

Emergency exercise and training techniques

Introduction

An emergency plan is not a viable document without an exercise and training program to support it. Even with the best laid plan, only its effective implementation by the people involved will rescue and care for the victims of an emergency.

Emergency services and company staff must be educated through briefings, walkarounds and exercises. Familiarisation with the geography of local surrounds and facilities is important for emergency services whose core role is emergency response but who may not be familiar with the complexity of a particular environment such as an airport. Conversely, company staff will be experts in their surrounds but may need education with regard to emergency response and recovery arrangements.

It is essential that all training involves multi-agency participation, ensuring that potential responders partake in problem solving exercises and become familiar with their roles. Exercising and training should be kept interesting and cover all probable emergency situations.

This paper is designed to explain some of the different types and methods of emergency exercise and training and will also outline what an Exercise Planning Group needs to consider during the preparation of an exercise. Some examples

by Sarah Renner,
Emergency Planning Coordinator,
Melbourne Airport, Victoria

specific to the airport environment are used throughout, however the guidelines could be applied to almost any industry.

Types of exercises

The types of exercises can take different forms, extending from information sessions to full field exercises. A planning group's aims and objectives will form one of the following types of exercises:

- information session
- walkaround
- tabletop exercise
- centre simulation
- field exercise

For each of the training sessions or exercises, a facilitator, presenter, guide or management group is required to ensure that pre-determined training and exercise objectives are met.

Information sessions

A planned information session is an easy way to train and impart information and ideas to a varied or specific audience. The exercise involves a presenter or guest speakers and an audience. In this forum the presenter imparts information to the

audience and there is little opportunity for interaction, as depicted in *figure 2*.

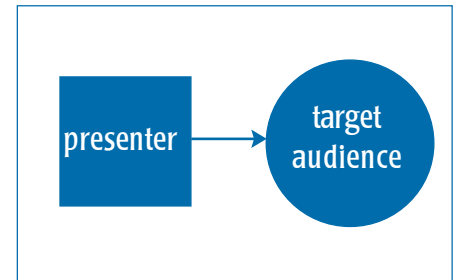


Figure2: Information session exercise concept

Sessions such as these will also allow a greater number of interested agencies to become involved and are a perfect opportunity to introduce staff to the plan.

Examples of types of information sessions are:

- simple briefings, familiarising staff and companies with the emergency plan and informing them of their responsibilities
 - companies and emergency agencies can allow an insight into the way they operate internally, thereby giving a broader understanding of company standard operating procedures and potential restrictions within a company's authority
 - a forum where guest speakers, professionals in their field, are able to inform attendees of particular aspects of an emergency situation such as 'an aircraft crash investigation', 'the perspective from an aircraft manufacturer', or 'the content of a disabled aircraft removal kit'
 - an opportunity for responders or victims who have experienced an emergency to speak to emergency response and recovery planners
 - experts abreast of emergency planning human factors, technology, response etc. can update emergency planners on improved techniques and best practice
- The advantages of hosting an information session are:
- it is relatively simple to organise
 - a fixed venue can be used (a good idea would be the use of an emergency centre facility)



Figure 1: Exercising and training should be kept interesting and cover all probable emergency situations.

- it is a good training forum for introducing staff to the plan
 - it allows opportunity for emergency planners to further their knowledge
- The disadvantages of hosting an information session are:
- it allows for little liaison and interaction between attendees
 - strengths and weaknesses of the plan or the participants cannot be gauged
 - it allows for little evaluation and feedback from participants
 - 'hands on' or real experience is not possible during the session

Walkarounds

Walkarounds are essential for emergency agencies that will be responding to a specific facility or access point. Walkarounds are also useful for staff where an emergency facility is located in a restricted area. The walkarounds will require a guide, experienced in the particular environment and versed in the emergency plan. As opposed to information sessions, interaction during a walkaround occurs not only between the guide and their audience, but also amongst the session attendees, as depicted in *figure 3*.

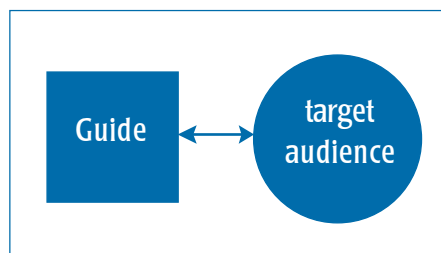


Figure 3: Walkaround exercise concept

Walking through the terminal building, for example, to a Passenger Reception Centre, will allow a responder to mentally analyse access issues, possible hazards such as media and crowds, and enable them to note reception and briefing points. This is clearly a better option than an overhead slide or video of an emergency centre.

Cupboards within a facility can be opened, phones can be casually tested and computers switched on, giving people a chance to familiarise themselves with a centre before, rather than during an event.

Walkarounds also have the benefit of creating an opportunity where staff from different companies can interact and ask questions of their host. However, like the information sessions, there is little opportunity for purposeful group interaction.

