Assistance to Earthquake Victims in Taiwan

Introduction

There are questions about the timeliness of the assistance that the Government rescue squad has offered to earthquake victims in Taiwan and allegations that the equipment it brought is out-of-date for the on-going search and rescue operations in the earthquake devastated areas.

Deployment of the Rescue Squad

- 2. A major earthquake with a magnitude of 7.6 on the Richter scale devastated Taichung and Taipei on 21 September. This was said to be the worst tremor in Taiwan in a hundred years. After some initial exchanges and having received a positive response from the head of the Chung Hwa Travel Service, the Government announced on 22 September that it would send a 16-member rescue squad from the Fire Services Department (FSD) to participate in the search and rescue operations in Taiwan.
- 3. Arrangements were made immediately through the Chung Hwa Travel Service to secure approval of the Taiwan authorities and particulars of the rescue squad members were provided for consideration of urgent entry visas for the members. Entry visas were made available around noontime on 23 September. The rescue squad also received a specific request for members to head directly for Nantou, a major wreckage site in Taichung, immediately upon their arrival at the Taipei airport. The rescue squad departed for Taipei in the same afternoon (23 September) on the first available flight before 3p.m.
- 4. The FSD rescue squad arrived at Taipei at around 5:30p.m. on 23 September. Members were received by officials of the Mainland Affairs Council (MAC). Rather than being taken to Nantou, however, the squad was arranged to attend a briefing by the National Fire Administration Ministry of Interior Headquarters (NFA) which was coordinating the rescue operations. At the briefing which run until around 9p.m., the rescue squad was informed that there has been a change in the rescue strategy, that the authorities have decided to bring in heavy excavation machinery, and that as a result the equipment brought by the FSD squad was considered not useful and its assistance no longer required. Squad members were then taken to pre-arranged accommodation at the Overseas Youth Activity Centre.
- 5. The FSD rescue squad had a brief meeting with the NFA in the next morning on 24 September and was given the same message, i.e. no assistance from the rescue squad was required in Taipei or Taichung. Nevertheless, the FSD squad made it clear that it would remain on standby for possible further instructions. Shortly after noon, a MAC official informed the rescue squad that arrangements could be made for it to join the rescue operation at Hsinchuang, Taipei.
- 6. At about 2:30p.m., the FSD rescue squad was taken to a collapsed building at Hsinchuang. Another rescue team from Mexico was already working at the site. The FSD squad leader immediately deployed members to strategic locations and conducted a thorough search within the collapsed building with the aid of the life detector units. The ambulance officers in the squad provided stress counselling to several families with members still missing, and rendered paramedic service at the first aid post set up at scene. Members of the FSD rescue squad worked until 6p.m. It was concluded that no sign of life could be detected in the collapsed building. The squad reported its findings to the Taipei Fire Department which was the incident commander for the operation. The squad leader repeated members' offer of help at Nantou or any other disaster site. This was declined. The squad left Hsinchuang at 6:30p.m.

- 7. Although the operation at Hsinchuang on 24 September did not identify any survivors, it was reported that a six-year-old boy was rescued from a quake scene at Taichung in the same afternoon. (There was a further report on the successful rescue of two survivors from another wreckage site in Taipei on 26 September.)
- 8. On 25 September, having confirmed that no further assistance from the FSD rescue squad would be required, members returned to Hong Kong at 2:30p.m.
- 9. The FSD rescue squad received warm reception by senior officials of the MAC, who have accompanied the squad throughout its time in Taipei. However, as rescue operations were under a separate command viz. the NFA, discussions as to which earthquake site the rescue squad should be deployed to and what form of assistance it could provide to earthquake victims were held with officials of the NFA.

Rescue and Supporting Equipment

10. A full list of the rescue and other supporting equipment which the FSD squad brought with it is at Annex A. The FSD considers the equipment suitable for the search and rescue operations in Taiwan because this has been proved useful in similar situations in Hong Kong including landslides and collapsed buildings. The squad has taken care to bring two different types of life detector units. The Life Detector allows the operator to listen to and pick up seismic signals due to slight movement of a buried survivor, such as scratches or knocks. The Survivor Detector is an electronic omni-directional device that has an extremely high sensitivity and a detection range of 45m in any direction from each of the four sensors built in the Detector. Both units also detect audible signals, such as crying of a survivor. The two pieces of detectors together should give precise detection of possible survivors in a confined wreckage scene.

Conclusion

- 11. According to press reports, a number of international rescue corps were able to arrive at the earthquake sites within the first two days following the devastating earthquake on 21 September, although there were also some which arrived following our FSD squad on or after 23 September (Annex B). Notwithstanding the timetable, the FSD rescue squad was sent under a clear indication that the squad's assistance would be welcome and was considered useful for the extensive search and rescue operations in Taiwan.
- 12. Although the Government has rendered assistance in search and rescue operations in waters outside Hong Kong from time to time, this is the first time that we deploy a rescue squad overseas to participate in rescue work in earthquake devastated areas. We do not have an established mechanism per se, nor do we have the establishment under the FSD a team of officers dedicated to undertaking rescue work outside Hong Kong. But we have made every endeavor to facilitate an early response and deployment of the rescue squad to Taiwan. The FSD has also ensured that the squad only bring with it the most suitable and advanced equipment to enhance the search and rescue of possible survivors buried in collapsed buildings or landslides.

