Cell Phone Tracking Systems

Enhancing SAR missions using the right technology

ICAR Congress

11 - 16 October 2022, Montreux, Switzerland



CONFIDENTIAL INFORMATION: Distribution or reproduction (partial or total) of this document is not permitted without the authorization of CENTUM research & technology S.L.

Lifeseeker is the airborne phone location system, a technology capable of finding missing people through their mobile phone geolocation – even in areas with no network coverage.

This technology turns mobile phones into emergency beacons that can lead the rescue team to the missing person's exact location.











Lifeseeker is available in 3 series

MINI

SAR

SAR XL

Short-range missions
Small areas

Short/mid-range missions
Mountain & sea shore SAR

Longe-range missions

Large areas & maritime SAR













Swiss Air Force



Canarian Emergency Services



EMSA



Norwegian People's Aid



Royal Canadian Air Force



Spanish Army





Italian National Firefighters



Hellenic Police



Lithuanian State Border Guard Service



REGA



Andorran National Firefighters



Berlin Police



Galician Coastguard



Low Saxony Police



Norwegian Ministry of Justice and Public Security











Lifeseeker is being operated by **civil and military** organizations around the world, helping SAR teams to save lives...







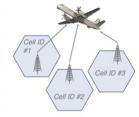




BRIEFING

- Mission planning
- Data acquisition





CONFIGURATION

- Network monitoring
- Set known configuration



SEARCH

- Detect
- Identify (IMIS /IMEI)
- Register
- Geolocate



DEBRIEFING

- Analise information
- DB
- Mission debriefing

OPERATION IN 4 STEPS





Transmission is active. Lifeseeker begins to search target phones. Radio resources were configured with scan results (suggestions) or programmed manually.

Instant location (GPS request)

When available, using RRLP function allows to get phone's exact position (GNSS accuracy) in just one click.

Regular search

If RRLP is not available, this mode allows to estimate any phone's location with our own algorithms.





1. Casualty details

- Missing old man.
- Suffering from dementia.
- Found by Lower Saxony Police by helicopter with Lifeseeker.
- Found Alive.







HANNOVER - 1:10 AM

HELICOPTER TAKES OFF

87 YEARS OLD

MISSING OLD MAN

RURAL

AREA TYPE

HYPOTHERMIA

SUFFERING FROM DEMENTIA

25 MIN

TOTAL SEARCH MISSION DURATION

01 MIN 52 SEC

TIME TO DETECTION

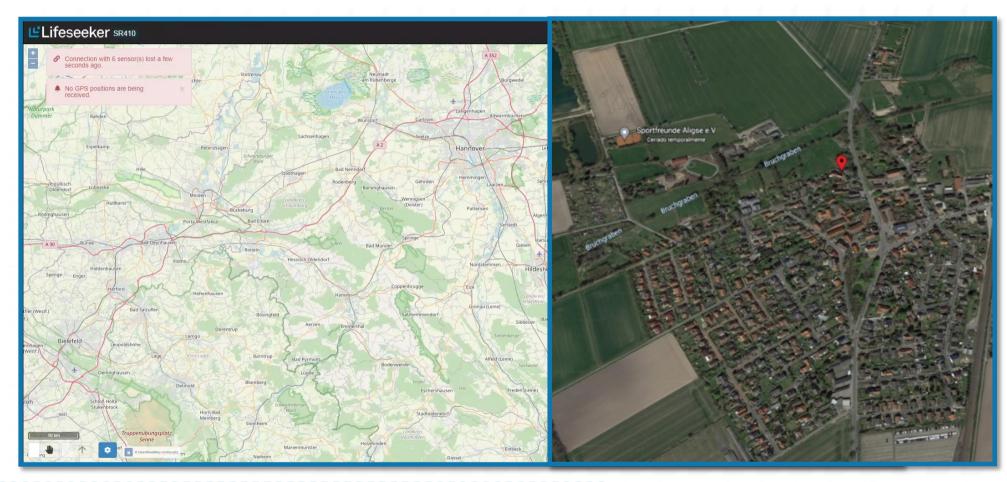
03 MIN 05 SEC

TIME TO GEOLOCATION

ALIVE

CASUALTY STATUS







2. Casualty details

- Dehydrated female hiker placed an emergency call at 10:00 to the Emergency Services.
- The Firefighters were informed and started search with drone.
- After 15 minutes the woman was geolocated.
- Found alive .