Walks should be advertised well ahead

of time and scheduled at regular intervals enabling companies to roster staff and allow for infrastructure and centre location changes to be noted by participants on a regular basis.

The advantages of hosting regular walkarounds are:

- they are relatively simple to organise
- the participants become familiar with practical response, access and facilities
- they are a good opportunity for staff to familiarise themselves with the resources within a facility
- they allow members of a small group to liaise with each other and put forward questions

The disadvantages of hosting walkarounds are:

- they allow for little liaison and practical interaction between attendees
- strengths and weaknesses of the plan or the participants cannot be gauged
- they allow for little evaluation and feedback from participants
- they may require more staff resources as small groups are often most effective and convenient

Tabletop exercise

A tabletop exercise is one of the most commonly used exercise techniques as it is economical in its production, flexible in its format and effective in its outcomes. It allows for a non-threatening, relaxed environment which can encourage participants to discuss problems openly around an actual table. Emergency responders and staff are chosen once the aim, objectives and scenario have been created.

A facilitator is required to structure the exercise in advance, ensuring that while it is taking place, participants are guided around issues pertinent to the emergency plan and their own role during an emergency.

When choosing a facilitator it is essential that they are familiar with the plan but independent in their analysis. The facilitator should monitor the discussion, feed in added exercise information or events at pre-determined intervals, and steer the exercise as necessary. As depicted in *figure 4*, the majority of interaction occurs between the exercise participants.

A tabletop exercise can last anywhere between two and eight hours depending on the complexity of the exercise and the number of people involved. During this time staff are given opportunities to make decisions, be creative and use their own problem solving techniques in a comfortable environment. Each person is

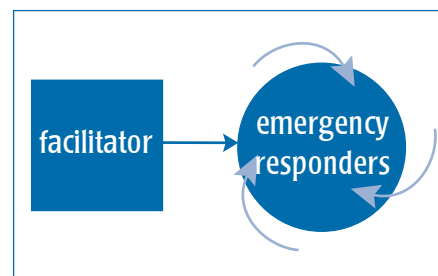


Figure 4: Tabletop exercise concept

asked to illustrate what action they would take during an emergency always keeping coordination in mind.

Uncovering better management methods during an emergency, discovering how each agency or person fits in to the plan and developing new solutions to problems are all part of the exercise.

The advantages of hosting a tabletop exercise are:

- it is a relatively stress-free exercise that allows for an imaginative environment and a real evaluation of procedures and the plan
- participants can assess their own knowledge of the plan and are given time to ask questions and make decisions
- it can be flexible allowing for the group to go on their own journey through issues, finding positive solutions
- it allows the group to gain a good understanding of agency roles, actions and limitations

The disadvantages to hosting a tabletop exercise are:

- encouraging an optimal team environment may not be easy due to frequent input and guidance by the facilitator
- the exercise may not be realistic in that one person often represents the actions of many
- it is difficult to include everyone evenly in the discussion
- it will not be valuable without a prepared, professional facilitator

Centre simulation

A centre simulation exercise is a functional exercise requiring careful planning and a large amount of preparation. It is different from the aforementioned exercises in that it is designed to simulate the reality of emergency decision making. This type of exercise is essential in building an effective management team.

Again, an aim, specific objectives and a scenario are developed, however the scope is reduced to the operation of one emergency centre (in most cases the emergency coordination centre).

Participants and agencies specific to

the 'incident' are gathered in the coordination centre while exercise managers in a different area, preferably close by, monitor the exercise and realistically simulate both the command centres of the agencies and the control operations in the field. The close interaction between the participants and the exercise managers is depicted in *figure 5*. To simulate realistic pressure on the occupants of the centre, a scenario should be developed to enable resources to be notionally sourced from a municipal or divisional level.

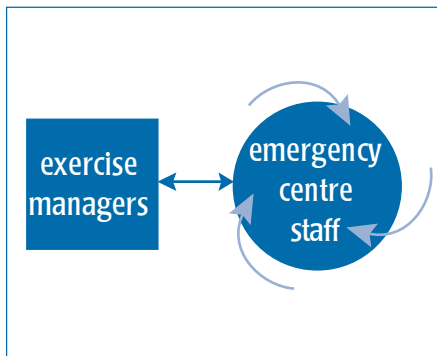


Figure 5: Centre simulation exercise concept

For example, requests from 'field commanders' are phoned or faxed into the coordination centre where exercise participants are required to make real-time decisions about the allocation of resources, usually with the help of their agency's 'command centre'. Both the field activities and the agency internal command centres are played by the exercise managers.

Hundreds of pieces of paper documenting field requests, resource allocation and situation reports are generated within the centre and are useful for closer analysis once the exercise is complete. Exercises should be planned to last between three and four continuous hours.

This exercise in its very nature builds a team environment, tests the participants' knowledge of the plan and can closely simulate the stress of emergency decision making.

