Learning from Kaikoura

The magnitude 7.8 earthquake just after midnight on 14 November 2016 took everyone by surprise, including the aviation industry. All of a sudden, a small seaside town was inundated with unprecedented air traffic, and everyone with a machine wanted to help. If there is another Kaikoura – what should you be aware of?

ir operations played a major role in evacuating people from the cut-off town, getting people in there, as well as much needed supplies.

Murray Hamilton manages Air Kaikoura and is a member of the Kaikoura Aero Club.

"All my staff basically gathered at my house about 12:30 that night. We knew that we were going to be inundated.

"We woke up about 6 am that Monday and drove out to the airport to discover that the runway was 100 per cent intact – that was a godsend really."

CAA Aviation Safety Adviser, Carlton Campbell, flew into Kaikoura a few days later and met with the manager of air operations, Airways staff, the council, and the RNZAF.

He also met that day with as many operators in the area as possible.

"My overall impression was of a huge number of people doing an amazing job under trying conditions, demonstrating the best characteristics of human nature. "But because everyone was sort of swarming in to help, there was the potential for safety to be compromised.

"The area was flooded with good Samaritan traffic, both private and commercial, some summoned by authorities, others arriving with supplies and making themselves available. Some established contact with authorities, others just came and went on an ad hoc basis."

All pilots need to be aware of the provisions in s13A of the Civil Aviation Act 1990. Unless there is an immediate threat to life or property, non-certificated operators cannot carry out operations that require certification.

Fatigue Management

What some people were dealing with on the home front worsened their fatigue, Carlton says.

"I met some very tired people, understandably so given most had experienced the quake themselves, but they had also been working long hours dealing with the emergency."

> Air Kaikoura pilot Shannon Surridge (left), and Tim Johnson. Photo courtesy of Andrew Spencer.

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He says the bad weather that paused flying on the fourth day was a blessing in disguise.

"Everybody under the pressure of an emergency dives in to do beyond the norm, and suddenly when they stop, they realise 'we're stuffed, we're tired'.

"It made them sit up and take note this wasn't going to be over in a couple of days, they needed to manage the flight and duty times of their people.

"The operators I talked to were starting to establish much better routines of giving people at least a full day off, ideally two days, to manage that."

Fuel

Think about what the fuel situation is like in the area you are flying into and make suitable arrangements.

Carlton says it was a major challenge, especially when helicopters were being used extensively.

"Apart from what the military managed to cart in themselves via the inland road, there was no access to fuel because Kaikoura itself didn't have any Jet A-1 in the area.

"Helicopters were going backwards and forwards from Christchurch, which started to push the extremities in their fuel endurance."

Ground Operations

Landing your aircraft in a disaster-hit area might be more complicated than usual.

Carlton visited about half a dozen temporary helicopter landing areas and says there wasn't always sufficient ground support.

"Initially, landing zone security and crowd control was limited until some larger operators and the RNZAF provided ground support.

"For example, helicopters turning up from all over the country with just a pilot and a machine full of stuff, but nobody to be their ground support in terms of third party public control."

Murray Hamilton says their biggest headache was the 1500 or so tourists.

"They all had very big bags, and suitcases, we had to take that into account when loading.

"There were also lots of people who had never been around aeroplanes in their lives. I think we had up to 40 aircraft here on the ground at one stage.

"I suspect we could have done it a little bit better, managing people coming and going through gates, co-ordinating the unloading of aeroplanes. But in all fairness it was pretty well done by everyone."

Airspace

"If the location of the disaster is outside controlled airspace," says CAA Aeronautical Services Officer, Paula Moore, "there is a strong possibility that a temporary restricted area will be designated for the safety of aircraft operations within the disaster area, as was the case with Kaikoura."

Before flying to a disaster area, brief yourself thoroughly by checking NOTAMs and re-reading the rules for operating within a restricted area. You must obtain prior approval from the administering authority before entering a restricted area. This applies to all types of aircraft, including RPAS (commonly referred to as drones) operations.

Communications

Down at the aerodrome, communication was an issue.

"We had nothing as far as mobile phones went, or internet. When I found a rare signal, I received 51 messages on my phone within two hours from people either wanting to get in or get out," says Murray Hamilton.

In an emergency, you are likely to encounter an unattended aerodrome, so the radio work of pilots comes to the fore.

There is the potential for people to talk on the wrong frequencies.

The unattended aerodrome frequency of 119.1 MHz is for use by traffic at the aerodrome – it is not a general frequency for use beyond the aerodrome environs. FISCOM sectors have an area frequency for that purpose.

It's compulsory to make calls within a mandatory broadcast zone using the published frequency and at the appropriate interval. While it's not compulsory to make calls using the published frequency inside a common frequency zone, the CAA strongly recommends pilots do so.

If there is a second radio in the cockpit, use 128.95 MHz for pilot-to-pilot chatter.

After conducting the Sounds Air proving flight, CAA Air Transport Inspector, Chris Nicholls, spent some time in Kaikoura.

He checked out how the aerodrome was standing up to the traffic and how operators were faring.

When the traffic density is far greater than normal, communication, he says, is key.

"Pilots found that co-operating as a group showed the benefit of user groups getting together. The more people talked, the better.

"Before you fly in, you need to familiarise yourself with the area, the airfield, the situation, and find out who you should be talking to."

Pressure

The wall-to-wall media coverage of the impacts of the earthquake and its potential to influence decision-making shouldn't be underestimated.

Carlton believes it very definitely made it harder to say no.

"Lots of tourists were sort of gravitating towards helicopters trying to negotiate deals to get out."

There could also be a temptation to push the limits to try to get as many supplies on board as possible.

"If you did have a turbulent day, out-of-weight or out-of-balance loads could end in disaster on top of a disaster."

Carlton says with all the good intentions to get stuck in and help, there is potential for letting the heat of the moment get you carried away.

"Just step back and ask 'hang on a minute am I going to create an even worse situation?'"

Murray Hamilton says taking a moment to plan was beneficial.

"We came up with a bit of a strategy, we sat down and prioritised what we could and couldn't do." \blacksquare