

Part 1 **The importance of stay flexible**

Analysis of a complicated rescue operation

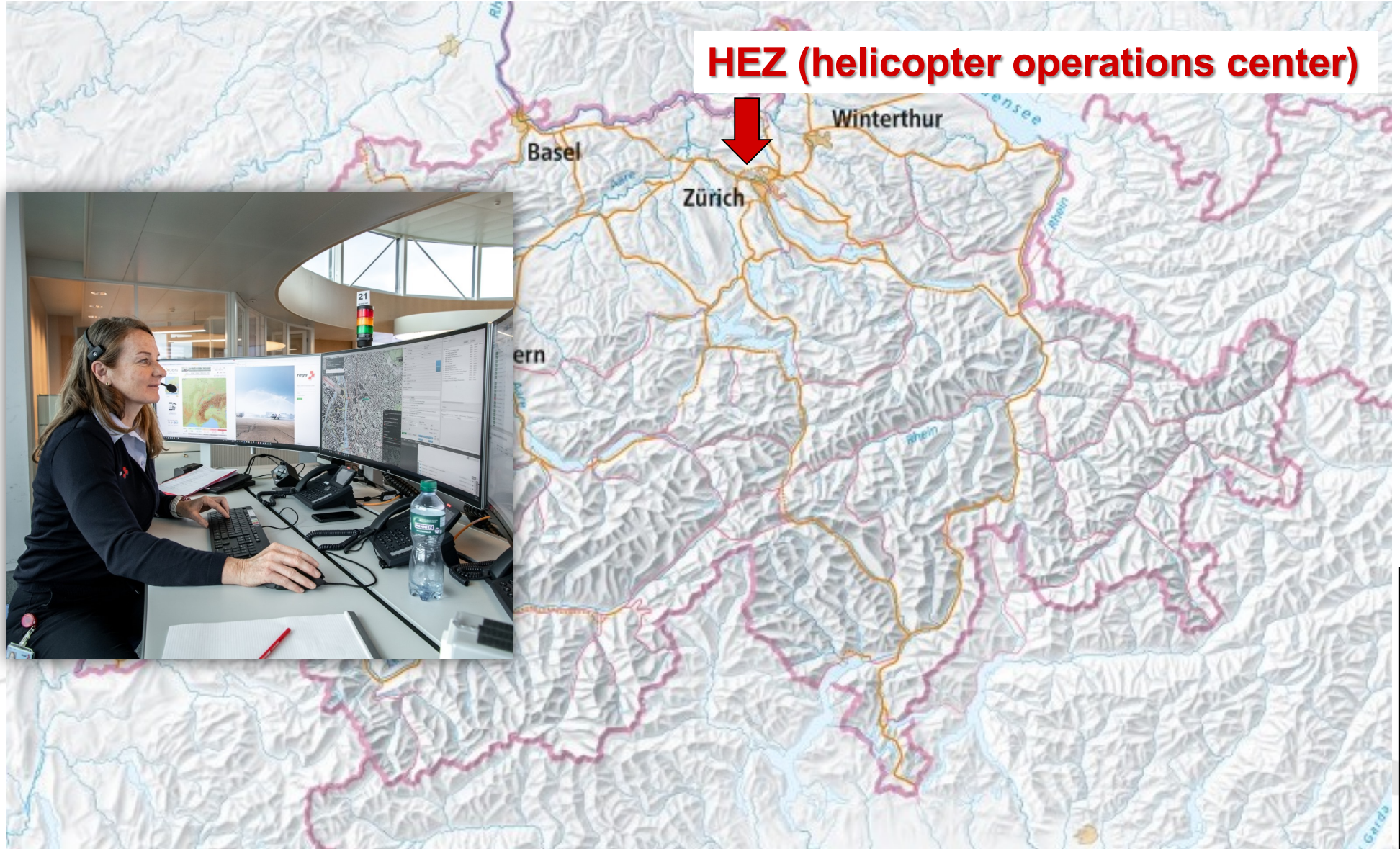
Andrea Dotta, Training courses leader, Swiss Alpine Rescue

Part 2 **New Technologies**

To be faster safer and wiser during a rescue action

Claude Gavillet, Rescue Chef Station Montreux, Swiss Alpine Rescue

Alarm – 13.12.2022 at 20:15h



Alarm – 13.12.2022 at 20:15h



Alarm



Normally, an alpine rescue Mission starts with a Key-word like:

EVACUATION

SEARCH

AVALANCHE

...



