ICAR Congress 2012

Search operations and proportionality of the resources deployed

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Agenda

1. Introduction
2. Case study
3. Uniformity of training, management and tactics for search operations
1. Introduction

Critical success factors in search operations:
- Issue of the official order and the alarms, plus responsibility for the operation
- State of the missing person
- Situation as regards time
- Environmental conditions
- Resources and availability

Cost implications
2. Case Study “Alp Siegl”
Search operation: “Alp Sigel / Al (Reichert)”

Alarm issued “Fall in difficult-to-access terrain”

Sunday, 29 April 2012, 17:00

Alarm received by Rega 1414 >> Rescue operation

Weather: strong foehn wind, mild

Key details:
- On territory belonging to canton Appenzell Innerrhoden
- Started as a rescue mission then seamlessly became a search operation
- Missing person made contact herself, details of state of health
- Mobile phone subsequently did not work (empty battery)
Alarms issued within the station

- Police
  - Operational command
  - Team
  - Search dogs mobilised
  - Request to authorities
  - Fire brigade mobilised

- Rescue Station
  - Standby command
  - Head of Operations
  - Mobilisation of dog handler
  - Mobilisation of search flight
  - Mobilisation of SAR
  - Mobilisation of neighbouring station

- Rega 1414 Head Office
  - Deployment alarm

20. Oktober 2012
Factors influencing tactics and resources

- Issue of the official order and the alarm, plus responsibility for the operation
- State of the missing person
- Situation as regards time
- Environmental conditions
- Resources and availability
Resources and ancillary resources deployed

- Search team (mountain rescuers) [eye and ear]
- Terrain-search-dog teams
- Rega helicopter for the search flight
- SAR helicopter (FLIR)
- Search dogs (bloodhounds)
- Mobile phone shadow map / IMSI-Catcher used for signal location

- GPS
- Radio relay
Front command post

- Head of Operations + Police
- Optimum: at police command post (infrastructure)
  Real: moved to the vicinity of the operations area
- Keeping up-to-date the map of the site, team list, log and order list
- Communication with search team via radio, possibly mobile phone, and with partner organisations in person, via radio and mobile phone (new Polycom)
Questions??
3. Uniformity in the training, management and tactics for search operations
4. New “Alpine Rescue Manual”, Chapter 4.2
“Search Operations”

1. Introduction
2. Fundamentals
3. Improvised rescue techniques
4. Rescue techniques (Parts 1-3)
5. Avalanches
6. Helicopters
7. Rescue dogs
8. Incident command
9. Communication

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Fig. 4.01: Organisation chart

Cantonal Police

OPERATIONS CENTRE (OC)
REGA 141 or KWRO 144
Head of Operations (HO) at operations centre

RESCUE STATION
Control room (possibly together with police)
- Head of Operations Accident Site HO AS
  (for small operations, the HO AS can also be in the search area)
- Log keeper

SEARCH AREA
Search parties
- Rescuers
- Terrain search dog teams

Support from partner organisations
- Helicopter company (search flights)
- Spelaeo Switzerland (caves)
- Police (divers)
- Army (FLUR / troops)
- REDDG (search dogs)
- Others...
Fig. 4.02  Search operation flowchart

MISSING PERSON NOTIFICATION

Successful  PHASE 1: Clarification and investigations  Unsuccessful

Successful  PHASE 2: Primary search area (paths, routes)  Unsuccessful

Successful  PHASE 3: Extend search area  Unsuccessful

INTERRUPTION/TERMINATION
Fig. 4.03  Assessment of the situation in a search operation

SITUATION

Missing person
- Age
- Environment
- Options open to missing person

Location

Weather/environmental conditions

Own resources and options
- Team
- Equipment
- Search resources

Deployable resources
- Own resources sufficient

Dangers in search area

Time

ASSESSMENT

Decision

FORMAL ORDERS ISSUED
Thank you!