

Airbox Enhances New Zealand Multi-Agency AF8 Earthquake Response with Integrated Comms, Common Operating Picture

Breaking Down Data Silos: How real-time information sharing enabled cross-agency crisis management in New Zealand earthquake logistics preparedness exercise.

When Emergency Management Otago conducted a major earthquake planning exercise to prepare for the rupture—or catastrophic +8 magnitude earthquake—of New Zealand's South Island Alpine Fault, they faced the challenge of coordinating multiple agencies and organisations with different data systems and operational protocols. The exercise tested transporting up to 60 tonnes of supplies on Lake Wakatipu via a commercial landing craft into Queenstown to provide mass relief to this major tourism destination.

Through the implementation of Airbox's MOSAIC—leading operational information sharing software—the exercise demonstrated how integrated real-time information sharing could transform multi-agency disaster response coordination. Airbox's ability to unify disparate data sources into a common operating picture proved crucial for effective emergency resource management and cross-agency communication.

The Airbox MOSAIC software was well-suited to our Command and Control needs for tactical operations of this kind. It allowed for planning schematics to be uploaded, Task Element tracking and real-time messaging—including imagery. It gave us a sound COP. A largely intuitive system, a range of users quickly uploaded and operated the tool with minimal instruction."

Emergency Management Otago



A Coordinated Multi-Agency Exercise



The Challenges

Comms Barriers Across Multiple Agencies:

The simulation involved coordinating members of the New Zealand Navy, Army, Coastguard, and Transport Authority, Queenstown Lakes District Council, Christchurch Civil Defense Emergency Management, Queenstown Harbour Master, Red Cross New Zealand, and commercial landing craft Utah 2.

Preparing for a Catastrophic Earthquake:

Navigating massive and wide-ranging impact on Otago, including main state highways forecasted to be impassable for weeks and major supply routes likely cut off completely.

Complex Resource Allocation: Inherent challenges of large-scale emergency response across multiple agencies, each with their own command centres, trying to share critical information and resources in real-time. The traditional siloed approach to emergency management creates barriers to the seamless coordination needed in a major earthquake scenario.

The Solution

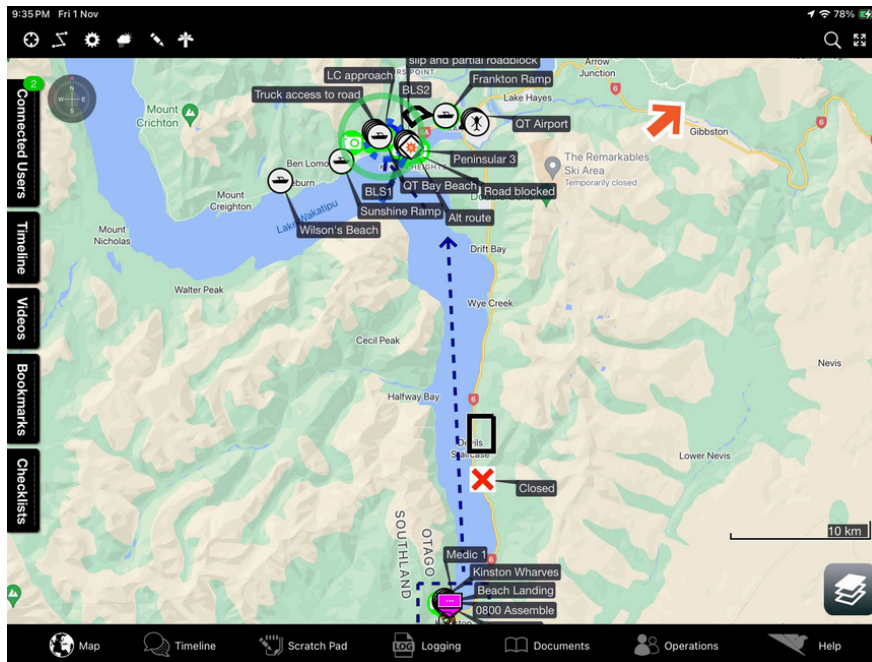
Airbox MOSAIC was deployed across all participating agencies with users located on the landing craft, on the Navy Rhib, with Emergency Management Otago Controllers, and with front-line participants. Use of Airbox demonstrated a step-change in emergency response capabilities, breaking down traditional information silos, enabling command centres to track resources, coordinate deployments, and share situational updates in real-time.

Collaborative pre-exercise planning:

- Pre-exercise, all participants were up and running after a 20-minute rapid training session, demonstrating Airbox's ease of use.
- Airbox built a digital map to enable collaborative planning and situational awareness. Key locations—such as landing locations for landing craft, RV locations, main supply routes, etc—were marked on the map ahead of time.



The outcome with Airbox



The Solution

Critical real-time comms, tracking, locations:

- Constant real-time tracking of all key assets, including the landing craft carrying supplies down the lake to Queenstown.
- During the exercise, beach landing locations were recce'd by participants passing back suitability and best location to beach the landing craft to Airbox in the form of photo, video, and written information in real time.
- Critical messages were transmitted to all participants in real time such as civilian presence on beach and situation report of suitability of beach landing locations.

Immediate & impactful situational awareness:

Following a quick and intuitive setup and deployment, Airbox was able to demonstrate immediate and impactful situational awareness during a complex exercise.

The Results and Successes

This groundbreaking exercise marked the first time in New Zealand that emergency management agencies implemented a common operating picture across their operations. Airbox's MOSAIC created an all-informed network between multiple agencies and teams, ensuring every stakeholder had access to the same real-time information and operational updates.

Exercise participants provided positive feedback about Airbox's effectiveness, particularly highlighting how the integrated approach enhanced their ability to coordinate and respond as a unified team.

Next Steps

As a result of the the exercise, Airbox will continue to collaborate with New Zealand's Emergency Management sector to demonstrate further how Airbox can transform community to central government disaster readiness, response and recovery.

