

QUESTION 7: PURPOSE OF EXPERIMENT

The system consists of an Entry Control Board (ECB) and portable data radios worn by fire-fighters. The ECB will normally be stored on the fire-truck then removed at the start of an incident and placed near the building door where the fire-fighters will enter. The fire-fighters then logon their portable radios to the ECB and enter the building. The ECB then polls the portable units at regular intervals (20smin) to gather data relating to their breathing apparatus. Simple two way alarms can also be generated. The system enables control officers outside of an incident to monitor the vital safety and status signs of the fire-fighters that are attempting to perform rescue and fire fighting duties.

All units transmit and receive on a single frequency, and will operate in an assigned channel within the Public safety pool.

The aim of the experimentation is to prove the telemetry radio (frequency, power, protocol and forward error correction algorithms etc) used by the system provide sufficient radio coverage in a variety of climates and environments.

The system will therefore be used in hot and cold climates, typical of the temperature extremes that fire-fighters have to work at. It will also be used in a variety of building structures eg wooden, steel reinforced concrete, high rise, basement, elevator shafts etc.