The advantages of hosting a centre simulation exercise are:

- it allows the building of a team and familiarisation among staff and agencies under 'real' conditions
- participants can assess their own knowledge of the plan and their standard operating procedures in an environment where time matters—positive practical improvements can be suggested for the plan
- the actual coordination centre can be assessed for its practicality with

specific focus on the environment, communications and other facilities

- exercise management is somewhat distanced from the operational staff which allows for impartial monitoring and assessment

The disadvantages of hosting a centre simulation exercise are:

- compared to a tabletop exercise the amount of preparation, forethought and lateral thinking required by the exercise planning group is escalated
- objectives can be lost by the exercise managers due to the amount of pressure that this group also experiences
- an exercise exerting equal stress levels on all participants is difficult to generate
- exercise managers must be 'professional' in their role playing and well versed in the particular agency's operation, resources and limitations

Field exercise

A field exercise is the best way to fully assess an emergency plan. Field exercises allow a team to be built under 'real' conditions where participants can assess their own knowledge of the plan in an environment where time matters. Extensive pre-planning and good cooperation from all involved will ensure that this type of exercise is a resounding success.

A scenario is developed for the exercise and may involve a transportation accident, fire evacuation or other field incident. The exercise should involve a number of outside agencies and can involve hundreds of people in the response and recovery at the various emergency locations and centres. Depending on the objectives, an exercise may last up to six or eight hours.

The exercise management team in a field exercise concentrates on planning the exercise, starting it and then closely monitoring the progress of participants. Interruption of the exercise by the group only occurs when an objective does not have the opportunity to be achieved due to decisions made by the participants themselves. This relationship is depicted in *figure 6*. The group will also closely monitor 'NODUFF' incidents which is a term that indicates that an authentic incident has occurred outside the exercise.

Volunteers are required for a field exercise to play victims, their families and friends and the media. However, it is recommended that due to the complex issues surrounding the handling of the media professional facilitators are employed for that particular role.

This exercise involves a real experience for emergency staff and the ability to judge aspects of the airport emergency plan and

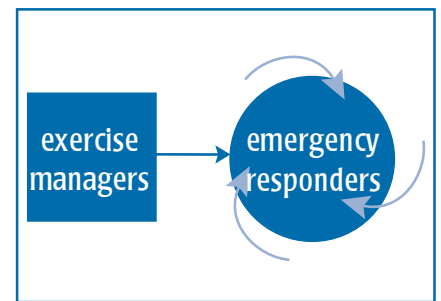


Figure 6: Field exercise concept

their own company standard operating procedures. Realistic tensions are created requiring participants to be effective in their decision making and cognisant of the big picture.

The advantages of hosting a field exercise are:

- it allows the building of a team and familiarisation among staff and agencies under 'real' conditions
- participants can assess their own knowledge of the plan and their standard operating procedures in an environment where time matters—positive practical improvements can be suggested for the plan
- emergency centres and facilities such as the emergency coordination centre and reception centres can be assessed for their practicality with specific focus on the environment, communications and other facilities
- exercise management team is distanced from the operational staff which allows for impartial monitoring and assessment

The disadvantages to hosting a field exercise are:

- compared to a tabletop exercise the amount of preparation, forethought and contingency planning required by the exercise planning group is much greater
- an exercise exerting equal amounts of stress on all agencies is difficult to generate
- a large commitment of resources is required by agencies and 'normal' operations may be disrupted
- the implementation of recommendations resulting from a field exercise may take time as facilities rather than planning issues are often targeted

Creating an exercise plan

In exercising an emergency plan, especially for the first time, a building block approach should be utilised. Before a full field exercise is attempted, information sessions must be conducted to introduce the various aspects of the plan and walkarounds held to famil-

ise staff with facilities and procedures. Tabletop exercises and centre simulations can subsequently be carried out where key recommendations are drawn and implemented, and apparent errors in the plan are corrected. A field exercise must then be conducted to ultimately test the plan.

In any exercise it is critical to always work from the plan to ensure that it is the plan in its current format that is tested. Simple scenarios can be used to find further events that the plan made need to cover. The plan must never be considered one dimensional where each scenario is compartmentalised. It should be general enough to cover a hundred scenarios but specific in outlining operational procedures and responsibilities. Exercises validate a plan and ensure that the plan grows to accommodate various circumstances that may have been initially unforeseen.

The exercise planning group

An exercise planning group will initially need to be formed with enthusiastic and experienced staff from various fields relevant to the exercise scope. The company responsible for the plan will usually convene this group.

The reputation of a company's plan may depend on the thoroughness and professionalism of consultation and planning with all stakeholders before the exercise commences.

Airport emergency exercise planning groups are made up of representatives from the Airport Authority, Police, Fire Service, Ambulance, Airline and various other planners depending on the objectives the group hopes to achieve. It is often the case that this group will grow as the planning advances.