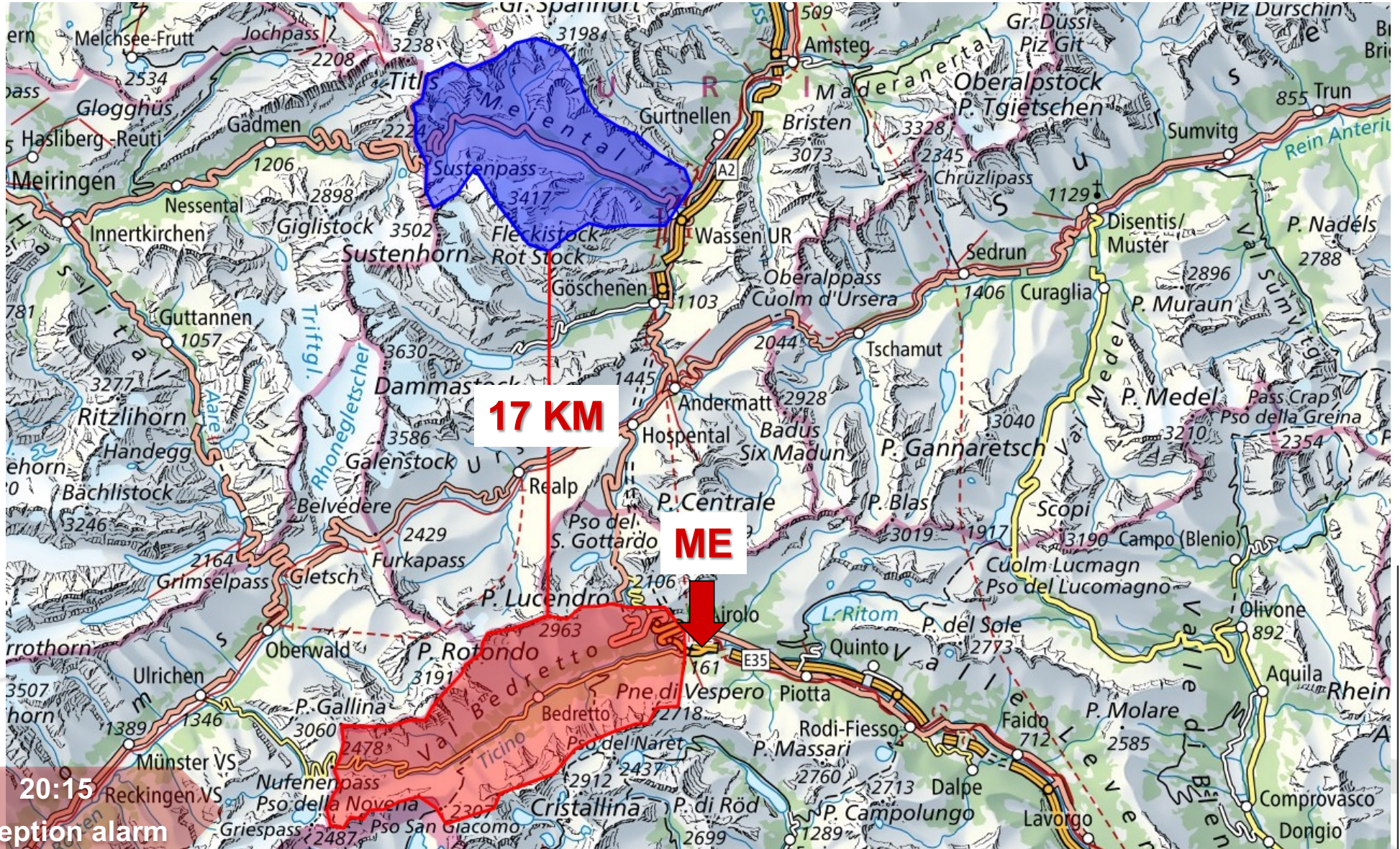
«facebook post» of the victim



20:15

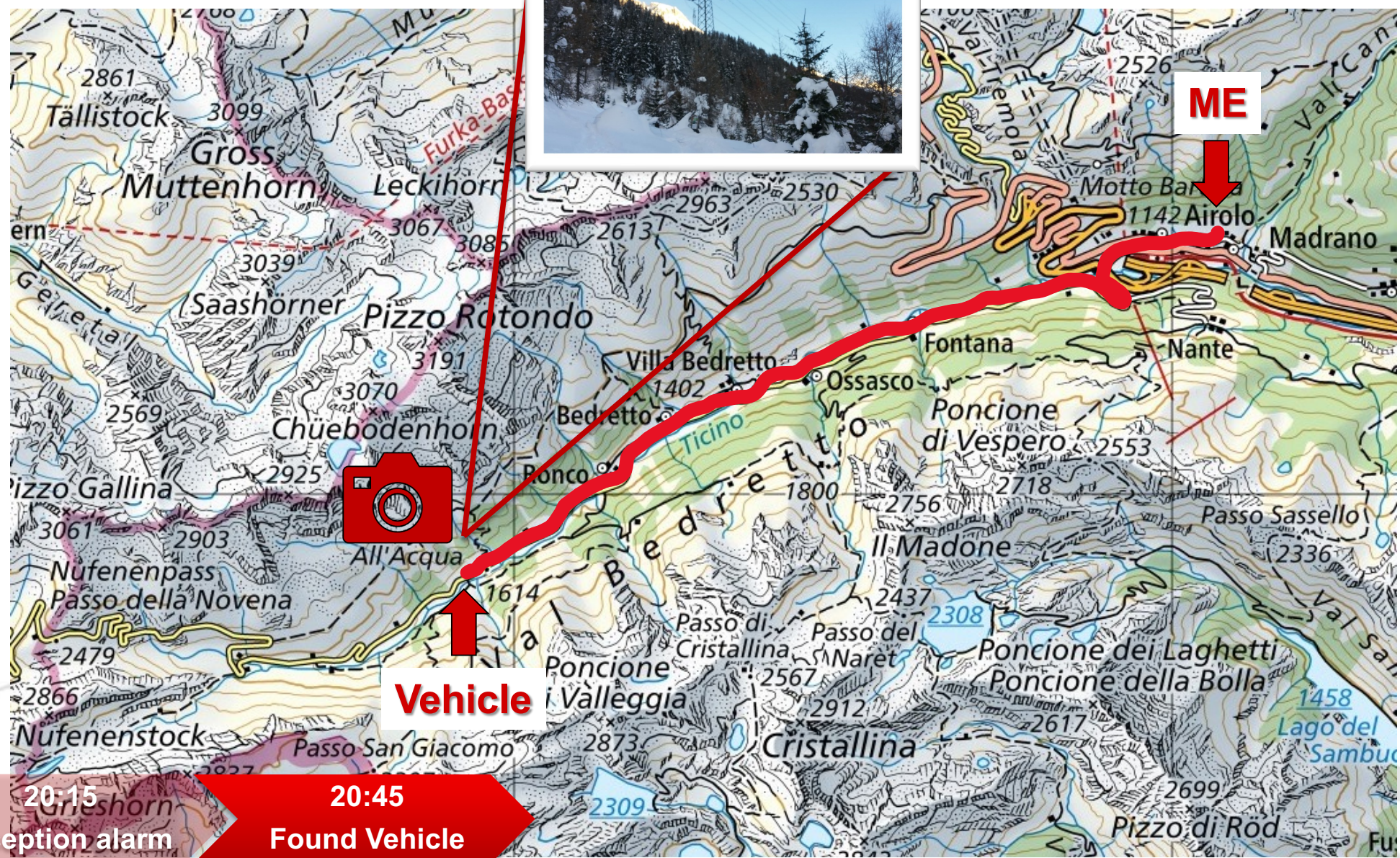
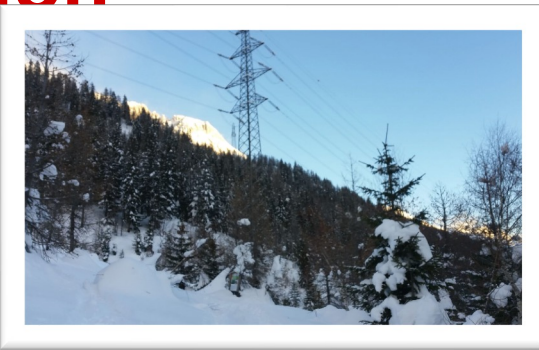
Reception alarm

