



The Development of HKFSD's High Angle Rescue Team

Experience and Insight Sharing



HIGH ANGLE RESCUE TEAM
HART
HONG KONG FIRE SERVICES



Swiss Army Knife vs Multitool



A wide-angle photograph of the Hong Kong skyline, featuring numerous skyscrapers and the Victoria Harbour under a clear blue sky. The image serves as a background for the top portion of the slide.

Traditional High Angle Rescue

- Use techniques and equipment derived from Mountain Rescue





High Angle Rescue in Modern City

- Rapid vertical growth in major cities
- High-rise building related rescue



High Angle Rescue in Modern City

- Construction-related rescue





High Angle Rescue in Modern City

■ Cable Car Rescue





High Angle Rescue in Modern City

- Evacuation from Super High-rise Building





High Angle Rescue in Hong Kong

- Suicide attempt – Jumping off from building / bridge
- Tower crane rescue
- Scaffolding rescue
- Gondola rescue
- Mountain Rescue



Traditional Rescue Technique

- Traditional high angle rescue techniques derived from mountain rescue cannot catch up with the rescue needs in modern cities
- What is missing: suitable standard、 system、 efficiency

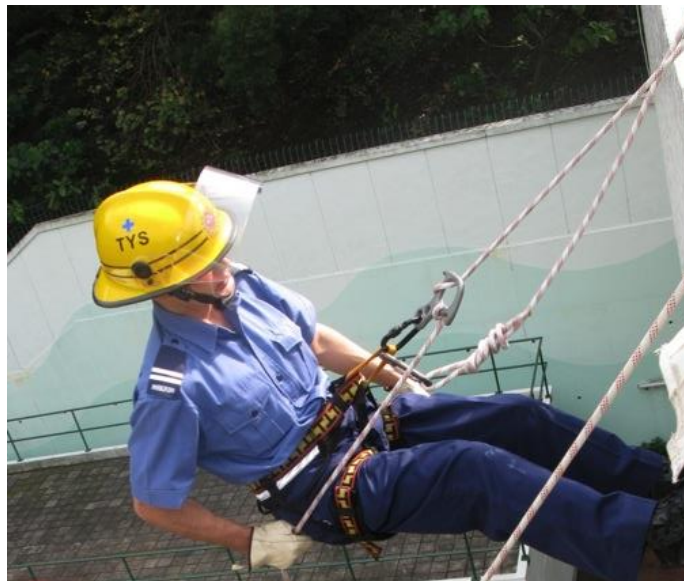


Traditional Rescue Technique





Traditional Rescue Technique





Change in Rescue

- Tight time-constraint (Public Expectation)
- Pressure from Social Network / Internet Media



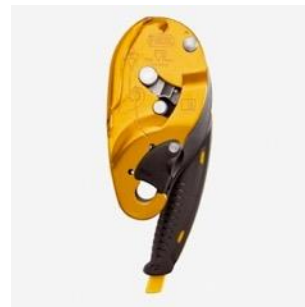
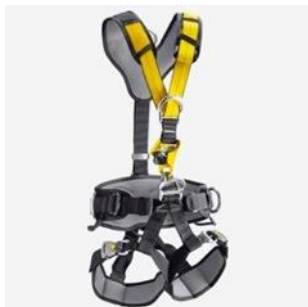
Rescue Team

- ▣ Focused effort
- ▣ Specialized and Professionalize



International Standard and Technology

- Based on industrial rope access standard and technique (Industrial Rope Access Trade Association)





International Standard and Technology

- Combined with rescue standard (National Fire Protection Association)





International Standard and Technology

- Benefit: keep up with the latest improvement in the field



Classification of Skill

- ▣ Basic Training
- ▣ Advance Training
- ▣ Specialized Training



Effective Allocation of Training Resources

- Different level of training for different level of rescuers
- To cater for different incidents and tasks
- Dispatched according to the nature of incident



High Angle Rescue Team (HART)

- From operational personnel through strict selection process





High Angle Rescue Team (HART)