LA GÀRDIA- 10:00 AM

DRONE TAKES OFF

38 YEARS OLD

MISSING WOMAN

SEMI-URBAN

AREA TYPE

DEHYDRATED

HEAT STROKE

20 MIN

TOTAL SEARCH MISSION DURATION

00MIN 33 SEC

TIME TO DETECTION

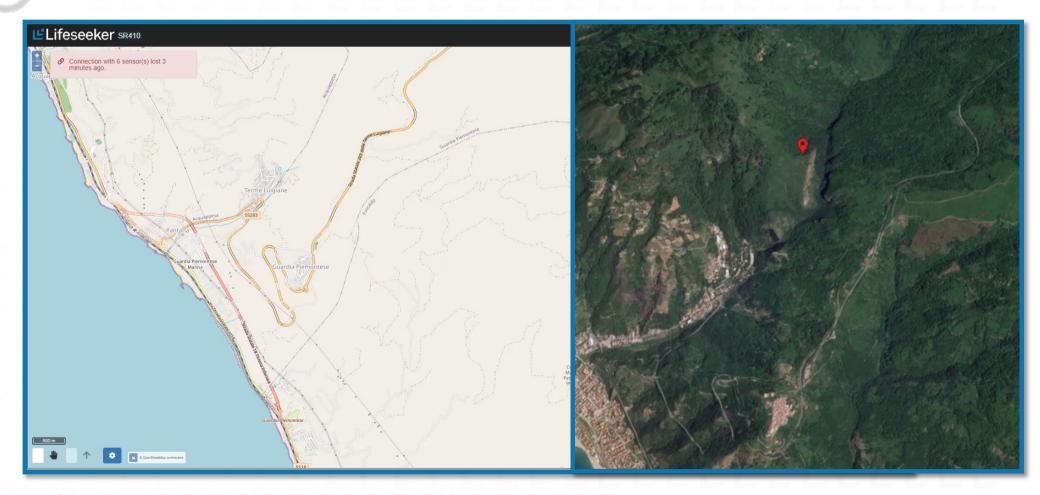
02 MIN 58 SEC

TIME TO GEOLOCATION

ALIVE

CASUALTY STATUS









3. Casualty details

- Injured female hiker placed an emergency WhatsApp call at 20:00, describing location and health state to her contact.
- The Police was informed and started visual search with helicopter.
- After unsuccessful search, Luftwaffe with Lifeseeker was requested at 02:00 AM.
- Luftwaffe was able to locate the phone in ca. 10 minutes, but unfortunately all help was too late.







AOSTA VALLEY - 2:00 AM

HELICOPTER TAKES OFF

55 YEARS OLD

INJURED WOMAN

MOUNTAIN AREA

AREA TYPE

INJURED

FALL

10 MIN

TOTAL SEARCH MISSION DURATION

01 MIN 32 SEC

TIME TO DETECTION

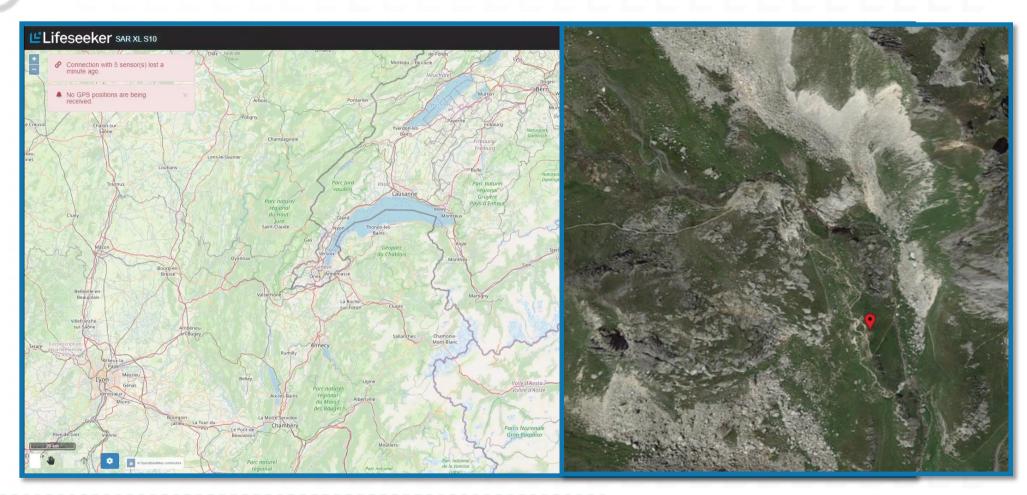
02 MIN 43 SEC

TIME TO GEOLOCATION

DECEASED

CASUALTY STATUS







Testimonial

"In an operation, not only every second counts, but also the right technology."

Chief of the Lower Saxony Police