For an information session, only one or two meetings may be held prior to the event, but for a full scale field exercise, planning may commence six months or more before the day, with meetings held at monthly or fortnightly intervals. Minutes should be kept to document each meeting, noting agreements and decisions made by the exercise planners.

Planning an exercise can also be considered a valuable experience for the staff involved as they will be working through issues that reflect problem solving in real emergency situations.

Exercise aim

The aim of an exercise is a global statement usually one sentence in length and can often indicate what type of exercise will take place. The aim is usually stated as to 'test', 'train', 'analyse', 'review'

or 'understand' a component of the emergency plan at a certain level (ie. executive management group, entire company, multi-agency etc.). The aim is broad and viewed from the perspective of the exercise managers.

For example: The aim of the exercise is to test the Airport emergency plan in a multi-agency response to an aircraft incident west of the airport.

Exercise objectives

Objectives will often gauge how 'big' an exercise will be and is a breakdown of the aim. Again the prefix of to 'test', 'train', 'achieve', 'workshop', 'gauge' or 'understand' is attached to the front of the following examples:

- callout
- communications
- care of customers, visitors, staff
- new plan processes before implementation
- staging areas
- environmental impacts
- scene isolation
- facilities
- response arrangements
- systems
- recovery arrangements
- individual agency objectives
- incident control point
- teamwork
- traffic isolation
- command arrangements
- media centre
- control arrangements
- reception centres
- coordination
- information desk
- equipment
- public announcements
- language barriers
- briefing
- handover
- contractors
- assembly
- emergency coordination centre

A field exercise may have up to twenty objectives, where an information session may have just one or two. Objectives are specific and represent the perspective of the exercise participants.

Exercise scheduling

The scheduling of an exercise is the next issue the group should consider. What time of the year should the exercise be conducted? Seasonal weather may become a factor in a field exercise; rain impeding vehicle access to a site and heat affecting volunteers. Should the exercise be held at night or on a weekend to identify staff resources and gauge realistic response times? Will the exercise affect

normal company operations at certain times? Conflicting events such as other exercises or scheduled events with the potential of a real response will also be factors in scheduling the exercise.

Exercise host

Usually a host is identified for an exercise. An exercise host takes on the responsibility of providing facilities, staff and other resources. For example: Does an international airline with staffing constraints want to test coordination with their handling agent? Does a specific tenant want to test their warden response in an evacuation exercise? Does a refuelling company want to achieve set objectives for a major fuel spill?

In all the above cases strong commitment of the host is necessary. For example, airlines will have to consider the use of aircraft, ground staff, terminal staff and engineering staff whereas the airport operator will have to consider disruption to airfield and terminal services.

Exercise budget

Exercises need to be budgeted for in staff, money and facilities. Advanced thought needs to be given to the cost of equipment hire, exercise facilitators, transport hire, donations, catering, video production, staging and props, radio hire, tabards and signs (*figure 7*).

Exercise scope

The scope of an exercise can also cause constraints to exercise realism. Will the local council be involved or simulated? Will the exercise extend to Air Traffic Control simulating the flight path of an aircraft?

Other factors affecting the scope are listed below:

- local, municipal, divisional or state involvement
- emergency facility simulation
- exercise budget
- public participation
- use of restricted areas
- use of buildings
- scripts for emergency responders
- use of facilities (ie. exercise hospital?)
- on site response
- resulting injuries
- off site response
- resulting deaths
- exercise length

It is important to clearly state the exercise scope in briefing notes to avoid any confusion or embarrassment on the day.

An example of an exercise scope is:

- The exercise has been planned to test facilities on airport. It is not intended



Figure 7: Signage and equipment hire is only a small part of an exercise budget

that passengers who receive injuries be transported to hospital. Consequently a drop off point will be established on the airport for the ambulance. Deaths will result from the accident. The emergency vehicles responding to the accident may be staged at a pre-staging area before the exercise commences.

Exercise location

The location of the exercise must be chosen carefully as it can affect normal operations of a company and in some cases the community surrounding the exercise area. Choices need to be made with reference to:

- incident site positioned within property boundary
- use of external facilities (ie. local hospital)
- use of a certain facility that is part of your core business (ie. runway)
- use of emergency centre facilities
- off site (ie. in a field, gully or river)
- use of a building or room (ie. boardroom)
- use of access roads (private/ public)

Exercise scenario

The exercise scenario sets the scene of an incident and is often geared to what response and recovery arrangements the emergency plan provides. Exercises can test the response to a specific unplanned event and outcomes may indicate that further planning is required in that area. The scenario is the storyline and encompasses the general and special ideas.