▣ Safety awareness





High Angle Rescue Team (HART)

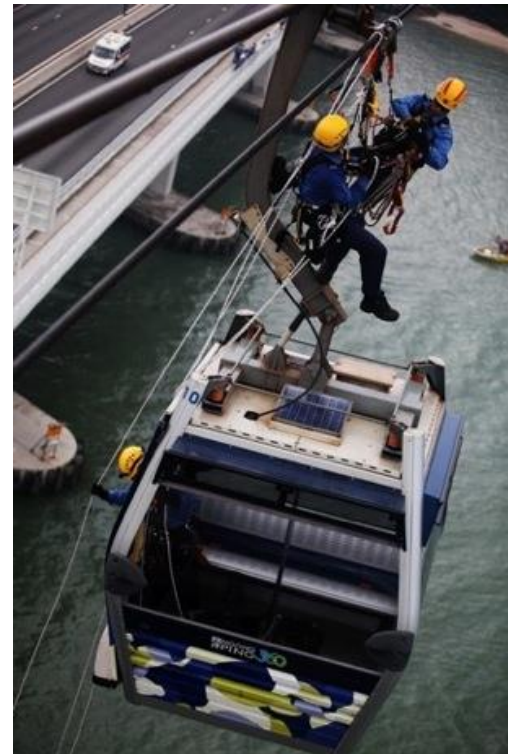
▣ Team spirit





High Angle Rescue Team (HART)

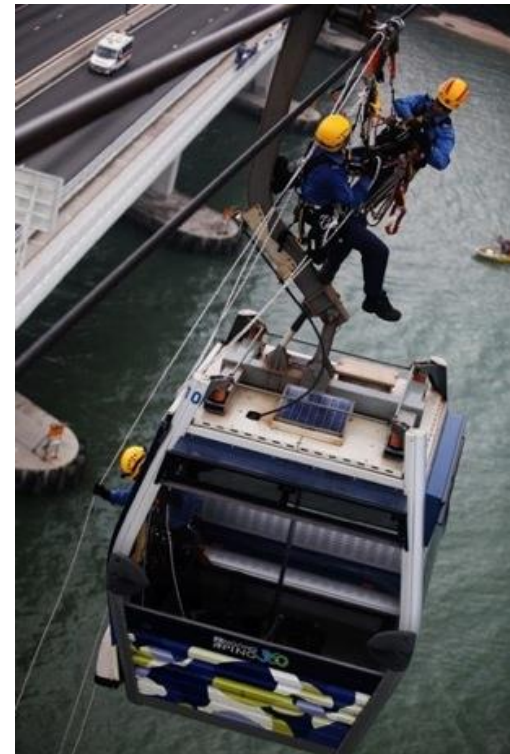
- Physically fit,
suitable mindset for
operation at height





High Angle Rescue Team (HART)

- Able to make independent decision, deal with changing environment well





Initial Training for HART

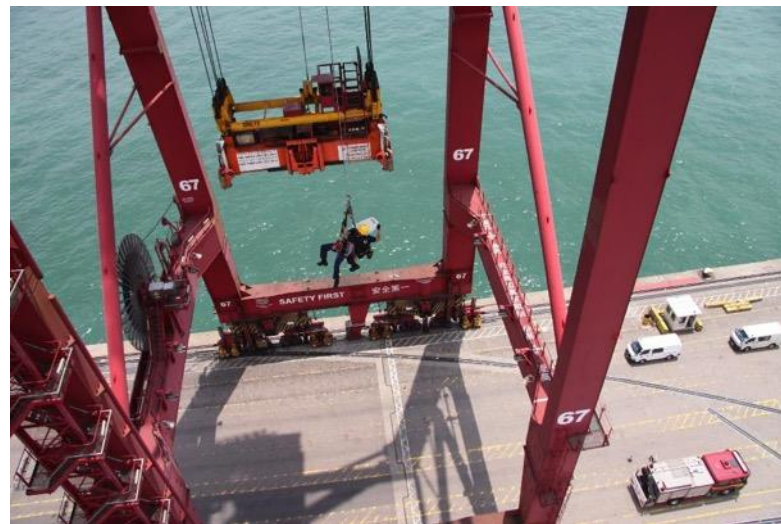
- Two weeks IRATA basic skill training





Initial Training for HART

- Three weeks scenario-based on-site training





Continuous Training for HART

- ❑ Consolidate rescue skills through continuous training
- ❑ Members who cannot maintain their skill levels will be replaced