Potential areas of operations



20:15
Reception alarm

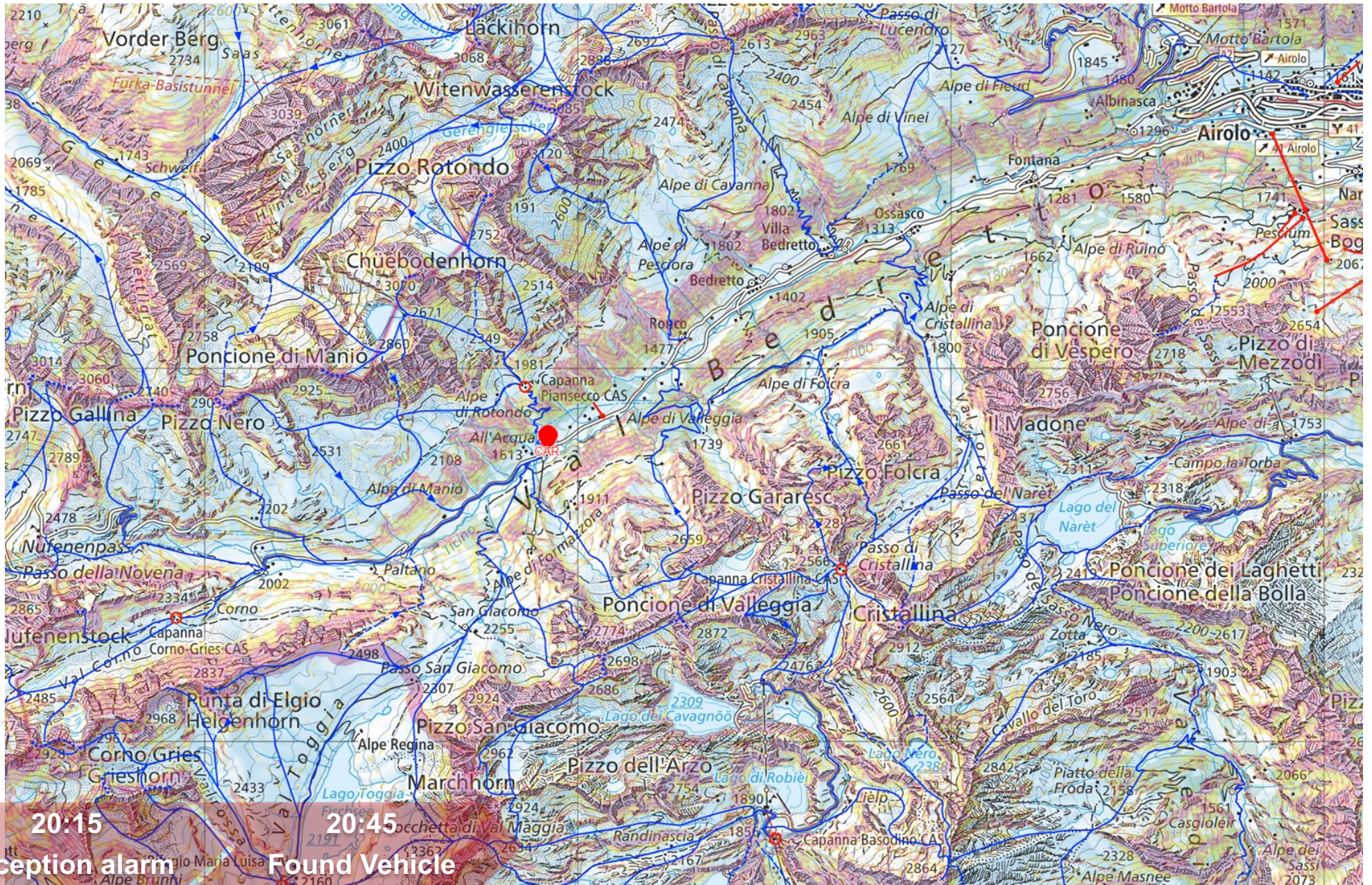
Map / time orientation



20:15
Reception alarm

20:45
Found Vehicle

Situation



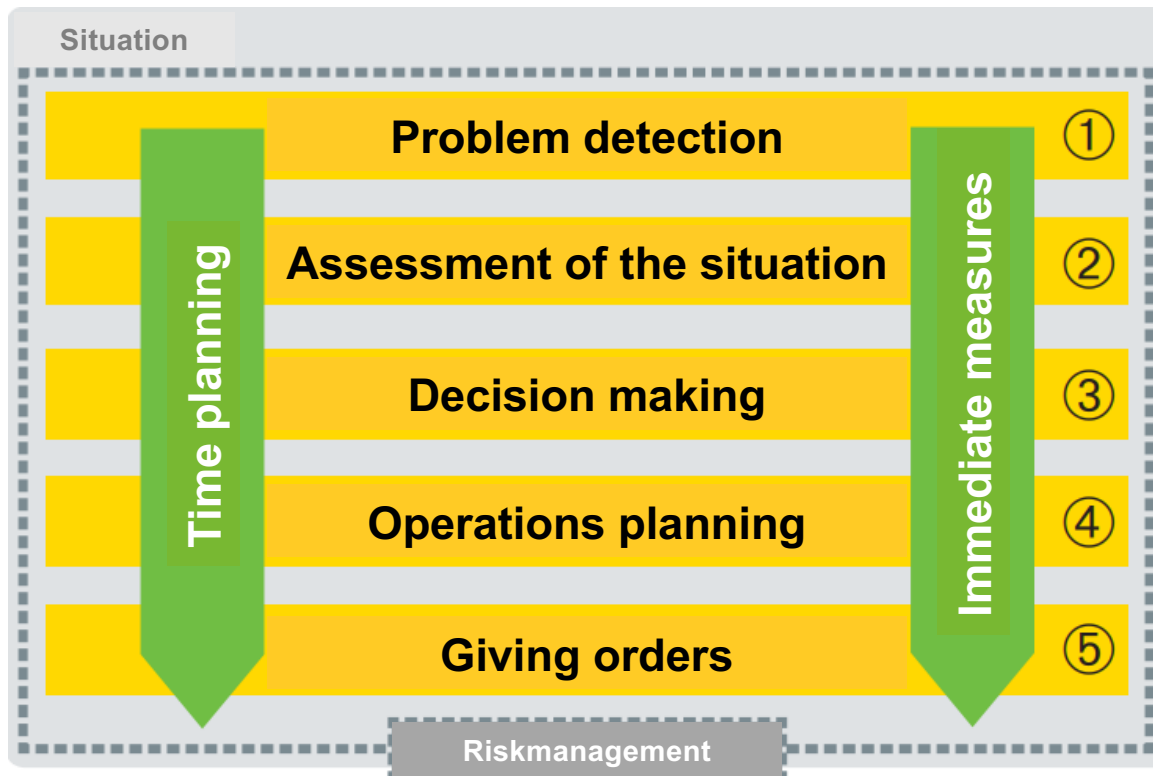
20:15

Reception alarm

20:45

Found Vehicle

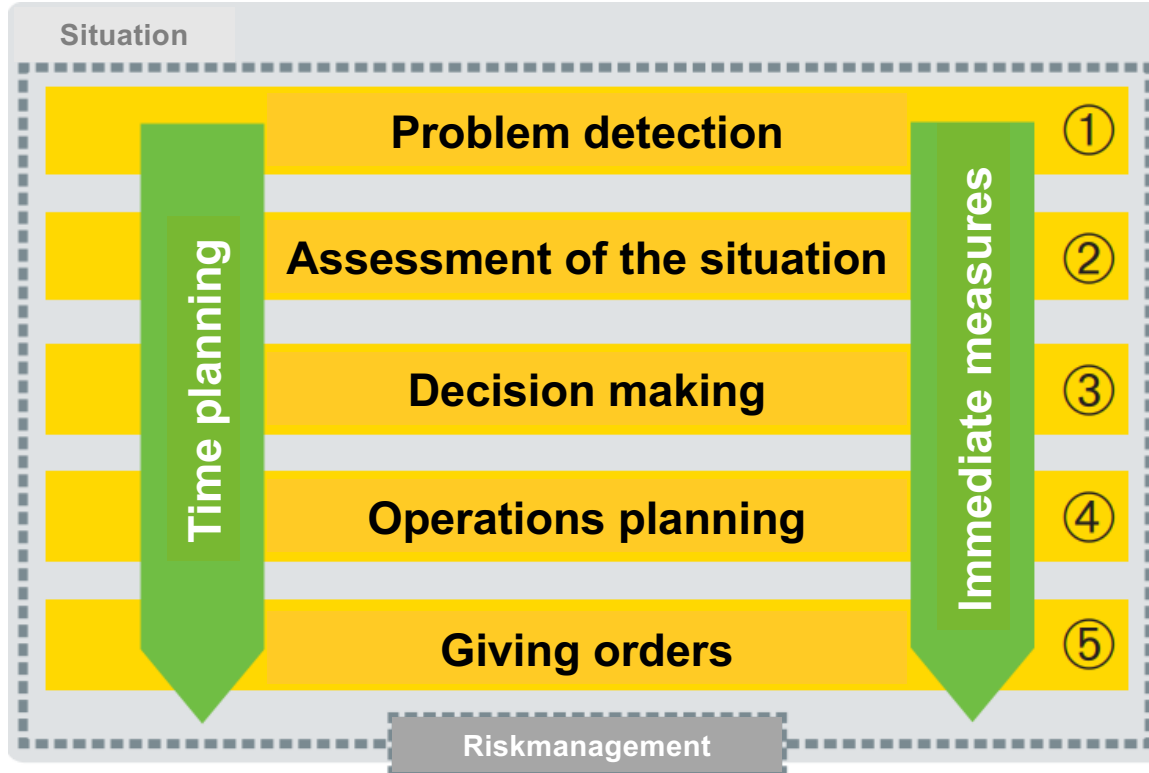
Leadership process



20:15
Reception alarm

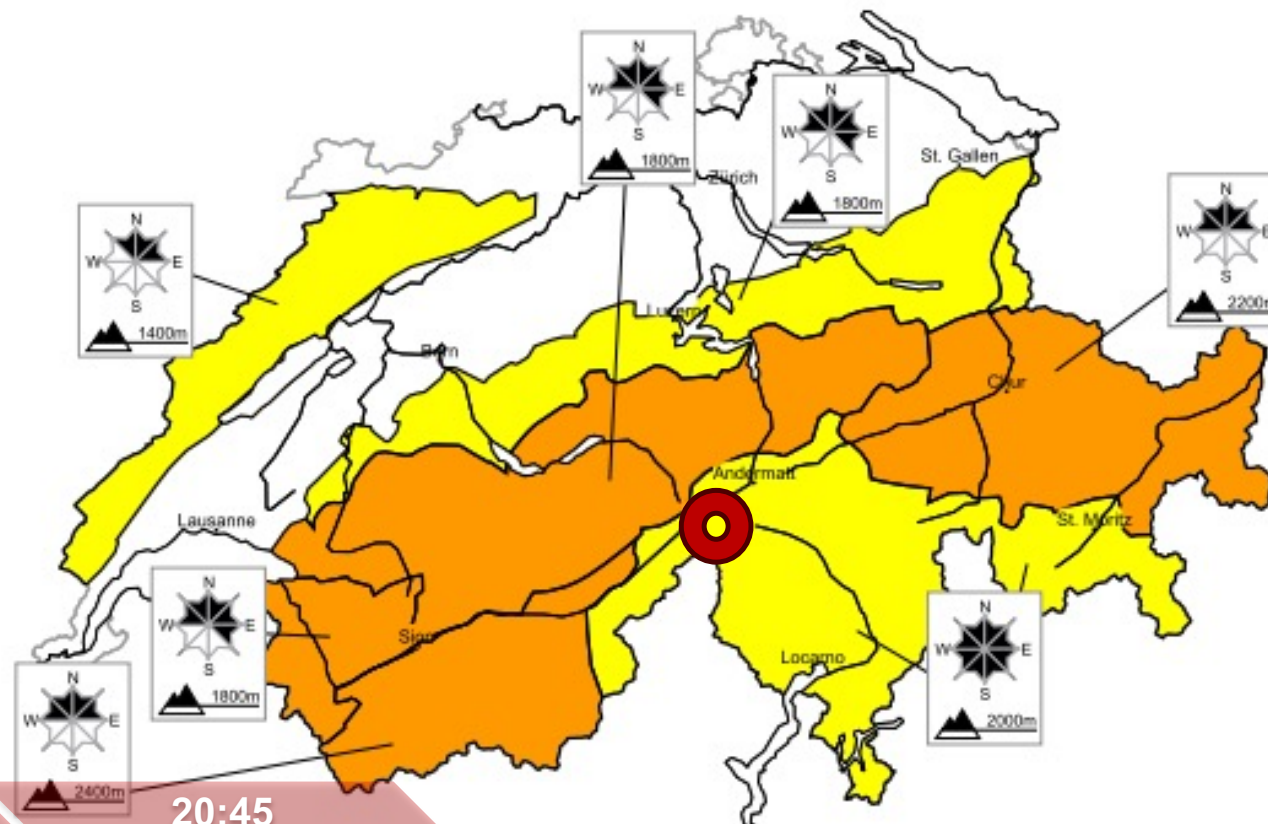
20:45
Found Vehicle

Leadership process



Avalanche danger «Switzerland»

Considerable avalanche danger will be encountered over a wide area



20:15

Reception alarm

20:45

Found Vehicle

Avalanche danger «Ticino»

region E

Level 2, moderate



Wind slabs

Avalanche prone locations



Danger description

Fresh and somewhat older wind slabs can still be released in some cases. Avalanches can in some cases reach medium size. Additionally in very isolated cases avalanches can also be released in deep layers reach dangerously large size. This applies in particular on steep, rather lightly snow-covered shady slopes above approximately 2400 m.