Types of situations that may be planned for by a company within a corporate crisis framework may be:

- bankruptcy
- plant closure
- boycott
- strikes
- bribery
- takeover
- lawsuits
- workplace violence
- fatality within the work environment
- murder

Scenarios for an airport emergency exercise are usually built on what is provided for in the airport emergency plan, that is:

- crash
- suspect article
- full emergency
- terminal/building fire
- bomb threat
- criminal act
- hijack
- medical emergency
- hazardous materials incident
- natural disaster
- fuel spill
- ground fire
- disabled aircraft
- protest
- community request
- blockade
- chemical, biological, radiological threat
- crowd control
- aircraft fire

An example of an airport exercise scenario is:

A Boeing 767-300 coming from overseas via Perth, fails to make the airport perimeter. There are one hundred and twenty people on board, made up of one hundred and ten passengers and ten crew.

Two diplomats are also on board the aircraft.

It is a devastating crash, killing sixty and severely injuring forty others. Nevertheless there are twenty uninjured/slightly injured passengers, some with no English language. Twenty legitimate meeter/greeters are gathered at the terminal, although thirty to forty people respond to the meeter/greeter reception centre.

In most cases the exercise participants are aware of the scenario though pre-briefings and before the exercise have the opportunity to go through in their minds what this scenario could mean for them. For example in the above scenario:

- what are the surrounds of the airport? residential? steep/flat terrain?
- where are the access roads?
- will political involvement be likely due to the diplomats?
- where will interpreters be sourced?
- how will the authentic meeter/greeters be identified?
- will both the airport and local fire services be involved?
- what time of day will it occur?

Exercise code name

What is an exercise without a punchy or memorable code name? A name like 'night sky' is short and sweet, yet evokes images of an emergency response during the cover of darkness.

Industry terms could also be used, for example at an airport, exercise 'stickshaker' or exercise 'is that the runway?'. Whatever name is chosen, it should be applicable and used in the distributed information. It must also be used on communication circuits throughout the exercise to clearly indicate exercise traffic.

Agency involvement

The size of an exercise will also depend on the agencies and companies invited by the planning group to participate. Following is a list of players that may be considered in an airport exercise:

- Airport authority
- State Emergency Service
- Police
- Metropolitan Fire Brigade
- communications provider
- Country Fire Authority
- Ambulance
- Australian Customs Service
- Environment Protection Authority
- Australian Protective Service
- Department of Transport and Regional Services
- Australian Quarantine and Inspection Service
- Aviation and Rescue Fire Fighting
- Department of Immigration and Multi-



Figure 8: Many agencies will be involved in a Field or Centre Simulation exercise, especially when an Emergency Coordination Centre is activated

Figure 9: Volunteers are a valuable resource of experience and information and should be treated accordingly

- cultural Affairs
- power company
- Salvation Army
- gas company
- Red Cross
- water company
- Health Department
- City Council
- coroner
- actors and volunteers
- St John Ambulance
- politicians
- Road Authority
- Australian Transport Safety Bureau
- Defence Force - Special Air Services
- Air Traffic Control
- hospitals
- Department of Human Services
- independent Counsellors/ Carers
- Department of Natural Resources and Environment
- emergency service communications provider

Volunteers

Volunteers are an integral part of any large emergency exercise. They can be sourced from the local community, universities, high schools and volunteer organisations. Perhaps the most valuable volunteers however, are company staff. Actually playing the part of a person involved in the emergency can provide responders themselves with an insight into the victims experience. An important source of recommendations can come from their participation, therefore all volunteers must be thoroughly debriefed.

Only volunteers above the age of fifteen are recommended and special insurance provisions should be investigated. More than the required amount of volunteers should be sought due to last minute withdrawals.

Volunteer Briefing Notes are distri-

buted to participants in advance. The notes should cover topics such as:

- welcome
- security arrangements
- catering (ie. do they need to bring food, vegetarian considerations etc.)
- 'NODUFF' arrangements (who to look to for authentic help)
- exercise scenario (from the perspective of the volunteer)
- exercise aim and objectives
- what to expect (a brief outline of the exercise experience)
- smoking arrangements during the exercise
- how to register (where to park, where to go)
- site safety and first aid arrangements
- what to wear
- leaving arrangements
- are they fit to participate (ie. do they suffer from claustrophobia, or have they experienced a similar traumatic experience)
- how to act (a description of realistic symptoms such as shock etc.)

Once registered on the day, a security pass or name tag may be necessary. An exercise card or tag on a neck chain or clip can provide volunteers with an easy reference to key exercise 'rules' or site plans or diagrams during the exercise. Any written documentation such as manifests, data etc. that would normally exist as a result of the emergency should be prepared in advance.

Pre-briefing and de-briefing of participants is essential. The opportunity for last minute questions and a quiet time for volunteers to de-role can be invaluable to the exercise management group—misconceptions of the day can be rectified and recommended changes to the plan can be made.

Follow-up of volunteer participation in

an exercise is a method of thanking them for their efforts and gaining further information of their experience after the event. A week after the exercise a more objective view of the day will be possible. A small token of the exercise planning committee, such as a T-shirt ('I survived Exercise...') is always welcome.

