

# “SAR-BOX”

## SEARCH AND RESCUE LOCATION AND GUIDANCE LIGHTING SYSTEM

### **General Notes on Operation & Maintenance:**

The SAR-BOX is designed to need minimum maintenance and operate on its own battery supply for a season\* supplemented by solar panels for standby power consumption.

Essentially set up and left alone except for periodic inspections to ensure the SAR-BOX and ancilliary equipment is not obstructed by snow falls.

Each SAR-BOX (Rescue Station) can be remotely checked by radio activation, the white strobe will flash and an acknowledging burst of GPS data will appear on the SAR centre monitoring computer. Daily testing (at dusk) is recommended allowing an observer to confirm strobe turn on.

### **System Components:**

#### At Rescue Location

1. SAR-BOX Emergency Switch Station  
( housed within a secure, commercially available weatherproof electrical cabinet )
2. Battery Bank ( in commercially available weatherproof box)
3. Solar Panel (commercially available weatherproof unit)

#### At Search & Rescue Centre

1. Radio Receiver  
( 60 mm x 30 mm x 120 mm with commercial 12V plug in power adapter)
2. IBM compatible Desk Top or Portable Computer  
(any PC Pentium 3 and above operating Windows NT 4; Windows 2000; XP)

The set up can be left permanently on or only when personnel are available to monitor the system.

#### Additional Applications for the SAR- BOX

At the heart of the SAR-BOX is a radio data module. The designed portability makes it a simple procedure to re-deploy the system as remote controlled:

- Early warning sentinel for Bush fires.
- Water level monitoring in storage tanks or river crossings.

\* Selection and calculation of battery bank will depend on number of days counted as a season.