



SEARCH & RESCUE SOLUTION



Introduction

Fast response time, precision coordinates & utmost reliability are critical components for Search & Rescue Missions.

With our expertise in GSM communication networks, Stratign has designed a comprehensive and customized solution STN-SAR for Search & Rescue operations even in the most remote terrain and demanding weather conditions.

The System generates a private GSM network, connects with target's cell phone and activates the transmission process. The Rescue team can then locate the source of the signal

using a Direction Finder. None of the functions require presence of the GSM network of any carrier within the range of the Search & Rescue operations.

The system does not interfere with the network of the local provider. The STN-SAR is primarily designed for:

- Mountain Search & Rescue.
- Search & Rescue for low GSM network coverage areas.
- Search & Rescue after occurrence of a natural disaster.



SYSTEM APPROACH

The system uses advanced GSM tracking technology in order to locate the signal transmitted by mobile phones. It has been created specifically for Search & Rescue agencies that frequently operate in extreme environmental conditions. Solid construction of the system guarantees large degree of shock resistance and waterproof shell protects it from adverse weather conditions such as rain, ash or excess humidity.

STN-SAR OFFERS TWO MODES OF OPERATIONS:

1. Random Interception Mode

This mode allows search of all mobile phones in the area specified by the operator from 10m up to 1,000m. The system generates a local GSM network. The coverage range of this network can be previously specified from 10m up to 1,000m. The system then scans the specified range for cell phones. The available cell phones in the range gets logged on to the SAR system. The operator can then activate transmission to/from these cell phones. These transmissions can then be tracked using Direction Finders provided with the system.

2. Target Mode

This mode enables search of previously defined mobile phones. The operator enters the ID data of target mobile

phones into the system. The system generates a local GSM network. The coverage range of this network can be previously specified from 10m up to 1,000m. The system then scans the specified range for cell phones' IDs previously entered by the operator. The available cell phones in the range is logged on to the system. The operator can then activate transmission to/from these cell phones. These transmissions can then be tracked using Direction Finders provided with the system.

DIRECTION FINDER

The Direction Finder is designed to work along with the SAR system to physically locate the target. User can choose the channel number (fixed frequency) on the SAR system for paging to the target phone and try to keep on paging till its direction is detected on the Direction Finder.

During paging, the system forces the mobile handset on fixed channels and mobile responds to the paging on the same channel. As the channel is known to the operator, he can program the same channel in the Direction Finder and start locating the target depending on direction and distance from the object volume level in headphones and bar level of the display will change.