Backcountry touring calls for careful route selection.

Gliding avalanches

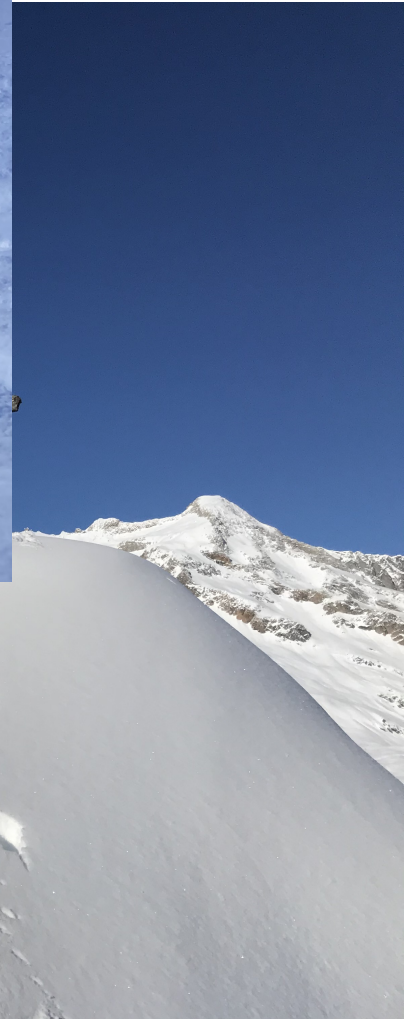
More small to medium-sized gliding avalanches are possible. This applies in particular on steep south facing slopes below approximately 2200 m.