Continuous Training for HART

- Minimum 80 hours on-rope training every year
- Focused on **on-site training**
- Complemented with refreshment training on basic skills





Continuous Training for HART

- During on-site training, team members will formulate action plan to practice problem solving and leadership skills

Cable Car Rescue



NP 360



Ocean Park

Cable Car Rescue



Tower Crane Rescue



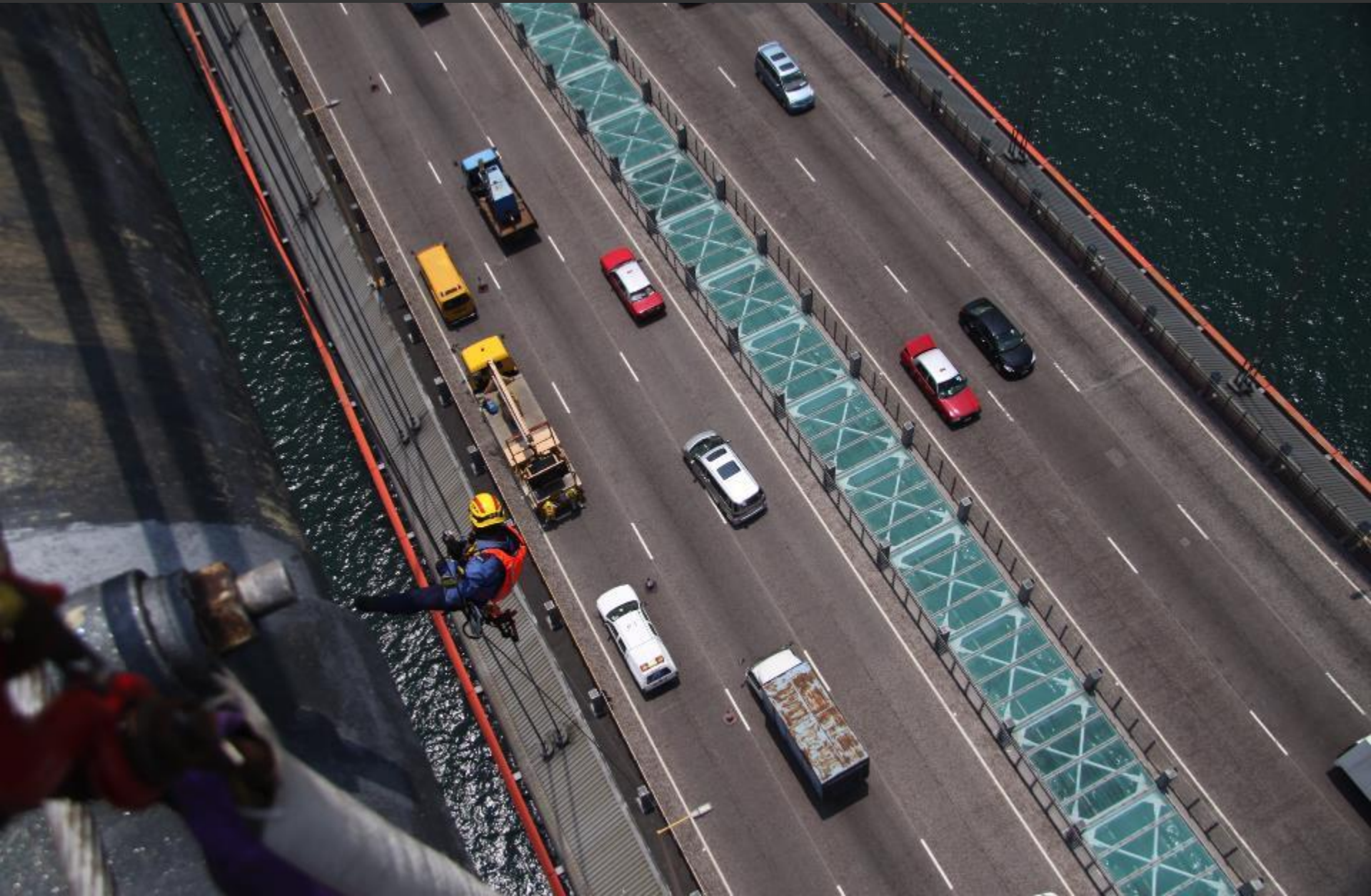
Tower Crane Rescue



Container Terminals Rescue



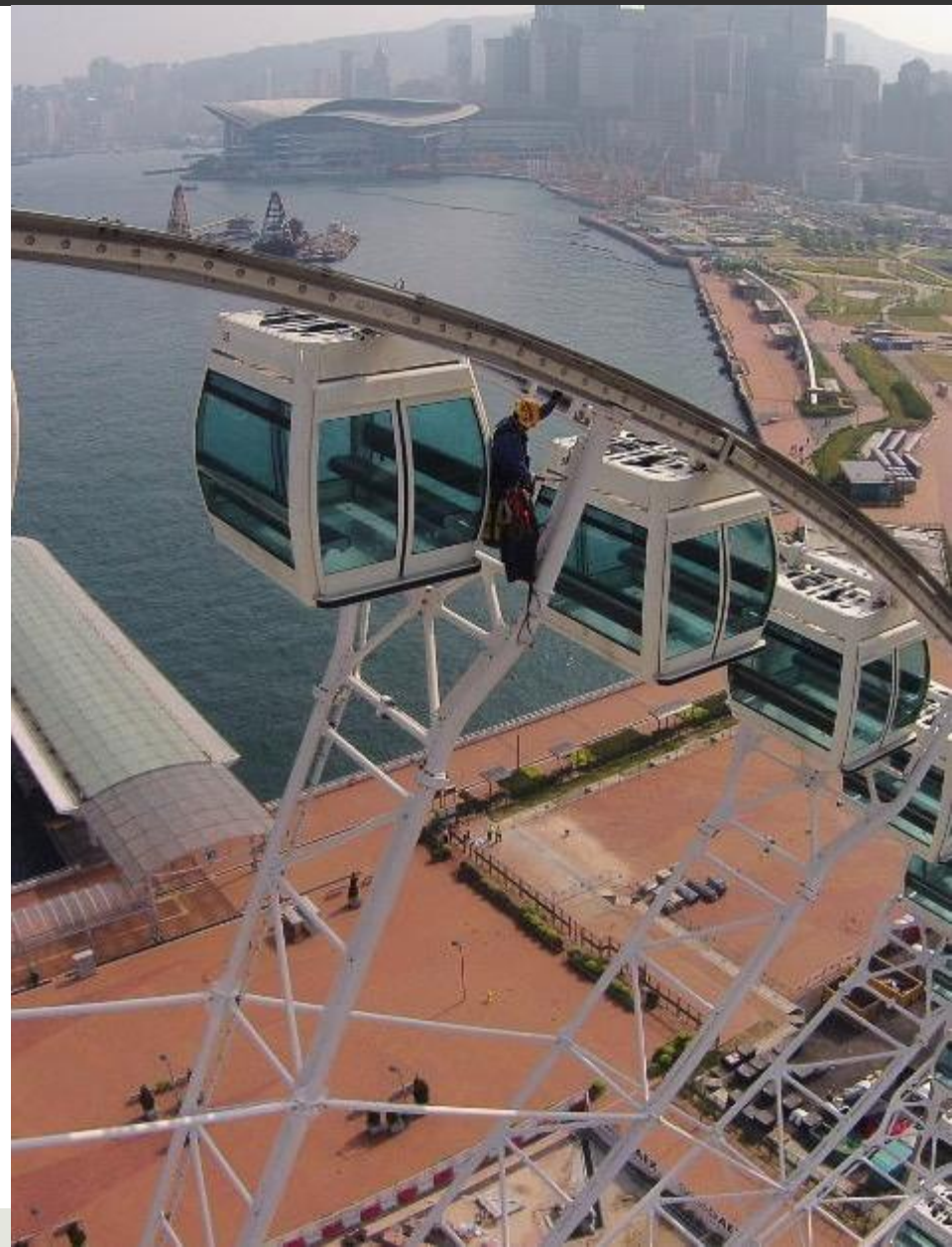
