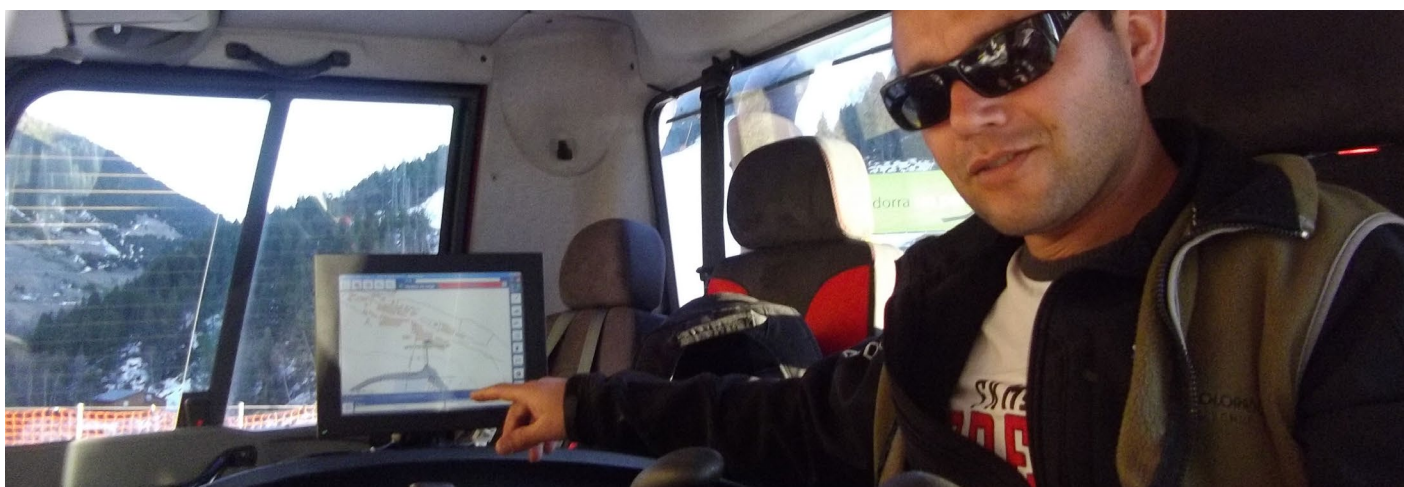




MOTOTRBO™ IMPROVES SAFETY FOR SKI RESORT LONE WORKERS

CUTTING ACCIDENT RESPONSE TIMES BY MORE THAN 50%



MONTGENÈVRE SKI RESORT

Montgenèvre is a well-known French ski resort in the Hautes-Alpes, on the Franco-Italian border. The Régie des Remontées Mécaniques de Montgenèvre is the organisation responsible for sourcing equipment and services for the resort.

While tourists are relaxing after their fun day's skiing, the piste maintenance teams work through the night to ensure that the ski runs are in optimal condition for the following day. Personnel often have to work alone and sometimes in exceptionally harsh conditions, in blizzards, sub-zero temperatures, low cloud or high winds, with the risk of avalanches and exposure. The resort wanted to introduce new measures to increase safety for its lone workers.

Long-term radio communication partner AMCOM recommended Motorola Solutions' DP4401 Portable Two-Way radios with integrated GPS, a Man Down option board and an enhanced GPS Tracking solution from Eiffage Energie Communications, Réseaux & Sécurité, DMRAAlert® GEO-LOC. The data collected on the radios is transferred to the ski resort's management system, CGX Mountain®, and allows Montgenèvre to precisely track its personnel throughout the ski area via DMRAAlert GEO-LOC. Now, if a worker has an accident and is not able to trigger a manual alarm, an automatic alarm showing the position of the person in trouble is generated and sent out via emergency call, SMS and email.

The new system has more than halved accident response time, as rescue teams can accurately pinpoint the scene of the incident on the mountain. Safety for lone workers has significantly improved.

