

4-2-5. Urban Search-and-Rescue Training in Singapore

1) Basic concept

Singapore government conducts training courses every year for personnel in charge of search and rescue activities. The seminar has been accepting trainees from outside Singapore for the past 4 years and providing training on search-and-rescue skills in urban disaster situations. The training facility of the Civil Defence Academy (CDA) of Singapore Civil Defence Force (SCDF) is one of the top-notch facilities in Asia. In an effort to utilize these resources, ADRC called for member countries to participate in the training, starting last year. As a result, search and rescue officers from Cambodia, Sri Lanka, Thailand, the Philippines, Malaysia and Myanmar have participated in the training.

2) Dates

January 12 to 23, 2004 (2 weeks)

3) Details

(1) Participants

Total 9 search and rescue officers (6 countries : 1 person from Cambodia, Sri Lanka and Myanmar, 2 persons from Malaysia, the Philippines and Thailand)

(2) Lecturers

Staff from Singapore Civil Defence Force (SCDF)



Fig. 4-2-5-1 Simulation Facility at Singapore Civil Defence Academy
(Left: Fire Rescue, Right: Rescue from the rubble)

(3) Example of training program

a) Lecture

- Evaluate damages
- Search and rescue in confined spaces
- Knots & lines
- Rescue operations
- Type of collapsed building
- Rescue equipment
- Mass/single casualties management
- Rescue dogs

b) Practical training

- Search training in the confined spaces
- Search training in a crop storage tank (simulation facility)
- Search training in a collapsed building (simulation facility)
- Search training underground (simulation facility)
- Rescue exercise at a ruined military facility
- High angle rescue training

4) Explanation

The search and rescue training facility in Singapore is equipped with simulation facilities including a 10-story fire building, chemical plant, oil refinery, debris area, confined space, and

also with lecture rooms, accommodation, canteen, and administration.

The first week of the training is centered on lectures and training, and the second week on practical exercise for search and rescue at the simulation facilities.

The Civil Defence Academy provides about 20 training courses a year for various objectives. For trainees from abroad, search-and-rescue training courses are available for 2 types of disasters – fire and urban disaster. Urban disaster search-and-rescue training is further divided into courses for ASEAN personnel, for personnel from specially designated countries and for personnel from other non-designated countries. All these courses are held every year, and trainers all have solid experiences.

ADRC sent trainees to the course for non-designated countries. Although the training course consisted of trainees with different skill levels and needs, all the trainees achieved satisfactory results thanks to the effective coordination of the trainers with full experience (see questionnaire survey in Table 4-2-1-1).



Fig. 4-2-1-2 Training for how to use rescue materials

Table. 4-2-1-1 Survey Results on the Program (Including 9 from ADRC and 7 from other scheme)
Course Evaluation For 17th International USAR Course 2003

1 Course Objective

Very well achieved	5	31.25%
Well achieved	9	56.25%
Adequately achieved	2	12.50%
Not well achieved	—	—
Not all achieved	—	—

2 Learning Objective

Very well achieved	4	25.00%
Well achieved	8	50.00%
Adequately achieved	4	25.00%
Not well achieved	—	—
Not all achieved	—	—

3 Course Structure and Content

a. Relevance of the topics

Very relevant	5	31.25%
Relevant	7	43.75%
Adequately relevant	3	18.75%
Less relevant	1	6.25%
Not relevant	—	—

b. Overall planing and preparation

Excellent	3	18.75%
Very good	7	43.75%
Good	6	37.50%
Satisfactory	—	—
Poor	—	—

c. Course duration

Too long	—	—
Just right	9	56.25%
Too short	7	43.75%

d. Overall pace of the course

Too fast	4	25.00%
Just right	12	75.00%
Too slow	—	—

e. Quality of the handouts in the terms of readability and clarity

Excellent	3	18.75%
Very good	8	50.00%
Good	4	25.00%
Satisfactory	1	6.25%
Poor	—	—

f. Usefulness of the course materials as a learning aid

Extremely useful	4	25.00%
Very good	9	56.25%
Adequately useful	3	18.75%
Less useful	—	—
Not at all useful	—	—

4 Trainer Effectiveness

a. Effectiveness in delivering the lesson

Excellent	5	31.25%
Very good	4	25.00%
Good	5	31.25%
Satisfactory	2	12.50%
Poor	—	—

b. Effectiveness in using practical examples and demonstration

Excellent	9	56.25%
Very good	5	31.25%
Good	1	6.25%
Satisfactory	1	6.25%
Poor	—	—

c. Interactions between the participants and the trainer(s)

Excellent	9	56.25%
Very good	5	31.25%
Good	1	6.25%
Satisfactory	1	6.25%
Poor	—	—

e. Overall presentation of the trainer(s)

Excellent	6	37.50%
Very good	5	31.25%
Good	5	31.25%
Satisfactory	—	—
Poor	—	—

The survey demonstrated clearly that Singapore has the appropriate human resources as well as facilities for search and rescue training. The objective of this program is to utilize the resources owned by member countries to meet the needs of other member countries. ADRC is determined to continue to promote this type of project in the future.