Bridge Tower Rescue



Drainage Tunnel Rescue



Amusement Facilities Rescue





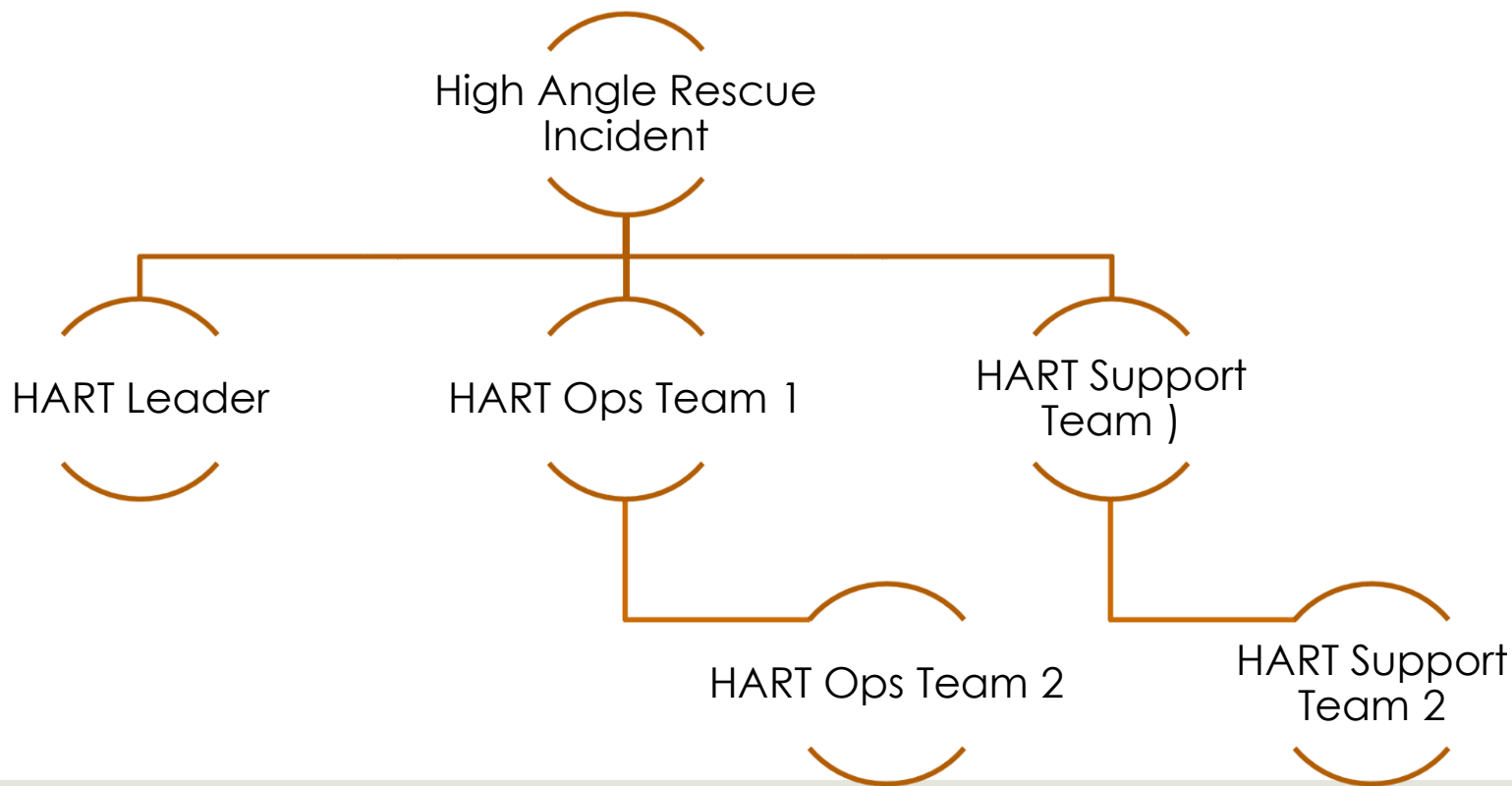
Support Team Arrangement of HART

- Consists of instructors from Fire and Ambulance Services Academy with advanced skills
- Attend high angle rescue incident





Support Team Arrangement of HART





Support Team Arrangement of HART

- Provide technical support
- Ensure operational safety and quality



Support Team Arrangement of HART

- Use observations from real incidents to enhance future training



