

## ISSUE 15

# STANDING READY IN THE FACE OF CRISIS

**With over 40 million passengers and nearly two million flights passing through Changi Airport annually, Singapore’s airport agencies are mindful that emergency planning and crisis management procedures must be put in place to mitigate any situation that could impact the operations of Changi Airport. Bridging Skies speaks with industry experts to find out what it takes to stay prepared.**

Imperative to Singapore’s status as a trusted global air hub are teams that put in place effective pre-emptive measures and crisis management procedures behind the scenes. They play a key role in ensuring the smooth management of any situation that may impact the operations at Changi Airport. With these processes in place, the aviation community is able to adequately deal with crisis situations, ranging from aircraft emergencies to natural disasters and pandemics. Close cooperation within the aviation community and with other relevant agencies is also vital to minimise the impact of a crisis, allowing air operations to return to normal quickly. Both government and private organisations work together to implement an overarching framework for emergency preparedness and to ensure swift and effective response during a crisis. This includes a crisis management framework, contingency plans and regular crisis management exercises. The Civil Aviation Authority of Singapore (CAAS) collaborates with various agencies to ensure that the crisis management and contingency plans are able to meet requirements, not just at the national level, but also meet international standards and adhere to guidelines set by the International Civil Aviation Organization. “As regulators, we do our part and bring together the plans of the operators to ensure that a cohesive and comprehensive overall strategy is in place to deal with all emergencies at the airport,” said Lee Wai Hong, Head of CAAS’ Emergency Preparedness (EP) Section.

The aviation community also implements a carefully considered crisis management framework – a basic EP element that dictates the level of involvement of various agencies during a crisis. Superintendent Ng Jyh Pyng, Deputy Commander (Counter Terrorism & Security), Airport Command, Immigration and Checkpoints Authority (ICA), stressed that the framework must be worked out long before an emergency arises. He said, “During peacetime, you have time and space to build the framework and to think through the possible areas to cover, such as the steps to take should a crisis happen, who to contact, who’s to take the lead and who are

your strategic partners. If there's a proper plan, we can be more prepared for a crisis situation when it happens."

### **MITIGATING AN AVIATION-RELATED CRISIS**

In the event of an air emergency, key decision-makers from several agencies are activated to participate in mitigating the crisis, as denoted by the crisis management framework. CAAS works with various agencies during the management of a crisis, like the Singapore Civil Defence Force (SCDF), which has the necessary expertise to deal with a range of emergencies from fires to chemical and biological threats; the Singapore Police Force (SPF), for security-related issues; ICA's Airport Command to facilitate passenger movement in and out of Singapore's national boundaries; and the ministries of Defence, Health and Foreign Affairs. As a group, they examine the impact of the crisis and provide strategic guidance to ground operators wherever the incident occurs.

At Changi and Seletar airports, Changi Airport Group's (CAG) Airport Emergency Services (AES) division provides rescue and firefighting protection. It is the on-scene commander for all aircraft emergencies within the airport and the first responder to domestic incidents like fires at the terminal and cargo buildings. "As long as the airline chooses to come into Changi Airport to land, we will be ready for them," said Edwin Lim, AES' Head of Planning. The most recent incident was in November 2010, when a Qantas A380 was forced to land at Changi Airport due to engine failure. "CAG staff were deployed and standing by on the runway well under two minutes, a timing which more than met international rules governing our response time," Lim added.

For incidents that occur within the airport terminals, Yeo Kia Thye, Senior Vice President, Airport Operations, CAG, said his division works closely with and taps into established partnerships between airlines, ground handling agents, airport police and ICA to handle all ground operation issues. During a crisis, this web of cooperation deepens and expands to include more organisations such as the Health Ministry and other government organisations, depending on the nature of the crisis.