CUSTOMER PROFILE

Organisation:

Régie des Remontées Mécaniques (RM) de Montgenèvre
(Organisation responsible for sourcing equipment and providing services to Montgenèvre ski resort)

Industry:

Sports and Leisure

Partners:

- AMCOM
- CGX Mountain®
- Eiffage Energie Communications, Réseaux & Sécurité

Motorola Solutions Products:

- DP4401 Portable Two-Way radios
- IMPRES™ chargers
- DR 3000 Repeater

Other products:

- DMRAAlert® GEO-LOC
- K-TERM 44 Option Board
- CGX Mountain® Software

Applications:

- GPS positioning
- Man Down and Lone Worker

'We want to know where our workers are and if they are in difficulty, without having to rely on a mobile phone network. The solution integrating MOTOTRBO™, DMRAAlert® GEO-LOC and CGX Mountain® exactly meets our expectations. The system is accurate and secure. We have reduced response times in the event of an emergency rescue by over 50%.'

Rosario Trischitta, Head of IT and Purchasing, Régie des RM de Montgenèvre



CHALLENGE

Working in mountainous areas carries risks, especially for those working overnight and alone. The system that Montgenèvre had in place previously did not offer GPS location or automatic alarms. It was only through a prolonged lack of radio contact or a manual alarm that users realised an accident may have happened. And, as workers need to leave their skidoos to operate the snow cannons and the drivers need to leave the snowploughs to attach cables at the top of the steepest slopes to the machine, the worker's location was not always obvious. This wasted crucial time in search and rescue attempts.

To complement Montgenèvre's current fleet of 60 Motorola Solutions analogue radios, which it uses for voice communications, AMCOM presented the MOTOTRBO™ solution. Following a successful mountainside trial, Montgenèvre equipped its three-man snowmaking team and the two snowplough drivers working on the steepest slopes requiring cabling support with the DP4401 Portable Two-Way radios.

SOLUTION

The DP4401 Portable Two-Way radios have integrated GPS. AMCOM also customised the radios with a K-TERM 44 option board, which has a man down sensor and automatically activates a pre-alarm if the worker is motionless for more than 60 seconds or tilted through 60 degrees or more. This alarm rings on the radio for a further 30 seconds to give the worker time to react. If he doesn't, an automatic alarm is generated and sent to the DMRAAlert GEO-LOC software application over the MOTOTRBO network.

The DMRAAlert software has been integrated with the CGX Mountain system used by the resort, so all DMRAAlert data is then read by the CGX Mountain application, relayed via internet to the CGX server in Castres and, in turn, relayed back to the laptops in each snowplough cab. The CGX Mountain software includes a range of applications for piste maintenance operations and fleet management and, as such,

very detailed maps of the area are shown on screen.

The exact position of each radio is shown on these maps on-screen in the resort management office and in the snowploughs – which are usually the closest at hand. Details can also be called up by accessing CGX Mountain's online portal. In cases where an automatic alert has been triggered, this information comes into the CGX Mountain's system and a phone call, SMS and email are all sent to all users to advise them of the alert and giving the exact GPS co-ordinates and mapping details of the location, such as the name of the piste, for example: « Alert from Pierre at 02:32 on the piste des marmottes, next to snow canon 12, Lat. 44.56029000 - Long. 6.43459000 ». These messages can also be directly relayed to police or helicopter search and rescue teams. Operators either carry the radio in a zipped pocket in their vest or a specially designed body belt, so they always have the radio on them.

BENEFITS

Feedback from users has been excellent. They now know help will be sent quickly and to the right place, if an accident happens.

The introduction of the MOTOTRBO radios is just one part of a wider solution Montgenèvre has introduced to ensure its resort is well managed and safe. Moving forward, the fleet of analogue radios will be replaced by digital radios. This will bring benefits such as enhanced audio, improved coverage and increased functionality that MOTOTRBO radios provide.



Benefits:

- **Accident response time reduced by more than 50%:** Increased safety for ski resort workers
- **Enhanced functionality:** Integrated GPS and ability to support new applications
- **Ease of integration:** DMRAAlert with the CGX software
- **Reliable, robust radios:** Having IP57 specifications, radios are suited for use in tough conditions and on snow
- **Improved battery life:** With IMPRES™ chargers
- **Smooth future migration:** Possible from analogue to digital

For more information on how MOTOTRBO can help you improve team communications and respond to crisis situations, please visit us on the web at www.motorolasolutions.com/mototrbo or contact us at: www.motorolasolutions.com/contactus

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