EASY-RADIO PROVIDES SOLUTION FOR WORKER SAFETY

REMOTE SAFE *TRACE-M* PENDANTS AND *CO BUDDY*® STATIONS CONTAIN LPRS' EASY-RADIO TRANSCEIVER UNITS.

LPRS, one of Europe's most successful integrators of industrial wireless communications solutions, has had its market leading modular wireless communications system easy-Radio designed into a unique personal location and tracking system.

Designed in New Zealand by Remote Safe Ltd, the Co Buddy®-range of products have been designed to automatically track the whereabouts of staff and monitor their safety. In the event of a worker going missing, becoming incapacitated or requiring emergency assistance, the system provides immediate notification ensuring a rapid response. In such an emergency the system will automatically relay the status of the worker to a 24 hour monitoring centre, typically within one minute of the incident occurring. The monitoring centre also has the ability to provide the location of the worker at any time.

The information received by the monitoring centre includes such details as the type of incident (duress, panic, or man down), the worker's name, their vehicle description, the current GPS position of vehicle and the worker's position in relation to a known fixed location (a Trace-M Waypoint or Locator).

The system was designed specifically to provide a "buddy" for lone workers, remote workers or multiple workers in high-risk industries (e.g. high voltage, oil and mining). This applies when they are working both above and below ground, and particularly where conventional communications are limited or unavailable. The manufacturers are receiving increasing interest from other sectors, to safeguard workers in health and other higher risk public services, local government, quarrying, warehousing etc.

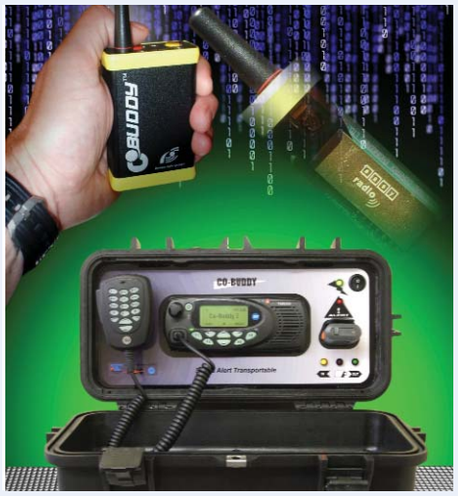
Co Buddy® (Call out Buddy) Vehicle Systems are available as portable or fixed vehicle units and comprise a uniquely designed (*Trace-M*) individual 'Man Down' pendant and 'Control Unit', combined with a GPS unit and a Tait mobile radio. When a staff member is called out the Co Buddy® system is plugged into the vehicle (portable system) or switched on (fixed installation). This automatically sends an 'On Call' data message to the monitoring centre along with the GPS location of the vehicle. The worker then drives to their worksite. The monitoring centre tracks the vehicle remotely via GPS to ensure they arrive safely. On arrival at the job the pendant is removed from the Co Buddy® unit and attached to the worker. This automatically informs the monitoring centre that the person has "arrived on site" and gives the GPS location of the vehicle and any relevant fixed location that they are near (see Co Buddy®-*Trace-M* System). After completion of their work assignment, the worker returns the pendant to its holder, which sends an automatic "job complete" message to the monitoring centre. The worker then drives to the next location where the cycle is repeated or drives home (tracked via monitoring), where they sign off by pressing a single button on their Co Buddy®, which sends an "at home" signal to the monitoring centre.

The Co Buddy® -*Trace-M* System (Trace Remote Alert Call Events – Monitor) was developed to support Co Buddy® Vehicle systems and is made up of a network of wireless devices (solar or battery powered), which are placed in strategic locations outside or inside a building, or underground complex, to provide a known fixed reference location. These devices can automatically detect Co Buddy® vehicle systems or *Trace-M* pendants (see below) and when used in conjunction with these devices, relay their location data to the monitoring centre. These are specifically designed to provide the location of a worker under duress where GPS is unavailable or where there is a requirement to actively track a worker around the complex (i.e. security or safety checks in high risk facilities). These devices all use the LPRS easy-Radio range of transmitter, receiver or transceiver modules.

To provide a robust and reliable method of data transfer to a monitoring centre, the Co Buddy® -*Trace-M* locators, waypoints and pendants have been designed to interface with the proven radio technology (conventional and trunking) of Tait Electronics. However Co Buddy®-*Trace-M* products are also capable of interfacing with other communications media such as cellular (GSM or GPRS) telecommunications, fibre optic and satellite.

The Co Buddy® -*Trace-M* pendant is the worker's lifeline and is the key component in the Co Buddy® *Trace-M* systems. The pendant is automatically armed when removed from its holder (either from a vehicle or in a building). It automatically communicates with the system of locators and stores location data as a worker moves around a complex. In the event the worker is injured or becomes incapacitated the worker can press the 'panic button' or the pendant will automatically send a "man down signal" which will be relayed to the monitoring centre. On activation the pendant also relays where the worker is in relation to the nearest locator (known fixed location) along with the nature of the emergency, (i.e. panic or man down) and the unique identifier code (user details), all within seconds of the event occurring. The pendant has a "crawl" function for when workers need to operate prone or in bent over positions and this deactivates the "man down" for a programmable length of time before it automatically resets itself. The pendant also has an "increasing chime alert" which prevents false activations of the man down feature.

All pendants can be detected by all Co Buddy® -*Trace-M* devices. For example: a lone worker travelling to a site (underground complex with a network of Locators on each floor) in a vehicle with a portable Co Buddy® Vehicle unit, will be monitored from his home to the site and then underground as he travels throughout the complex. Any activation of his pendant will relay who he is, the GPS location of his vehicle parked outside, the vehicle's registration, the known fixed location of the locator he is nearest to (i.e. "11kva room, on level 3, North Eastern corner") and the nature of the emergency (panic signal or man down).



As part of their service commitments many organisations in high-risk industries have to provide after hours fault response. The person "on call" must be able to be contacted at any time of the day or night to respond to problems that occur in remote isolated locations with limited communication. These persons can often travel significant distances and attend to problems in highly dangerous environments (i.e. live electricity environment). Such workers are often by themselves with limited or no supervision and loose or minimal monitoring of their whereabouts and safety.

It has been a major concern for some time in a number of industries that there has not been a satisfactory means of monitoring the well being of such lone or remote workers or the ability to know when they are in need of assistance.

There is also a strong legislative requirement within an increasing number of countries to "take all practicable steps" to ensure the safety and well being of staff when working in an organisation. The sanctions for not doing so are also increasingly severe and can extend to very large fines for companies and even imprisonment for responsible company executives. The Co Buddy® system assists enterprises to comply with this requirement and avoid the risk of such sanctions.

Other benefits of the system include: knowing a worker's location at any time they are working, the automatic recording (via monitoring software) of the GPS co-ordinates as the worker moves about a complex, automatic recording of time, date and place as the worker perform his duties or passes specific key areas, among others.

For more information on how easy-Radio can facilitate your wireless system design, please visit www.lprs.co.uk or call +44 (0)1993 709418.