Observers

Observers, hosts, referees and exercise managers can be best described as exercise 'ghosts'—they are there to view a process rather than actively participate.

Careful consideration as to the involvement of observers in an exercise is necessary. An exercise such as an information session or a walkaround does not promote the involvement of observers, however centre simulation and field exercises often generate the interest of staff who do not want to be directly involved.

The benefit of observing an exercise is limited. For example a centre simulation exercise is difficult from an observation perspective due to the limited space that may be available in the centre and the difficulty with being able to follow the decision making process and exercise progress.

Similarly, observers participating in field exercises must be carefully managed to ensure that simply viewing a process does not become boring. In most cases, interested staff should be encouraged to participate in the exercise as a volunteer or responder to gain the maximum benefit from the day.

Field exercises promote the most interest for viewers often because of the 'lights and sirens' response—there is smoke, anticipation and movement. Observers should therefore be invited to attend an exercise or agencies asked to



Figure 10: Observers should be managed as if participating in a Walkaround

fill one or two observer positions to ensure a manageable observer group.

Preparation for observer involvement begins with the distribution of observer briefing notes. The notes should cover topics such as:

- welcome
- what to wear
- aim and objectives of the exercise
- exercise transport arrangements
- exercise scenario
- the role of an observer
- what to expect (a brief outline of the exercise experience)
- how to register (where to park, where to go)
- leaving arrangements
- site plans
- observer protocols (ie. do not wander from the group, ask before entering an active emergency centre etc.)
- catering (ie. do they need to bring food, vegetarian considerations etc.)

Hosts

The host role is to look after the observers. The hosts are staff familiar with different agency response procedures and the emergency plan.

A pre-briefing should be conducted for the observers by the hosts prior to the exercise commencing, again to clarify issues and to enable the formation of realistic expectations by the observers. Information packs can be given out to the observers during the day, outlining emergency facilities, roles and responsibilities.

Small groups of observers are manageable for hosts and permission to enter most management centres is likely to be granted. Questions are to be encouraged during lulls in the exercise 'action' and comments from the observers logged for

later analysis in conjunction with formal exercise recommendations.

Notes to exercise hosts can also be developed addressing:

- welcome
- catering arrangements
- aim and objectives of the exercise
- exercise transport arrangements
- exercise scenario
- role of the host team
- assembly of the host team
- thank you
- observer protocols (ie. do not wander from the group, ask before entering an active emergency centre etc.)
- administrative arrangements

Referees

There is little point to an exercise without the formal assessment of the response and recovery operations with specific reference to the exercise objectives. Referees are a vital component to an exercise.

Careful briefing of referees is required and is best carried out in the week before to ensure preparation time is given. Again, briefing notes compiled outline:

- referee protocols (ie. do not interact with the exercise players)
- catering (ie. do they need to bring food, vegetarian considerations etc.)
- aim and objectives of the exercise
- referee prompts or detailed checklist
- exercise scenario
- welcome and thank you
- what to expect (a brief outline of the exercise experience)
- use of photography in exercise analysis
- how to register (where to park, where to go)
- maintenance of exercise logs
- what to wear
- written report expectations
- exercise transport arrangements (will

they respond with their own agency etc.)

- oral debrief report expectations

The exercise planning group must ensure the referee understands the role and is committed to a written report and/or oral presentation. The most successful refereeing comes from those who have an understanding and objective view of the Emergency Plan.

Exercise management team

The role of the exercise management team, made up of a director and control staff is to manage the exercise on the day. Scheduling must be adhered to, a definite start and finish to the exercise must be made clear and careful attention to 'NODUFF' situations given.

For small exercises only one person may be needed. Large field exercises though, often require a large group of exercise control staff positioned at various key points (ie. incident control point, emergency coordination centre etc.). The exercise management team are best linked by radio enabling the whole group to hear all communications and respond immediately to 'NODUFF' situations.

The goal of the exercise management team is to give every opportunity to the exercise participants to achieve the set objectives. Timing can be somewhat flexible and in extreme circumstances the exercise could be stopped, rewound and re-played.

Where an exercise has a large number of objectives or is complicated in format, the best people to play the role of an exercise director or control staff are those who developed the exercise in the first instance—the exercise planning group. The exercise management team can also play the part of referees in this instance.

Media involvement

Centre simulation and field exercises present an opportunity to test the media or crisis communications component of the emergency plan. Staff are often well versed in the operational response and immediate recovery aspects of an emergency, but the media coverage of an incident will be the image that lingers in the public mind.

It is recommended that facilitators are employed to allow realism, professionalism and essential feedback which can take the form of a six o'clock news report, radio report or a newspaper article.

Multiple agencies should commit their public affairs staff to the day to ensure that coordination is tested. Too often, companies can be played off against each

other if a coordinated response is not obvious. Joint media conferences, call taking, information gathering and dissemination are good aspects of the media plan to exercise (figure 11).