20:15

Reception alarm

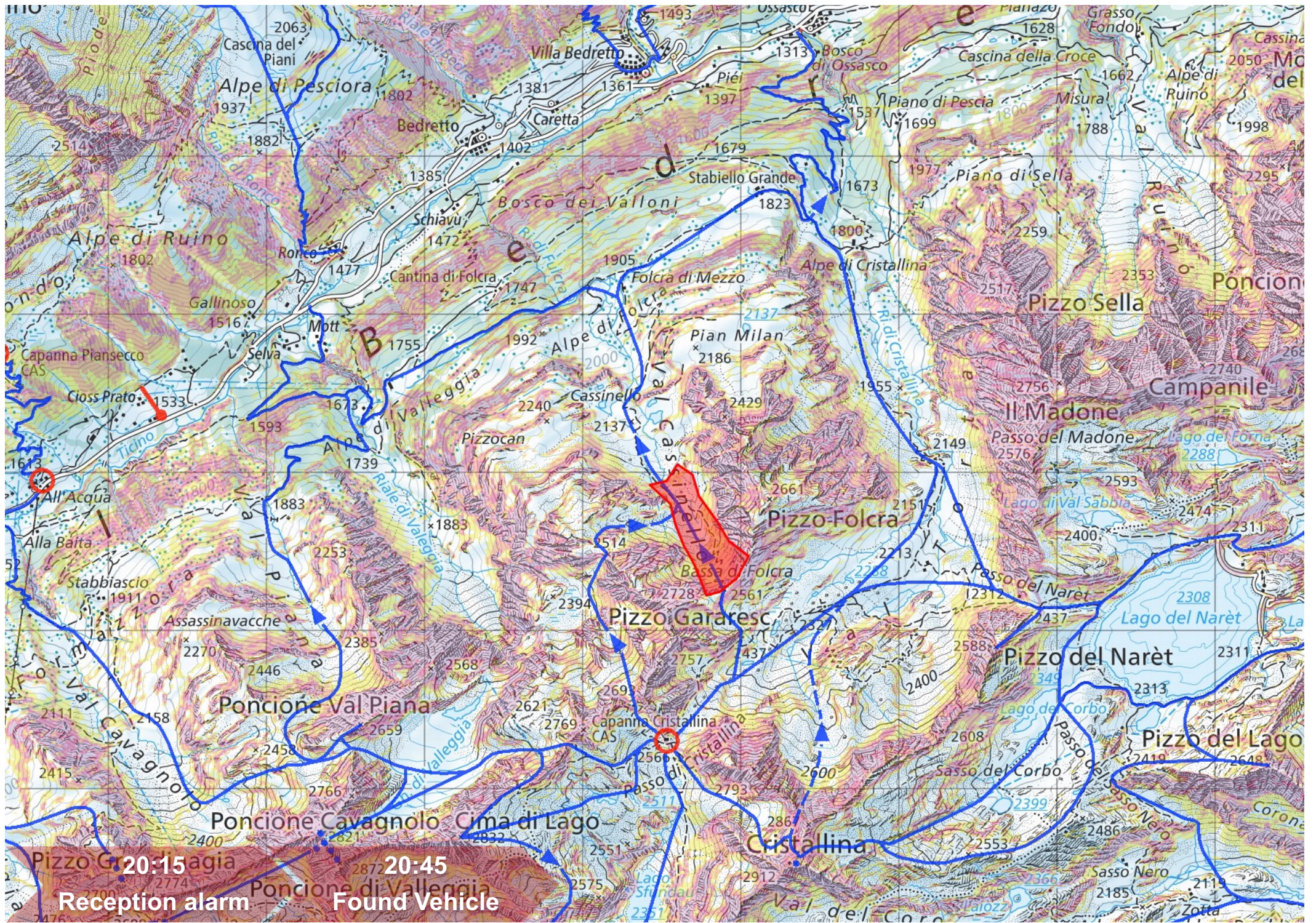
20:45

Found Vehicle



20:15
Reception alarm

20:45
Found Vehicle



20:15
Reception alarm

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Found Vehicle



20:15

Reception alarm

20:45

Found Vehicle

Get ready for the search flight



20:15

Reception alarm

20:45

Found Vehicle

Decisions - chief of Operation



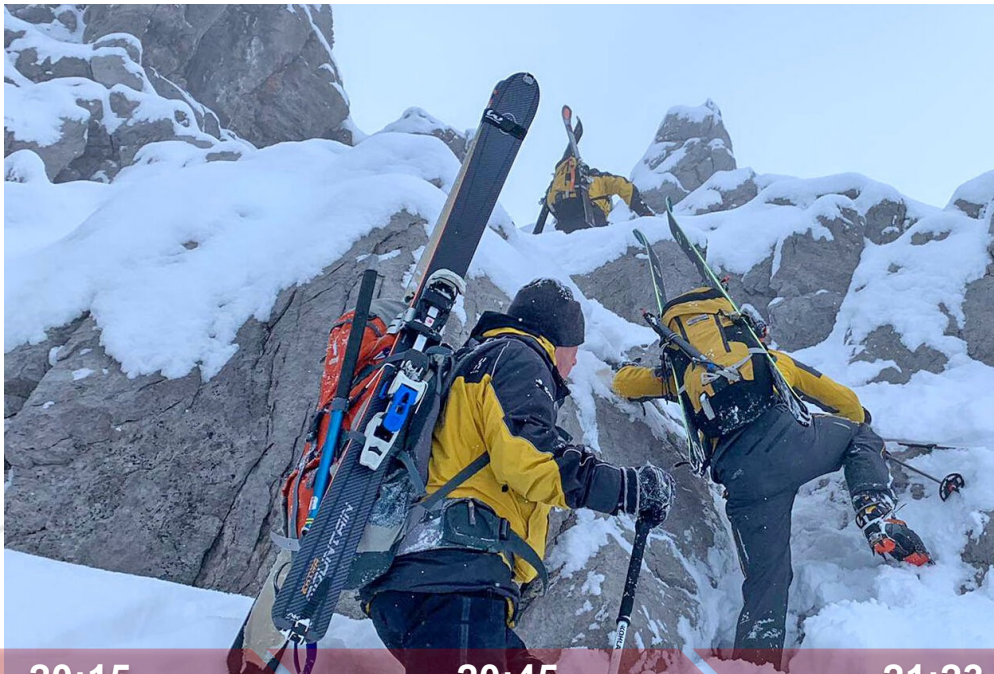
1. Search flight with a helicopter



Decisions - chief of Operation



2. Pre-alarm for the rescue team “station Airolo” and for the avalanche dog handlers



20:15

Reception alarm

20:45

Found Vehicle

21:23

Search Flight

Decisions - chief of Operation



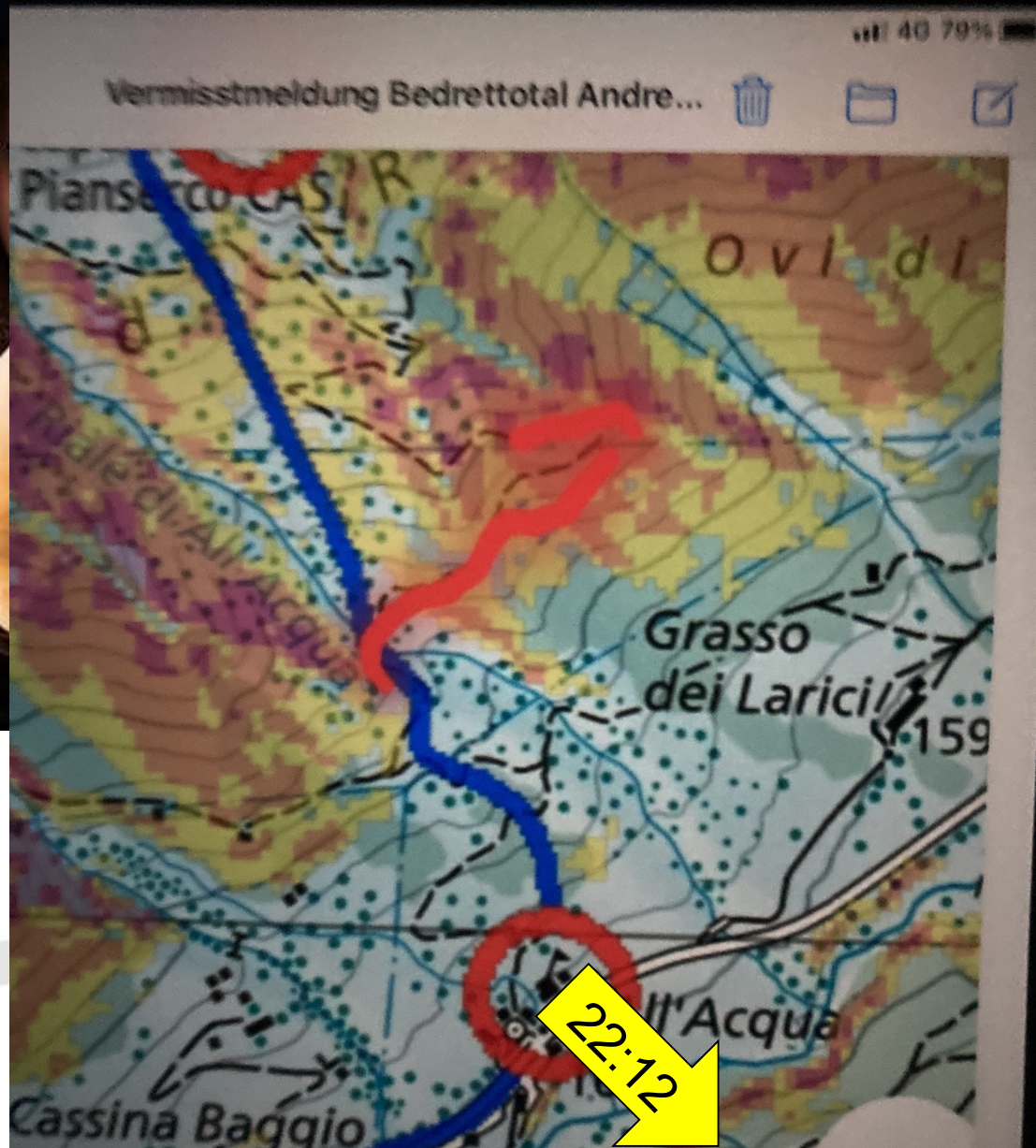
3. Search flight with an IR/EOS Rega helicopter



