacting few minutes of flying.

"It was sort of a cycle. I'm looking at Matt, 'you ok, you ok?' Then I'm looking forwards to keep a visual reference on how close I am to the surface of the water and with the bank I'm working towards. Then I'm looking at the bank so I don't get disoriented, then I'm looking out my left side to check Matt again, then I'm looking right back over my shoulder at the tail rotor, to make sure it doesn't contact anything.

"And there's a big bluff coming up in about 150 metres.

"I *had* to get them out by then, because it would have been another kilometre before we had a place to drag the man ashore."

They did make it to the bank, lowering the man onto solid ground. Heath hovered back and up, safely out of the way. A third man, one of the boaties' mates, pulled the man further from the water.

The police arrived. Heath and Matt removed the spray booms and the passenger door and took off to try to find Dan's body, with a police officer in the back seat.

Heath was talking with multiple agencies and decided it was too much distraction. "So I told the rescue chopper, 'can't talk to you'. I said to the control centre, 'got people on board, I gotta go'.

In the end they were unsuccessful in finding Dan's body which was finally located on a beach some weeks later. Although the 'mission' could have induced Heath and Matt to forget safety for a few minutes, Heath says they were quite methodical.

"I even got Matt to shut the dump doors before we first took off. I didn't want any chemical residue in the water. I thought back later, 'why the hell did I remember to do that?'

"But we had to keep quite systematic and not get all caught up in the moment.

"I had to slow things down in my mind and constantly assess the risks of where we were and if we were safe. At the end of the day you're the pilot in control. If you can help, you help, but you don't just bore in there.

"We did it, but it wasn't at all cost. We were in full control."

Heath thinks it was all over in five or six minutes, although they searched for Dan's body for an hour.

"It was good to use the helicopter to save a life. We had to file a Section 13a<sup>1</sup> on the basis we'd had an unrestrained person outside of the aircraft. But I'd assessed the risk of that and felt it was still safe because we've done hundreds of hours of hover entry/exit training and operations over the years."

CAA's human factors specialist, Matt Harris, says the thought of saving someone's life can lead a pilot to take more risks or 'push the limits'.

"And, of course, the danger is that you're now operating with limited or no safety margins.

"But Heath said he slowed things down to keep quite systematic and 'not get all caught up in the moment'.

"This is an example of threat and error management in practice," says Matt. "Heath identified each threat, maintained his situational awareness and continually reviewed his decisions and actions, to manage the situation and ensure the safety of the aircraft and all on board."

Heath says it was hard, originally, not to dwell on their unsuccessful attempt to rescue Dan. "But I realised that if we'd persisted in trying to get him, they could have both been dead."

Heath says it was certainly difficult flying and he wouldn't have done it 10 years ago.

"I wouldn't have had the skills. I would have been gutted I couldn't do it, but I just wouldn't have even tried."

<sup>1</sup> A 13a form – which is submitted to the CAA – gives a pilot the 'capacity' to breach a rule. The breach can be only during an emergency when life or property is in danger and there are "no other reasonable means of alleviating, avoiding or assisting with the emergency". The pilot has to be qualified and current, and the machine airworthy. While no breach of the civil aviation rules is to be encouraged or endorsed, in this case, the submitting of the 13a form was justified, because all the criteria for the CAA to accept one were met.