Public awareness

A large company is often part of the wider community and it is sometimes the case that neighbours can be left out of the information loop. Large impacts such as planned exercise road diversions should be advertised.

An exercise with little community impact may still require a letter drop or some form of road-side signage to ensure minimum inconvenience to the surrounding community.

The media could also be informed that an exercise is taking place as calls could be placed to them by misinformed and concerned neighbours.

Staff, other tenants and other key companies should be informed up to a week before the day of a large field exercise. On the day itself, signage and PA announcements can notify staff and visitors to the area of the exercise and its impact.

General briefing notes

General briefing notes are an essential component to any exercise. They are often sent to all emergency plan holders notifying them of the event and enabling them to assess whether or not they have a part to play. If their agency is not involved, then there may be a chance for them to observe or ask to expand the scope to include their own agency objectives.

The general briefing notes include:

- introduction (an explanation of why the exercise is being held)
- response by participating organisations
- exercise aim
- transport arrangements
- exercise objectives
- catering arrangements
- pre-exercise briefing
- type of exercise
- scope of exercise
- site safety
- observer arrangements
- escorts to Site
- exercise code name
- first aid
- scenario
- smoking arrangements
- administration
- security arrangements
- public relations
- pre-exercise training
- exercise management
- exercise debrief
- exercise comments and recommen-



Figure 11: An inter-agency media conference at the end of an exercise is an excellent opportunity for companies to practice 'a united front'

- dations
- volunteers
- summary
- exercise constraints
- referee arrangements

Site preparations

The preparation of an exercise site, whether it be in an emergency centre or out in a paddock, is important for the protection of exercise participants. Phone cords should be taped to the carpet; rough or steep ground should be graded. Thought needs to be given to the placement of a field site—is it near an operation that could lead to the distraction of exercise staff? etc. Occupational Health and Safety and insurance matters must be addressed well before the day.

Placement of props such as 'bodies' (mannequins), water based red paint (blood) and rubbish, simulating break-up is to be carefully positioned. Smoke machines, flares and water hazards also need to be placed in safe areas to protect the exercise participants. Steep drop-offs, boggy areas and hidden drains and

culverts are to be marked so they are highly visible in poor or low light conditions. The exercise environment should be made as comfortable as the exercise scenario allows.

Moulage

Where a field incident with injuries is planned, moulage (make up) is a method employed to add realism to an incident scenario. Depending on the scenario, an agency such as the ambulance service is asked to provide a list of injuries that would be likely to result from the emergency.

Make-up artists, from volunteer agencies or various universities prepare the victims, often briefing them on the symptoms they should voice during the exercise. Participating volunteers should be encouraged to wear old clothing.

Site first aid

Site first aid is recommended to be provided where physical activity is planned, for example a large scale field exercise. Volunteer organisations may be able to provide staff to fulfil this role.



Figure 12: Mannequins, old clothes, chairs etc. make ideal props for an incident site

If a site first aid officer is not going to be employed for the exercise, alternative arrangements must be prepared. An exercise manager for example, may be tasked with a 'NODUFF' emergency callout.

Agency preparation

It is up to the individual agency as to how it prepares its staff for an exercise. Depending on the type of exercise and the individual objectives of the agency, it may be used as reinforcement of recent training, training itself or as a test of plans.

To avoid any misunderstandings between a real incident and an exercise however, it is recommended that staff are at least informed of the exercise date and that they may be required to participate.

Contingencies

It is rare for exercises to be changed or cancelled at the last minute, however the exercise planning group must be prepared with a contingency plan. Some problems to consider are rain, heat, fog, hail, other conflicting events, industrial strikes, product demand and authentic emergencies.

A contingency plan may be: if it rains the field exercise will be cancelled and only the media centre and emergency coordination centre will be activated through a centre simulation exercise, or a tabletop exercise will explore a similar scenario. It is important that all agencies are aware of any contingency plans well before the exercise date and that there is a method for relaying this to everyone on the day.

Pre-exercise briefing

Exercises of a large nature such as a field or centre simulation exercise should include a pre-exercise briefing for all participants or single agency representatives, about a week before the exercise. The briefing can take different formats depending on the objectives of the exercise. Some examples are:

- a tabletop exercise focusing on the scenario of the field or centre simulation exercise
- a briefing of the emergency plan and how it applies to a certain scenario
- a briefing of what is expected from the exercise participants
- a briefing of the exercise scenario combined with an information session
- a briefing of the exercise scenario combined with a walkaround

Exercise hot debrief

A hot debrief usually refers to the exercise participants meeting directly after the exercise and is designed to allow a forum



Figure 13: Moulage can assist emergency responders in gauging the gravity of the emergency

for people to voice their feelings as to how the exercise progressed. This meeting is usually emotionally charged and therefore should be professionally facilitated by a person who can draw both recommendations for change and positive aspects from the day. A hot debrief can pick up issues that may be forgotten in coming days and is also designed to de-role the staff.