20:15 Reception alarm
20:45 Found Vehicle



21:23 Search Flight
22:50 00:15 IR/EOS - IMSI



20:15

Reception alarm

20:45

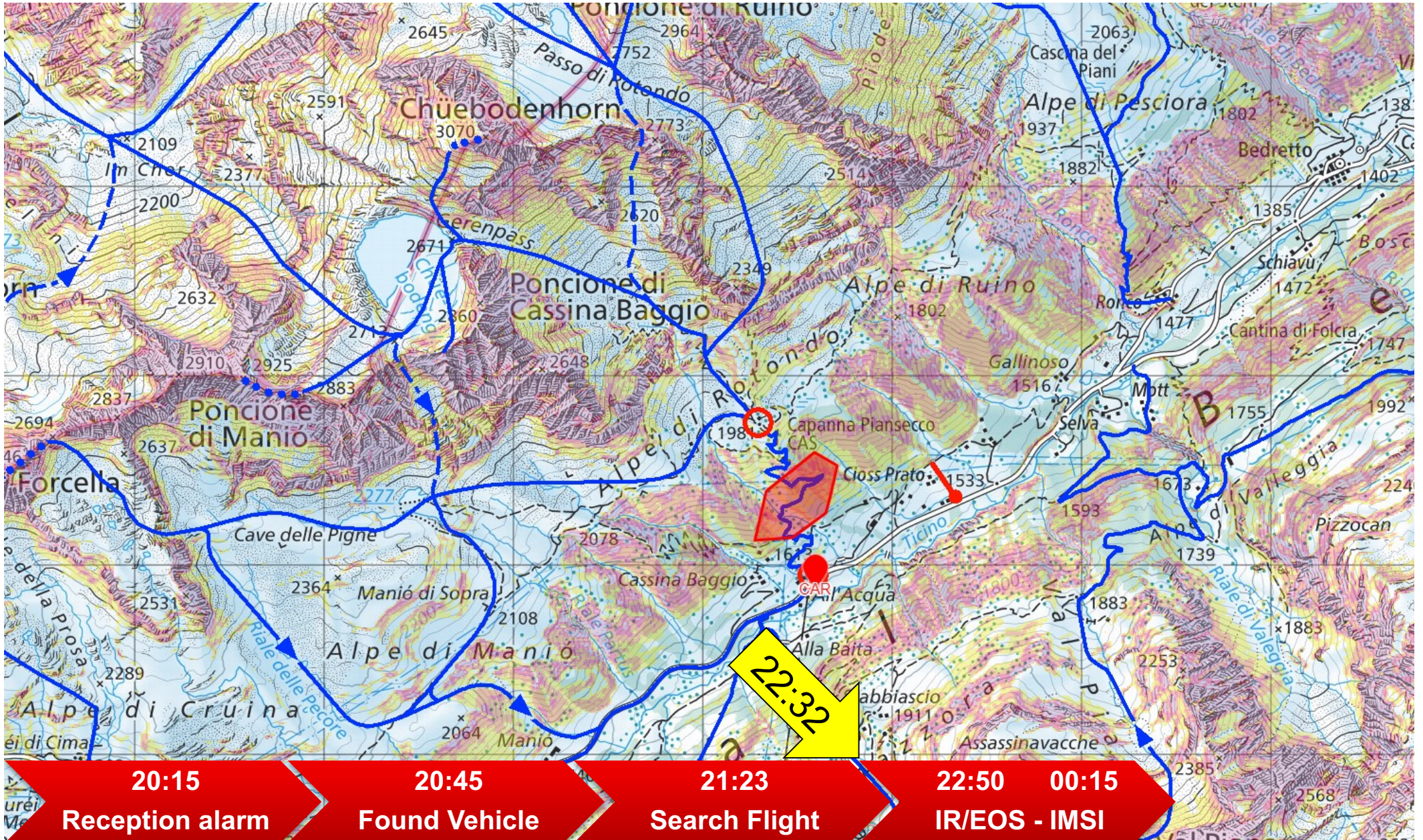
Found Vehicle

21:23

Search Flight

22:50 00:15

IR/EOS - IMSI

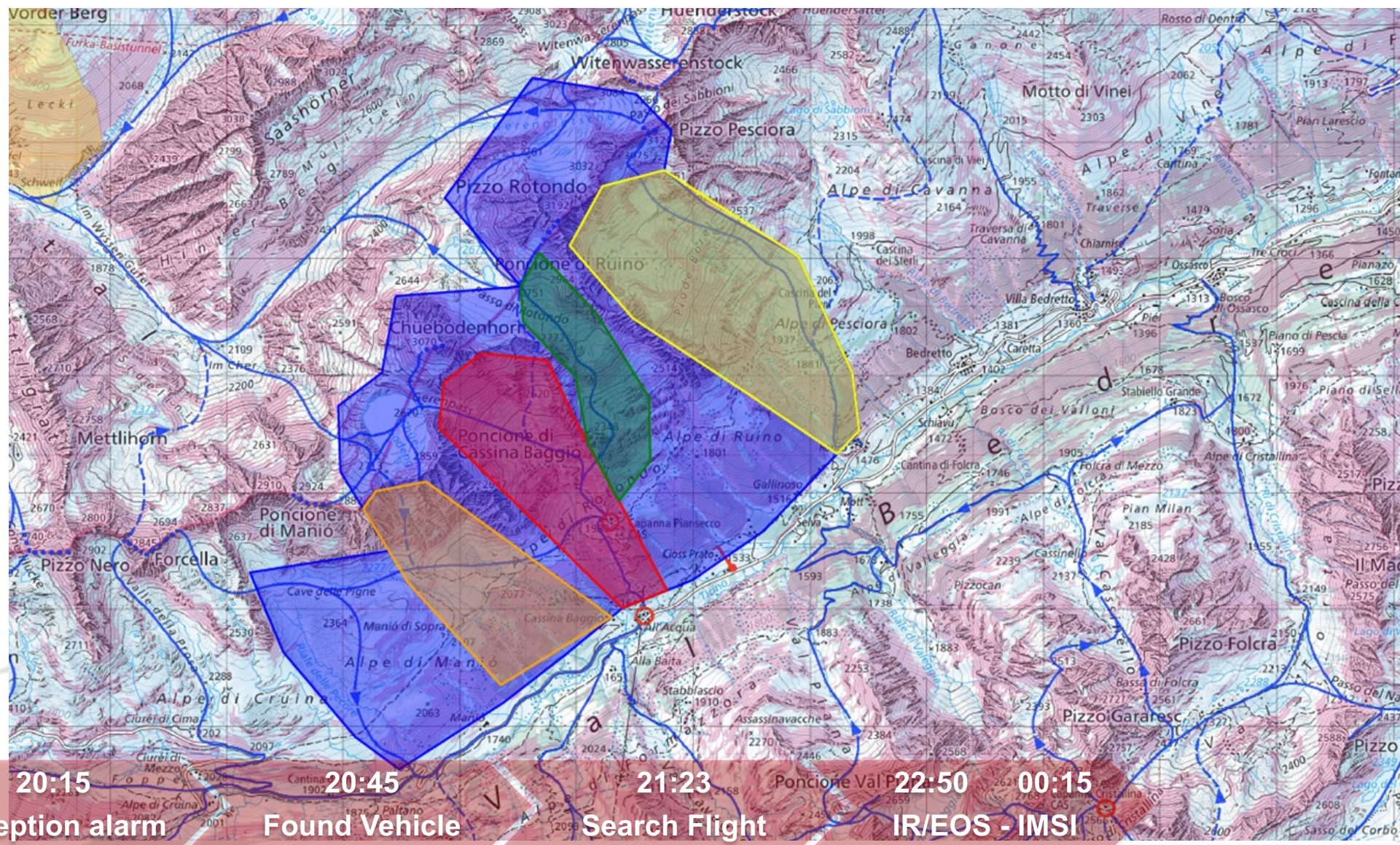


Search

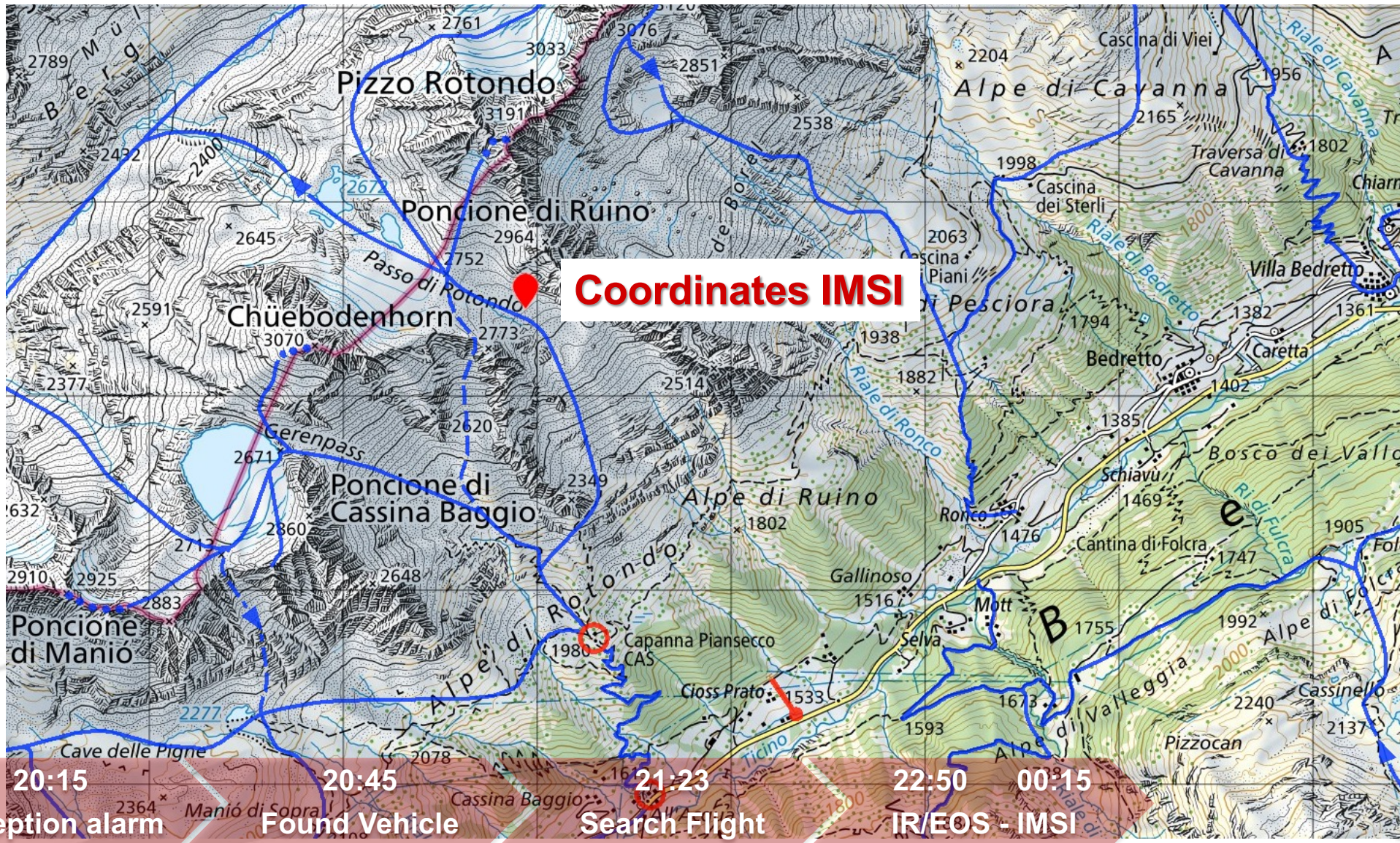
Search flight with an IR/EOS Rega helicopter



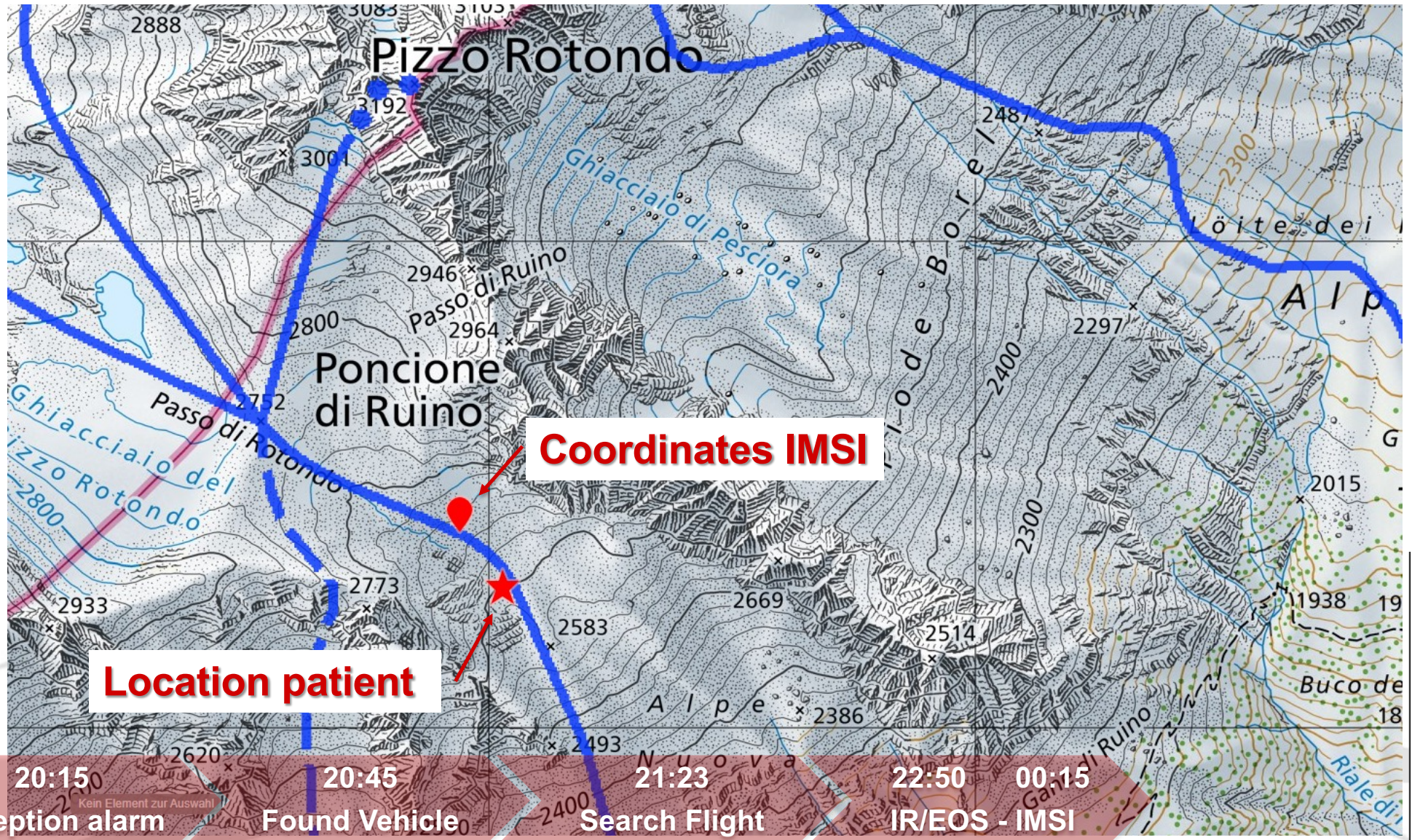
Search sectors (2 helicopters)



