



## APPLICATION NOTES

**Subject: Detection of Physical Displacement / Movement**

### **Introduction:**

The Trip Plate facility was designed to reliably activate the SEE - BLITZ when deployed as an Emergency Location Marker/Man Overboard Buoy Light.

Additionally Alpine rescue groups have marked off potential avalanche zones with trip lines across paths in much the same way the Military set up trip lines to alert perimeter incursion.

Further more the widening of a crevasse can be monitored remotely.

A pole is driven into the snow on each side of the crevasse with the SEE-BLITZ on one side and with the Trip-line attached to the other.

Depending on how taut the line is movement will set off the beacon.

As long as the major part of the Trip Plate is moved from between the Switch Boss magnet

(Total removal is not necessary ) the SEE - BLITZ will turn on and because the sliding action is smooth the nature of the movement is not important.

### **Principle:**

Providing the SEE - BLITZ is held stationary and the Trip Plate is attached to another member of a structure or object any movement which separates the two will eventually switch the SEE - BLITZ on.

### **Implementation:**

To indicate:

- excessive loading of temporary structures ie Bailey Bridges / Scaffolding
- excessive movement of damaged structures ie. Burnt-out / Condemned buildings
- seismic activity ie. Remote indication ( line of sight ) of tremors by setting up a SEE - BLITZ on a pole and attaching Trip line to a balanced stone etc which would move and pull the trip plate.

### **Summary:**

Providing the event to be monitored can be interpreted as movement between a fixed point and a moving point, the Trip plate affords a simple means of visual alarm. The application of levers to the movement will make the trip system more sensitive by virtue of mechanical amplification.