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List of Communication Equipment

Item	Description	Quantity	Function
1	Radiotelephone comprising		To provide immediate means communication
	- Portable Transceiver c/w External Microphone, Rechargeable Battery and Nylon Carrying Case	20 Nos.	
	- Rechargeable Battery	40 Nos.	
	- Battery Charger	20 Nos.	
2	GSM Mobile Telephone comprising		
	- GSM Mobile Telephone (with Auto Roaming Service)	10 Nos.	
	- Rechargeable Battery for GSM Mobile Telephone	30 Nos.	
	- Battery Charger for GSM Mobile Telephone	10 Nos.	
3	Satellite Phone	3 Nos.	

List of Rescue Equipment

Item	Description	Quantity	Function
1	Survivor Detector	1 Set	To search for buried/ trapped casualty
2	Life Detector	1 Set	To search for buried/trapped casualty
3	'Draeger' Multi-gas Detector	4 Sets	To detect toxic and poisonous gas
4.	Oxygen & Combustible Gas Alarm Meter	3 Sets	To detect oxygen content in the atmosphere
5	'Holmatro' Rescue Equipment (heavy Duty)	1 Set	For breaking-in, lifting and cutting during search and rescue and search operations
6	'Pionjar' Breaking-in Tool	1 Set	For drilling through hard objects such as concrete slab

Annex A2 (Sheet 2 of 4)

7	'Combi' Light Weight Rescue Tool	1 Set	For breaking-in, lifting and cutting during rescue and search operations
8	Rescue Stretcher	3 Nos.	To convey casualty
9	Shovel	8 Nos.	To remove debris during rescue operation
10	Life Line	8 Nos.	To secure casualty and rescuer during rescue operation
11	Rescue Karabiner	16 Nos.	To work with life line for rescue operation

12	Mountain Rescue Equipment comprising		To effect search and rescue
	- Troll Tape Sling		
	- Canvas Rope Protector	6 Nos.	
	- Figure 8 Descender	6 Nos.	
	- Electric Flasher	6 Nos.	
	- Troll Harness c/w Karabiner	6 Nos.	
	- Rescue Pulley	6 Nos.	
	- Anchor Strap	3 Nos.	
	- Carrying Bag for Mountain Rescue Equipment	3 Nos.	
		4 Nos.	
13	Other Supplementary Rescue Tools comprising		To effect search and rescue
	- Pry Axe	6 Nos.	
	- Pick Axe	3 Nos.	
	- 1st Aid Box	3 Nos.	

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	- Box of Tool Kit	3 Nos.	
	- Crowbar, 1m	6 Nos.	
	- J-Belt	16 Nos.	
	- Hand Lamp	6 Nos.	
	- Reflective Waistcoat	20 Nos.	
	- Luggage Trolley	3 Nos.	
14	Tents and Sleeping Bags		For use during recuperation in open air

List of Equipment for Ambulance Crew

Item	Description	Quantity	Function
1.	Casualty Label (Triage Tag)	100 nos.	A system for prioritizing the order for treatment and transport in multiple casualties incident.
2.	Trauma Kit	2 nos.	To carry medical supplies for airway, trauma and wound management
3.	IV (Intravenous) Equipment	1 Lot	To replenish body fluid directly into blood vessels of a dehydrated casualty
	- IV Catheter	40 nos.	
	- Alcohol swabs	50 nos.	
	- NaCl (Normal Saline Solution)	20 nos.	
	- D10 (10% Dextrose in water)	10 nos.	
	- IV administration set	30 nos.	
4.	Intubation Equipment	1 Lot	To oxygenate the lung directly by
	- Laryngoscope	2 sets	inserting an endotracheal tube into the
	- ET (endotracheal) tube	30 nos.	trachea
5.	Cervical Collar	4 sets	To immobilize neck of casualty who is suspected to have spinal injuries

Annex A3 (Sheet 2 of 2)

6.	Inflatable Splints	2 sets	For fracture management
7.	SAM Splints	6 nos.	For fracture and spinal injury management
8.	Digital Thermometer	1 no.	To examine body temperature
9.	BP (Blood pressure) Cuff	1 no.	To examine arterial blood pressure
10.	Oximeter	1 no.	To evaluate the saturated oxygen level with arterial blood
11.	AED (Automatic External Defibrillator)	1 set	To deliver electrical energy to casualty who is in cardiac arrest in order to restore normal heart function
12.	Disposable Burn Kit	2 sets	Burn Management Kit
13.	Cling Film	4 rolls	Minor Burn Management Film
14.	Ice pack	6 nos.	Provide instant cooling effect to reduce pain and swelling
15.	KED (Kendrick Extrication Device)	2 sets	For use in confined spaces to carry casualty where other extrication devices are difficult to apply
16.	Sharp box	2 nos.	Container for used syringes and needles
17.	Oxygen Face Mask	4 sets	Oxygen therapy equipment
18.	Oxygen Regulator	2 nos.	Oxygen therapy equipment
19.	Oxygen Cylinder	4 nos.	Oxygen therapy equipment

Annex B

International Rescue Teams in Taiwan*

Date of arrival	Country of origin	Site of work
21.0	•	W. G
21.9	Japan	Hsin Chuang
	Singapore	Taichung/Yunlin
22.9	United States	Nantou
	Russia	Yunlin/Nantou
	Turkey	#
	Germany	Yunlin
	S. Korea	Taichung
	Thailand	#
	United Kingdom	#
	Czech.	#
23.9	France	Taipei/Taichung
	Spain	Chushan/Chichi/Puli
	Austria	#
	Switzerland	#
	Germany	#
	Canada	#
	Hungary	#
	Australia	#
	Hong Kong	Hsinchuang
24.9	Mexico	Hsinchuang
	France	#
	Slovakia	Hsinchuang
25.9	New Zealand	#

^{*} Information according to press reports, quoting the Fire Services Department in Taiwan.

[#] Site of work not reported by the press.