Rega IR/EOS System – IMSI signal



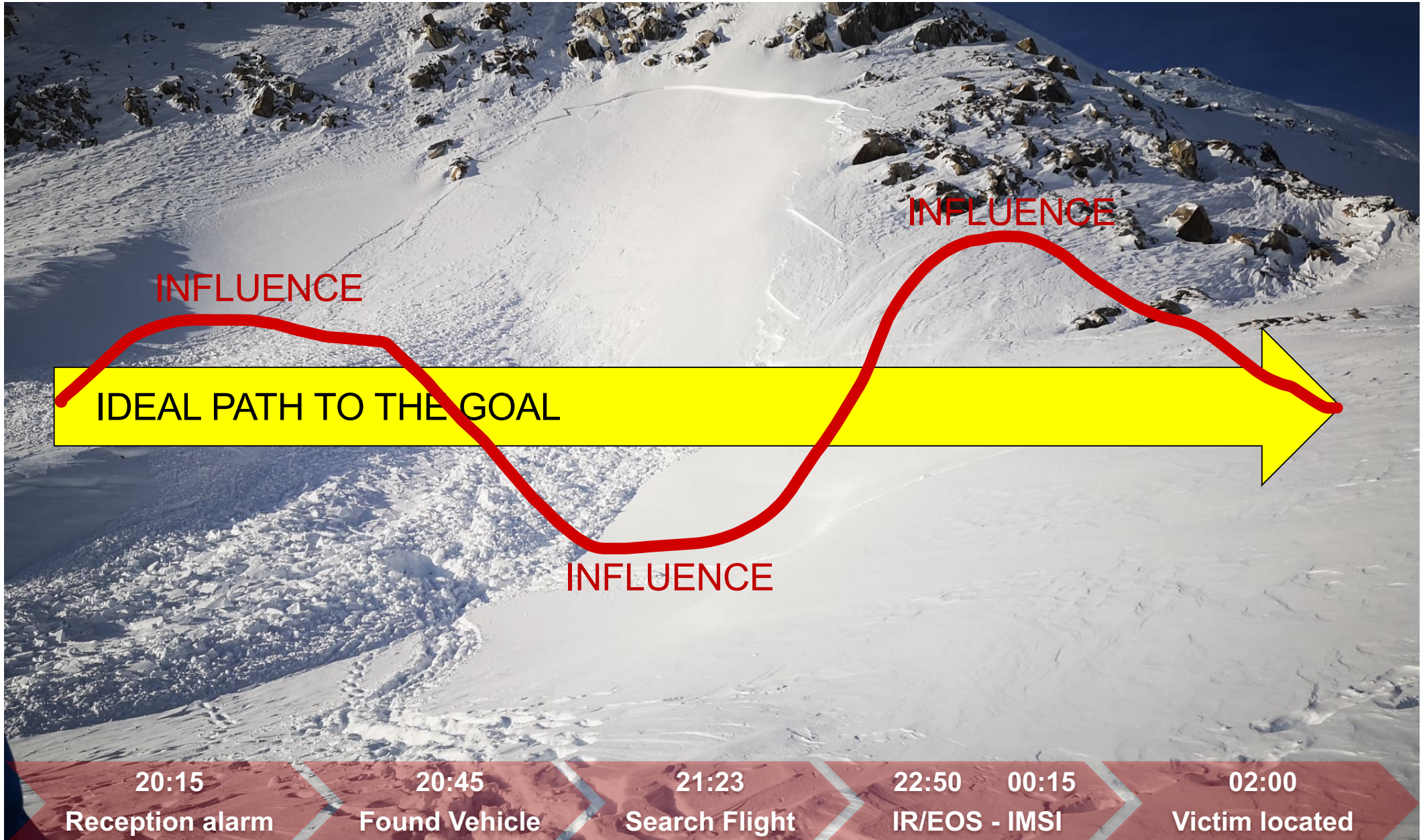
IMSI signal versus find location



Conclusion



Conclusion



Part 2 How can technologies help rescuers be faster, safer and wiser during a mission?

LOCATE THE CALLER AND GET A VIEW OF THE SITUATION ON SITE



Momentum BY SUREVIVE

Connesso a: 0041797213064
0041 Svizzera

Inviare di nuovo SMS Stato connessione: ✔ 🇮🇹 Fine connessione

FUNZIONI

- Posizione
- Video dal vivo
- Funzione foto
- Funzione puntatore
- Funzione di disegno
- Chat dal vivo
- Audio
- BIDI
- Condivisione dello schermo

SCEGLI LA FOTOCAMERA

Non specificato (camera 1)

GESTIRE L'AUDIO

SCHERMO DI CONDIVISIONE

SISTEMA

- Sistema operativo: IOS 16.2
- Browser: Safari / 16.2
- Impostazione della lingua: Italiano
- Batteria residua: Non disponibile
- Qualità della connessione: 5/5

COORDINATE GPS

- Latitudine: 45.87052850143988
- Longitudine: 8.975920656619458
- Accuratezza: 35 m

Invia GeoSMS

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1873 m

1872 m

1871 m

1870 m

1869 m

1868 m

1867 m

1866 m

1865 m

1864 m

1863 m

1862 m

1861 m

1860 m

1859 m

1858 m

1857 m

1856 m

1855 m

1854 m

1853 m

1852 m

1851 m

1850 m

DEFINE SEARCH AREAS



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
In collaboration with the cantons

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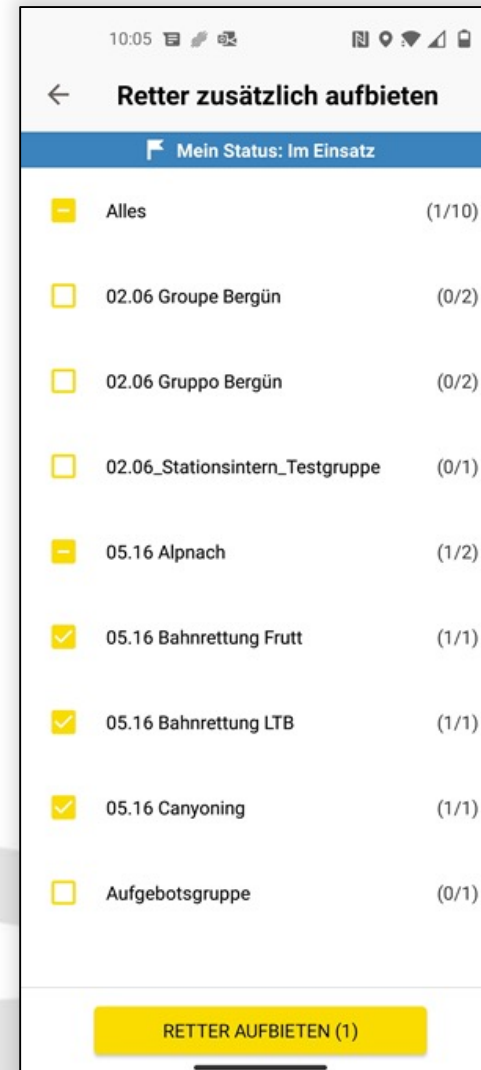
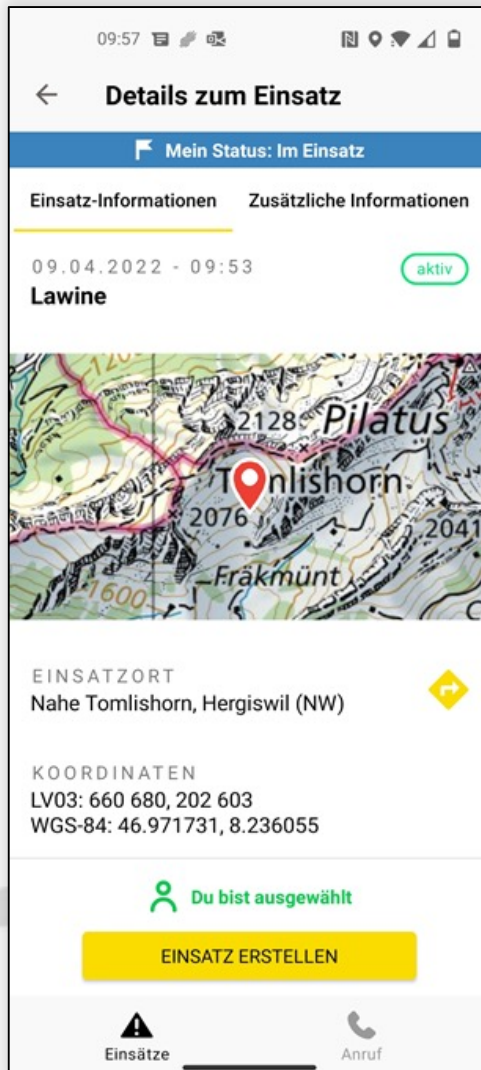
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 - Slope over 30°
 - Slope classes over 30°
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500 m CH1903+ / LV95 Coordinates (m): 2'681'405.0, 1'147'484.2