An aerial photograph showing a worker in a safety harness and helmet climbing or working on the exterior of a tall building. The worker is positioned near a window or ledge. Below the building, a city street with cars and a park area are visible.

Support Team Arrangement of HART

- Focused effort to
 - bring in new equipment;
 - refine rescue technique and strategy





High Angle Rescue Cases



HIGH ANGLE RESCUE TEAM
HART
HONG KONG FIRE SERVICES

Container Terminals Rescue

Exercise in Sept 2011



Incident in Dec 2011



Gondola Rescue



Gondola Rescue



Mountain Rescue

- Two injured hikers trapped at a cliff during Typhoon Pakhar



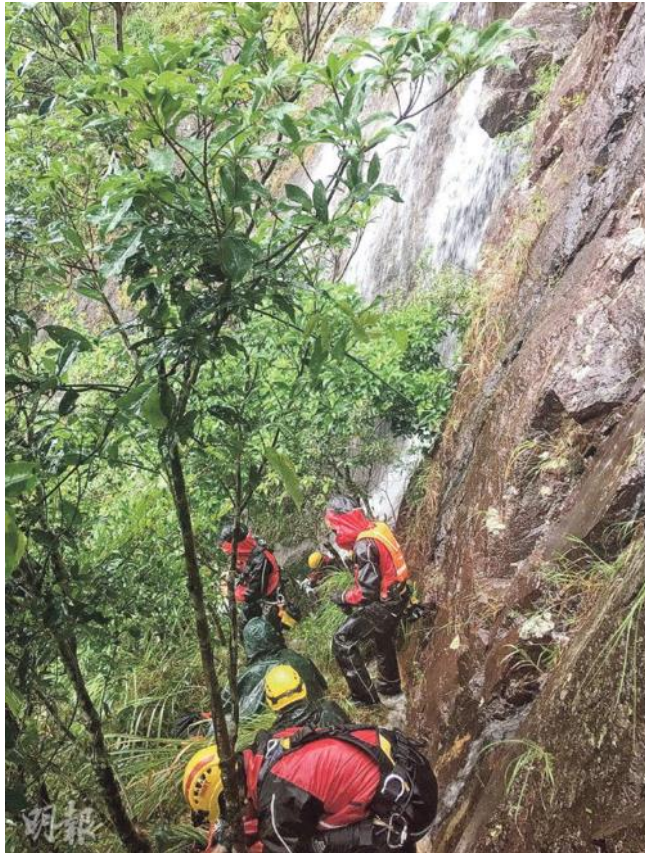
Mountain Rescue



Mountain Rescue



Mountain Rescue



Mountain Rescue





Summary

Specialized, Modernized, Professionalized



HIGH ANGLE RESCUE TEAM
HART
HONG KONG FIRE SERVICES



高空拯救專隊



Train Hard Fight Easy



HIGH ANGLE RESCUE TEAM
HART
HONG KONG FIRE SERVICES

Thank you



HIGH ANGLE RESCUE TEAM
HART
HONG KONG FIRE SERVICES