### **REHEARSING A COORDINATED RESPONSE**

Coordination is not achieved overnight and plans must be put to the test to ensure that they are truly effective in an actual situation. Lee said the Ministry of Transport conducts crisis management exercises every year for the transport industry: "Last year, they organised an exercise to simulate an air crash at sea, off Changi, where the aircraft "hit" a ferry. Many agencies had to work together because it became a two-sector emergency – air and sea."

Separately, CAG's AES division organises two full-scale crisis management exercises at Changi Airport a year. Each time, 500 to 800 officers from multiple agencies, such as CAAS, CAG, SCDF and the relevant ministries, are involved. Lim noted that these exercises give the various organisations the opportunity to rehearse and assess the effectiveness of their crisis

management plans. The teams involved are also assessed on how well they can coordinate with each other to achieve the fastest and best emergency response.

“The annual full-scale crash exercises present a realistic and challenging platform to test, stretch and validate existing contingency plans to ensure that they are relevant and sufficiently robust in the event of an actual crisis,” Lim said. During an After-Action Review following each exercise, the stakeholders meet to address any gaps and fine-tune the crisis response processes.

To test the operational effectiveness of each shift, AES introduced the Company Proficiency Test (CPT) three years ago. The CPT brings together each operational shift during their days off and serves as a platform to assess the capabilities of individual firefighters, the operational leadership of the supervisors, the command leadership of the senior officer and the team coordination and synergy in mitigating a mock aircraft emergency scenarios. “The team of invigilators will also introduce surprise elements to assess how the unit commander and his crew would react under conditions of fatigue and stress – both individually and as a team,” said Lim.

Beyond the crisis management exercises, however, the various agencies also need to work at strengthening their partnerships so that they can coordinate more efficiently during times of crisis. For example, Lim noted that CAG organises different forums like seminars, conferences and open houses that give the stakeholders opportunities to network and learn best practices from each other.

### **CONSTANTLY LEARNING FROM NEW CRISES**

Singapore’s position as a global aviation hub means it is more susceptible to crisis situations in the region and around the world. In the last decade, the nature and types of crises affecting the industry have changed significantly. Health pandemics, such as Severe Acute Respiratory Syndrome (SARS) and H1N1 flu, have impacted Singapore and its aviation community.

Yeo also observed that more major natural disasters, like the eruption of Eyjafjallajökull in Iceland in 2010 and the devastating Japanese earthquake and tsunami earlier this year, have occurred in the last two years than in the past two decades: “I don’t think I have ever seen them happen with such frequency and such impact. We are so much more connected to the world compared to twenty or thirty years ago. Any incident that happens could have a ripple effect on us.”

With change as the only constant, the aviation industry has had to make changes accordingly, ensuring that they can cope with any situations faced. Yeo admitted that both the Iceland and Japan disasters caught the aviation community by surprise, especially the fallout from the Icelandic volcanic eruption as the incident was so far away, but still impacted Singapore

greatly. However, he pointed out that the aviation community was able to react quickly to the crises as suitable contingencies were already in place: “Fortunately, we have an existing plan to deal with large numbers of passengers stranded at the airport because of our experience in the 90s, when air traffic controllers in India went on strike and all flights going to Europe were cancelled. We’re always preparing for the next possible kind of crisis because nothing ever stays the same.”

Similarly, Lee noted that CAAS and the aviation community have learnt valuable lessons from the recent aviation-related crises: “They not only gave us an indication of how a serious pandemic or a natural disaster can quickly create a crisis, but also showed us how important it is to identify potential crises, how it’s going to affect us and how we’re going to respond and manage these crises accordingly.”

As Singapore continues to expand as an air hub, welcoming greater numbers of passengers each year, members of the aviation community maintain their vigilance and work closer than ever to strengthen existing partnerships and forge new ones to tackle any future crises with greater confidence. They are mindful that while it is difficult to expect the unexpected, they continue to prepare themselves as best as possible through a series of crisis management plans and exercises that hone their reflexes and ensure they can minimise the fallout from any unpreventable emergency.