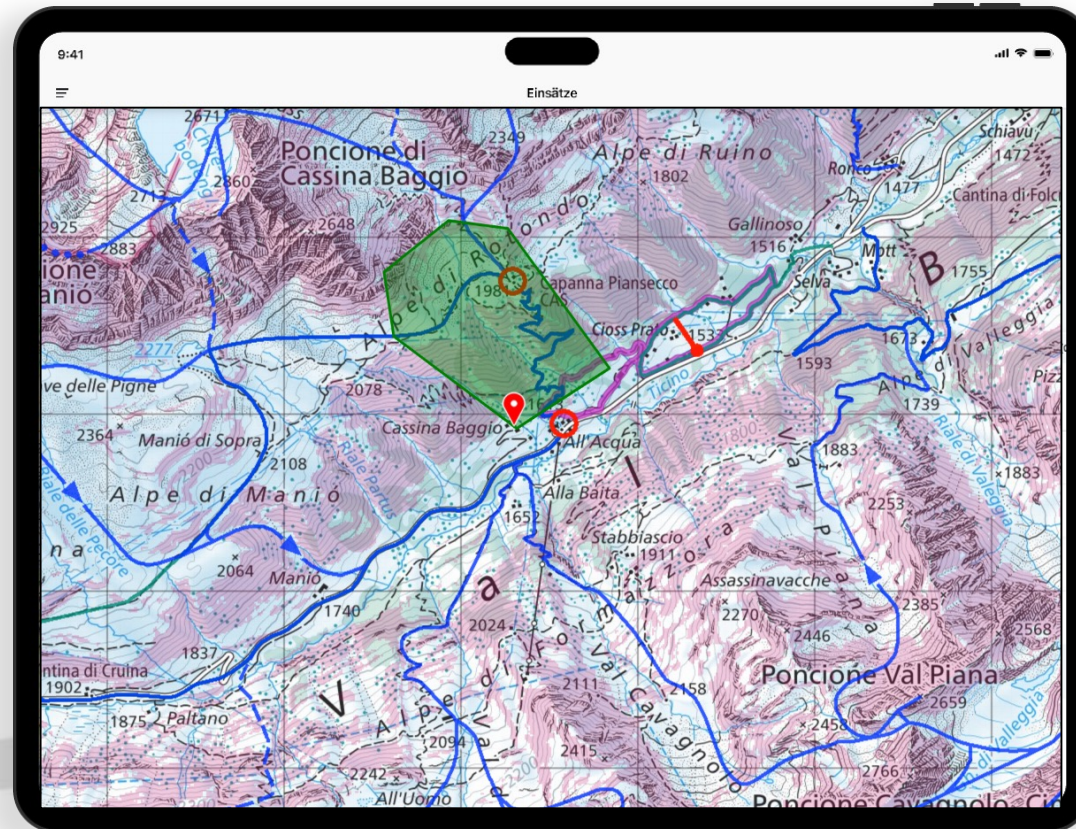
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ALARM AND SELECT RESCUERS



Source: Alpine Rescue Mission Control (ARMC)

ASSIGN SEARCH AREAS AND TASKS TO RESCUERS



TRACK RESCUERS AND PROVIDE A COMPLETE SITUATIONAL AWARENESS



Vergangene Einsätze Einsatz erstellen Deutsch John Doe Momentum

Nur FR Sörenberg anzeigen SwissTopo

Javier Patton
FR Sörenberg
+41 79 789 12 45

1289
1158
1178
Lauali

Zurück Alle Abschliessen

23.07.2023 08:55:23

Sörenberg, Alpweidstrasse

Einsatzstichwort: Reanimation
Hergang: männl, 67 Jahre, bewusstlos, schwacher Puls
Einsatznummer: E42671457

Koordinaten: LV03: 645225 - 186025
WGS-84: 46.82765 - 8.033254

FR Sörenberg (2) Ambulanz LUKS (1) Lions Air Heli (1) Air Glacier Heli (0)

Abschliessen Nur Rückmeldungen zeigen Aktionen

Abruf	Name	Telefon	Status	Entscheid
📄	Jasmine Meier FR Sörenberg, Pistenpatrouilleur, Retter I	+41 79 789 12 45	In charge Angenommen	1 ⌵ ✓
📄	Jessy Tran FR Sörenberg, Pistenpatrouilleur, ELUP	+41 79 789 12 45	Nicht benötigt	1 ⌵ ✓
📄	Ivan Reyes FR Sörenberg, Pistenpatrouilleur, Retter I	+41 79 789 12 45	Sofort Verfügbar	? ⌵ ✓
📄	Chris Arteaga FR Sörenberg, ELUP	+41 79 789 12 45	Nicht benötigt	1 ⌵ ✓
📄	Javier Patton FR Sörenberg, Pistenpatrouilleur	+41 79 789 12 45	Angenommen	1 ⌵ ✓

9:41

9:41

9:41

Missions Mission details

Mission 1: Sport accident
Mission 2: Accident

Sörenberg, Alpweidstrasse

23.07.2023 08:55:23

Alle Abschliessen

FR Sörenberg (2) Ambulanz LUKS (1) Lions Air Heli (1) Air Glacier Heli (0)

Abschliessen Nur Rückmeldungen zeigen Aktionen

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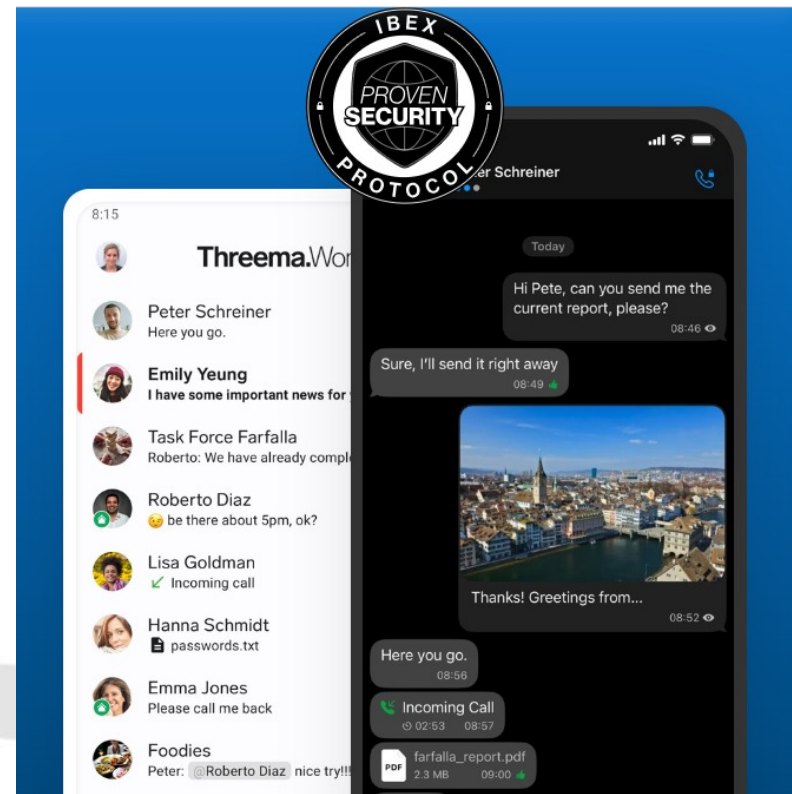
Javier Patton
FR Sörenberg, Pistenpatrouilleur
+41 79 789 12 45

Source: Alpine Rescue Mission Control (ARMC)

COMMUNICATE AND COOPERATE WITH OTHER RESCUERS



ARMC App



Threema App

Source: Alpine Rescue Mission Control (ARMC) and www.threema.ch

Thank you for your attention

Andrea Dotta
Training courses leader, Swiss Alpine Rescue

Claude Gavillet
Chief of station Montreux, Swiss Alpine Rescue

