Disaster response

Contingency planning for an airport crash

What happens at an airport when disaster suddenly strikes? This is a critical question for an airport manager to assess, since it is the key to his contingency planning. Only a careful and complete analysis of potential problems and activities can lead to a sound emergency plan.

Dr Jay Levinson

An excellent example of a sound emergency plan is the United Airlines crash at Sioux City; as is often recalled, a principal reason for the success of the disaster response was meticulous planning and the holding of an airport exercise only weeks prior to the accident

Planning to rely on outside assistance is not a solution. It is true that within an hour of an accident even the routinely quietest airport will be converted into a beehive of fervent activity The critical time, however, is in the initial minutes of response before off-field emergency services arrive In these moments, the airport must transform itself from regular activity to an emergency operation, and it must function on its own as an autonomous unit If pandemonium is allowed to reign, it will be harder to restore order later

Every airport is required by international convention to maintain certain basic emergency services, such as a ready fire department located within minutes' reach of the runway Fire planning is a part of virtually every airport exercise The more important question, however, is what does one do after the fire is put out.

Injured passengers obviously take first priority, even during the fire fighting effort It has been estimated that in aircraft fires only 7% of the fatalities are from burns; the remainder are from smoke inhalation. Thus, the fire service must be involved in passenger evacuation and aircraft ventilation (being careful not to spread the fire by adding oxygen), while at the same time trying to extinguish the fire

In terms of treating the injured, the basic object is to save the maximum number of people given the resources available It might sound cruel at first, but the practical consequence of this philosophy is to leave the seriously wounded and emphasize treatment of those with a better chance of surviving At this stage, medical resources are also very restricted Before outside ambulances arrive, the medical personnel available are those persons involved in the usual first-aid problems of the airport facility. Response to a major accident is clearly beyond the number of medics available and the equipment which they have at their disposal. A partial solution is training a maximum number of persons working at the airport in the basic principles of first aid, so that they can, hopefully, function until professional staff arrives at the airport.

The onus of initial disaster response falls on the airport. Is your airport prepared?

What is its rescue capacity?
What is the hospital capacity nearby?
What is its telephone-exchange capacity?
How good are the alarm routines?
How good are the "meet the public" routines?
Will your crisis management stand the test?

When full medical services do arrive, the basic guideline is not to set up a field hospital and begin treatment. Rather, the medical objectives should be to establish evacuation priorities and prepare the injured for evacuation by stabilizing their condition. Nor should every patient be rushed by helicopter to a hospital. The method of evacuation is a medical decision, taking into consideration not only the time factor, but also the effects on injuries which an air evacuation and its accompanying change in air pressure might entail.

Treating the 'walking wounded'

The uninjured or 'walking wounded' pose a paradoxical situation. On the one hand, the lack of physical injury does not constitute a description of 'uninjured'. In many incidents, the psychological scars on those involved take more time to heal than physical wounds Planning should take into account psychological screening and assessment.

Dr Levinson has been employed as the disaster victim identification officer of Israel National Police, Jerusalem, for the past seven years, enabling him to gain a certain expertise in handling air disasters

On the other hand, it is often critical to debrief the uninjured as soon as possible to get a clear picture of what happened aboard the flight. The uninjured can also give important information as to who else was on the airplane. The best method of debriefing is generally a prepared questionaire, but any set of questions must be used judiciously, striking a harmonious balance between the person's condition and the need for information

The dead pose a very different problem From the perspective of victim identification, the dead should be left in situ until scene photography and annotation have been completed Yet, the dead often have to be moved before then to gain access to living persons or as a moral factor in running the response operation. Finding personnel within the airport to accomplish this task can be futile, particularly when dealing with bodies in less than pleasant condition

Although baggage handlers, for example, might have the physical strength to remove bodies from the scene, they do not necessarily have the psychological fortitude to stand up to the task. Undoubtedly, the arrival of funeral directory personnel on scene is a positive contribution to the operation

The deceased should never be evacuated to a hospital, since that only brings more work and confusion to a facility whose true goal is saving human life A temporary mortuary should be preselected on or near the airport, and bodies should be gathered there. This allows for concentration for 'evidence' in one area and police evaluation before questions about autopsies and pathology are addressed, since this is a sensitive issue in certain religious/cultural circles

One should not lose sight of the reality that every crash is potentially the result of a criminal act (including criminal negligence) and must be treated accordingly until proven differently

As most eyes are focused on the high-profile activities at the crash site, other essential tasks must be performed Police, for example, must resist the temptation of running to the scene to help save victims. In terms of incident management, it is much more important for them to begin the process of routing traffic to distance the general public, while at the same time enabling emergency vehicles rapid entry and exit. This, of course, includes directing traffic at the crash site itself, by quickly establishing traffic patterns with parking and waiting options If this is ignored, unblocking jammed facilities at a later time is much more difficult.

Even before news of a crash is broadcast the airport must be ready to handle the 'meeters and greeters' on hand to see off or receive their loved ones. This means