Phone location
Feedback and prospective analysis

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INTRODUCTION

- New features but same purpose for the mountain rescue teams
- A 94% mobile phone equipment rate in France
- « Safety of life » versus fundamental freedoms: an eternal dilemma?
PLAN

- Phone location techniques
- The « Wolfhound-Pro » : an original electronic search solution
- Prospective analysis
Phone location techniques

- How to locate a phone call?
  - « Safety of life » requisition
  - Location-enhanced emergency calls services
  - The Advanced Mobile Location arrival

- How to locate a cooperative subject?
  - Conversation between the rescuer and the subject,
    « Gendloc » : a phone location – web based
Phone location techniques
Phone-tracking – Missing persons

- Specific know-how for the mountain rescue teams:
  - «Find my phone», Geotags...
  - «share position» apps
  - «open sources» and social media
- Administrative and judicial inquiry
  - Technical tools:
    - Active solutions: high-level tool + direction finder
    - Passive solution: analysis of the whole GSM band
WOLFHOUND-PRO
An innovative tool

- A GSM spectrum analyzer ...
- ... modified from its original purpose...
- ...with suitable capabilities adapted to mountain and rural areas.
WOLFHOUND-PRO
implementation and feedback

- Pilot phase
- Implementation in all PGHM
- Training efforts
- First results
WOLFHOUND-PRO

user instructions

- When does it work?
  - Known number
  - Coverage zone of the operator
  - Isolation

- How to use it efficiently?
- Coordination between the initiation element and
WOLFHOUND-PRO

- **Drawbacks**
  - Known number / coverage zone
  - Inability to isolate phones
  - Unknown transmission power of the phone → no distance
  - Negative impact on the target phone’s battery
  - At least two rescuers involved
  - Large or inappropriate areas

- **Benefits**
  - Works with an uncooperative victim
  - Maximal range of 1600 meters
  - Efficient from the helicopter
  - Low cost
  - Relatively easy to use
  - Life saving / search time
PROSPECTIVE ANALYSIS

- Enhanced emergency calls / convergence of alert means

- Reported missing persons: key issues for the future
  - A link between the safety operation and the inquiry
  - Continuation of research and development
  - Cost control

- Legal developments
« If you have a great ambition, take as big a step as possible in the direction of fulfilling it, but if the step is only a tiny one, don’t worry if it is the largest one now possible. »

Mildred McAfee