

Scene and Structural Assessment

Introduction

Scene and structural assessment is a continuous process from the initial response to the incident conclusion. Like any other incident, the assessment process should commence with the arrival of the Incident Commander, and comply with the operational procedures and guidance of the individual FRS.

It is important in the early stages to assess what level of specialist resources and personnel, if any, are required. This may not be possible until the Incident Commander has completed an initial survey. Therefore, the scene and structural assessment process is based on three levels - depending on experience and specialist advice available:

- Initial assessment** First response Incident Commander
- Detailed assessment** USAR reconnaissance and survey
- Specialist assessment** USAR technical search and structural specialists

This process should be used as a guide. The individual stages may be combined at smaller and less complex incidents.

Initial Assessment

Operational personnel must constantly observe all safety precautions to protect themselves and others from injury. This is paramount in the early stages and in particular during the initial scene assessment. This should be done from a safe distance and within the limits of expertise of the individual.

It is vitally important that all operational personnel appreciate the hazards associated with incidents involving collapsed structures and gather appropriate information that will allow them to select the correct PPE.



Fig 1: Early Stages of a Collapse Operation

Date	Status	Document Number	Version	Page
November 2006	Completed document	ND_USAR_SOP_SSA001	0.6	Page 1 of 3

Detailed Assessment

On larger scale or complex structure collapse incidents, the Incident Commander will need to develop an Incident Action Plan with support and advice from the USAR Units. This will require trained personnel with the requisite knowledge and expertise needed to gather information, following a detailed scene and structural assessment.

Early on, a USAR reconnaissance/assessment team should be established that can be deployed at any time to assess or review the scene based on situational needs. A typical team may consist of 2 to 10 team members with a variety of specialties represented as the incident or risk dictates:

- Search manager
- Canine search handler
- Technical search specialists
- Hazmat advisor
- Structural engineer / demolition specialist
- Safety officer

The role of the team is to carry out a detailed assessment of the scene, to gather information for the Incident Commander/USAR Advisor and to formulate an Incident Action Plan. During the assessment and survey the team should include:

- Structure hazard evaluation
- Continual structural monitoring
- Recording of information and mapping
- Area and multiple buildings triage
- Allocating identification to buildings and specific areas to be searched
- Carrying out and recording a risk assessment
- Cordoning of unsafe areas and structures
- On completion, liaise with incident commander/USAR advisor for search planning

Fig 2: Form USAR202 – USAR Action Plan

Date	Status	Document Number	Version	Page
November 2006	Completed document	ND_USAR_SOP_SSA001	0.6	Page 2 of 3

Specialist Assessment

This level of scene assessment is carried out by a specialist technical search team who have the knowledge and USAR skills to make:

- Safe entry into the collapsed structure environment
- Continual assessment of the immediate scene of operations

The team should have the capability to plan and assess what resources are needed for intricate technical search and rescue operations of buildings and void spaces.

They should also identify defined areas and assess levels of risk before instigating safety control measures. These could include barriers and shoring, which should be in place before rescue teams start operations.

This team should normally consist of USAR technicians with enhanced knowledge of technical search operations and equipment. However the size and other specialists within the team will depend on the incident and resources available. They may include:

- Structural specialists
- Medics/doctors
- Canine search teams
- Hazmat advisors/DIM
- Safety officer

All should be under the direct guidance of a USAR search manager (see Role of the Search Manager – ND_USAR_SOP_SEA011).

Author – Malcolm Crisp

Date	Status	Document Number	Version	Page
November 2006	Completed document	ND_USAR_SOP_SSA001	0.6	Page 3 of 3