Walkarounds, information sessions and centre simulation exercises often involve all agencies during the debrief and is usually the only debrief conducted. A field exercise hot debrief should be conducted in single agency groups due to the amount of people involved and the tensions that are sometimes experienced between agencies immediately after the exercise.

Full debrief

A full debrief occurs approximately a week after a large exercise and is designed in this fashion to allow an agency reconciliation of its own recommendations. It also enables participants time and distance to critically consider the achievements of the exercise with reference to the objectives, away from the 'heat of the moment'.

A full debrief is a structured meeting where time is given for each agency referee to reflect and report on the exercise outcomes from their perspective, offer recommendations for future exercises or changes to the plan, and also gives the opportunity for considered questions.

All debriefs should be treated as a positive experience where conduct guidelines for participants are set out by the facilitator at the beginning of the meeting.

Exercise report

The exercise report and the implementation of recommendations are the most important end products of an exercise. The exercise report is a culmination of referee reports, observer and volunteer comments and of the outcomes of the full debrief.

Carefully structured in its design, the report should be an honest representation of the exercise and is approved by the exercise planning group before its release to all emergency plan holders. A report for a full field exercise is written within a month or two of the exercise. A suggested report layout is below:

- synopsis or executive summary—the concept of the report, an accurate overview, the conclusion and general outline of recommendations
- table of contents—an outline of the sections of the report with reference to page numbers
- introduction—the purpose and objective of the report is identified
- a brief outline of the exercise planning group—detailing the charter of the group and how effective the group was in its production of the exercise (the exercise management team may also be mentioned here)
- the exercise aim and objectives—as set out prior to the exercise
- the exercise scenario—as described in the general briefing notes, but in past tense
- participating organisations—a list of those companies and agencies who participated in the exercise
- participating volunteers—a list of those organisations who supported the exercise with volunteers
- sequence of events (master schedule)—

a concise table of times and relevant actions or events

- exercise critique and recommendations—the main body of the document where the various sequential exercise objectives are the section titles—the objectives are addressed stating basic facts with reference to quotes etc. and are followed by clearly defined recommendations
- attachments such as the referee reports, noted other reports, notes of the full debrief—appendices in logical order added with the approval of the author
- summary—where logical conclusions are drawn from the exercise critique
- thank you—an opportunity to thank specific people or organisations for their time and significant participation in the exercise planning or management

Implementation of recommendations
Once the exercise report is written and released to the wider community, areas identified within the report are to be addressed by the emergency planning committee, prioritised and then actioned over the coming months.

Emergency exercise areas of improvement can usually be split into four categories; personnel and agency coordination, communication, facilities and plans, policies and procedures.

Conclusions

The importance of exercising an emergency plan cannot be overstated. Emergency agencies and companies can interact, exchange ideas and form relationships that will better assist the response to an emergency situation. Staff are able to consolidate their understanding of the emergency plan and help identify deficiencies and recommend solutions to further enhance the response to those people directly affected by the event.

Exercising is about communicating, realistic problem solving and principally ensuring that the plan outlines the best procedures to take care of emergency victims and their family and friends. Exercises and training programs build trust and recognition between all participants from the planners to the responders. It is a rehearsal for the real thing.

When an emergency plan is developed, completed and then distributed to staff, its useful life will be limited without constant amending and testing. Exercises and training are the critical link between the plan and the people carrying it out. The plan that is most valuable in an emergency, is the plan that has been exercised by staff and which will be

implemented as second nature once an event occurs.

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Author's contact details

Ms Sarah Renner
Emergency Planning Coordinator
Melbourne Airport
Lock Bag 16 Gladstone Park VIC 3043
sarah.renner@melair.com.au

This article has been refereed

Victorian flood conference set for Traralgon in October

The next Victorian Flood Management Conference is being held in Traralgon from 10–12 October 2001. The conference, which is held only once every two years, is being hosted by the West Gippsland Catchment Management Authority and Latrobe City Council.

The theme for the conference, *Planning for the Inevitable*, is intended to highlight the importance of **planning** to good floodplain management. Flooding is somewhat unique in the world of natural disaster management in that it is highly predictable—we can estimate locations, extents and depths of flooding with considerable certainty—we just don't know when floods are going to occur. However, floods are **inevitable** and proper planning is critical to minimising their negative impacts and the associated social trauma. With the introduction of new and consistent municipal planning schemes across Victoria, and the advent of Catchment Management Authorities with regional floodplain management functions, planning for floods has a renewed focus and vitality.

Sponsors and technical papers are currently being finalised and a second conference brochure will be distributed in early July.

To be placed on the mailing list for conference information contact:
Wayne Gilmour, Chairman of the organising committee
Phone: 03 5175 7800, email: wayneg@wgcm.vic.gov.au.