

# GUIDELINES FOR HEALTH AND SAFETY

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## **1. Summary**

Although The Radio Amateurs' Emergency Network, as an organisation, is not bound by the Health and Safety at Work Act (not having any paid employees<sup>1</sup>), nevertheless every individual member of RAYNET has a legal duty of care towards each other and members of the public.

To encourage good practice, RAYNET has therefore produced the following document for the guidance of all members.

## **2. Introduction**

During the course of their duties, RAYNET members may be dealing with a wide variety of situations, for example high structures, AC voltages, generators and fuel, adverse weather conditions and crowds of people. Every situation should be evaluated for risks as early as possible and the appropriate controls put into place. This is called a risk assessment and involves identifying the hazard, the risk associated with it and the likelihood of an accident or incident happening.

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<sup>1</sup> See HSG192 "Charity and voluntary workers – a guide to health and safety at work" ISBN 0 7176 2424 2

### 3. Health and Safety Guidelines

#### a. Masts – erecting and dismantling

- Lightweight masts (up to 30ft)
  - One person should have overall responsibility of the mast “party”
  - Consider the suitability of the ground
    - Soft or firm
    - Sloping or level
    - Check for the presence of overhead power cables <sup>2</sup>
  - Consider existing and forecasted weather conditions
- Additionally for masts in excess of 30ft or with a heavier head-load
  - The use of a gin pole is recommended
    - **Mast erection / dismantling**
      - Does the mast have a base-plate?
      - What guying is appropriate?
      - Is each section in good condition?
      - Are the members of the team familiar with the method employed to lower and raise it?
      - Are all members wearing appropriate personal safety equipment (eg gloves, hard hats)?
      - Will all the guy ropes and ground pins be clearly identified to avoid trip hazards?
      - If the mast should collapse, what damage could occur?

#### b. Avoiding danger from overhead power lines <sup>2</sup>

- Check for overhead cables running across the area

#### c. Generators

- Place the generator at least 1m away from any building, tent, vehicle etc
- Allow for adequate ventilation and never use a generator in a confined space
- Operate the generator on a level surface
- Never operate the generator with wet hands, and protect it from precipitation
- Make sure that those operating the generator are aware of the manufacturer’s safety notes (usually found in the Owners Manual)
- Ensure that pets and unauthorised personnel are kept away from the generator.
- Generators should only be refuelled when not in operation
- Fuel should be kept in an authorised and clearly marked container and stored in a safe place.
- A suitable fire extinguisher should be located nearby.

#### d. Installing radio equipment in motor vehicles<sup>3</sup>

- Batteries should be adequately ventilated and secured to avoid upset
- All conductors and cables should be adequately protected
- The termination of flexible cables should be free from strain
- Mobile radio equipment should be connected to a power supply by a fuse-link.

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<sup>2</sup> “Avoidance of danger from overhead power lines” – HSE publication GS6 (3<sup>rd</sup> edition) 1991 ISBN 0 11 885668 5

Also “Working safely near overhead power lines – Agricultural information sheet 8” available from HSE

<sup>3</sup> “Guidance for safe handling and operation of mobile radio equipment” British Standards Institute BS IEC 1149:1995

- Radio equipment should be secured
- The operation of radio equipment should not impede the driver

#### **e. Fire extinguishers**

- Suitable fire extinguishers should be provided appropriate to the equipment (eg a dry powder extinguisher for a generator (blue band on shoulder or blue panel))
- Following a fire involving electrical equipment, it should be isolated from the supply immediately and permitted to cool.

#### **f. Safety checks for portable and transportable electrical equipment <sup>4</sup>**

- External examination:
  - Examine the power lead for damage (cuts, abrasions etc)
  - Examine the plug for damage (cracks to the casing or bent pins)
  - Look for signs of overheating (burn or scorch marks)
  - Ensure that the cable is being gripped properly where it enters the plug.
  - *In a moulded plug, only the fuse can be checked.*
- Upon removal of the plug casing, check that :
  - The correct fuse is being used
  - The cord grip is holding the outer part of the cable tightly
  - The wires are attached to the correct terminals
  - No bare wires are visible except at the terminals
  - The terminal screws are tight
  - There is no sign of internal damage (overheating, entry of liquid, dust or dirt)

It is not necessary for 12v equipment to be PAT tested; it may be appropriate for power supplies and mains-operated equipment to be checked, as this may be a requirement of the User Service.

#### **g. Setting up and maintaining equipment at temporary locations**

- ***Please refer to Sections a, b, c & d***
- Additionally, check that:
  - No cables are trailing across walkways - if such a route is absolutely necessary, they should be taped securely to the floor.
  - Aerial cables have a suitable point of entry into the building.
  - The location of equipment does not impede access/egress through doorways, emergency exits etc.

#### **h. Special considerations within hospitals**

In many hospitals, the use of mobile telephones and radio equipment is forbidden, as it is suggested that radio transmissions might adversely affect sensitive equipment. Before using radio equipment on hospital premises, permission must be sought from the Hospital Emergency Liaison Officer.

NB: there are other locations where there will be a restriction on the use of radio equipment.

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<sup>4</sup> "Maintaining portable and transportable electrical equipment" HSE document HSG107

Also "Maintaining portable electrical equipment in offices and other low-risk environments" HSE publication INDG236

### **i. RAYNET training and support at public events**

Consideration should be given to the welfare of all RAYNET personnel and the RAYNET Risk Assessment at Public Events document (RA-Assessment [Rev00/05]) may be used for this.

### **j. Personal responsibilities**

Members are responsible for their own safety and for the safety of others.

- **Health & physical condition**

- RAYNET members should not be allocated duties beyond their physical capabilities. When assigning duties, controllers should take into account the age, state of health and any other factor which might affect the member's capability to discharge that duty in a safe manner.
- Individual members should decline a duty which they feel is beyond their physical capabilities.
- Members may wish, for their own protection, to carry a card stating important information
  - Name, address and telephone number of next of kin
  - Details of any regular medication
  - Details of any physical condition which might be important to medical staff.
  - Details of any allergies
  - Blood group

- **Weather conditions**

- Members should dress to suit whatever weather might be encountered during their duty of operation
  - A suitable sunscreen should be applied in sunny weather
  - A peaked hat is advisable to both shield the forehead in sun and reduce the loss of body heat in the cold.
  - The Net Controller should check on the welfare of operators regularly, particularly during long hours of duty and in adverse weather/night-time operations

- **Refreshments**

- A quantity of food, soft drinks and at least a litre of water sufficient for at least 24 hours operation should be carried unless the event is known to be of short duration
- Fresh & dried fruit and chocolate can be carried as emergency rations.

#### **4. Conclusions**

Although not a definitive list, the following eight main categories may pose hazards for RAYNET operators or others:

- Masts – erecting and dismantling
- Danger from overhead power lines
- Generators
- Installing radio equipment in motor vehicles
- Safety checks for portable and transportable electrical equipment
- Setting up and maintaining equipment at temporary locations
- Special considerations within hospitals
- Personal welfare

#### **5. Recommendations**

- A risk assessment document<sup>5</sup> should be completed for each activity (including training) and the written record kept.
- It is absolutely necessary to ensure that RAYNET members are trained and that they follow recommended procedures to minimise risk (as identified in any risk assessment document)
- It must be recognised that EVERY RAYNET member has “a duty of care” to him/herself and others. However, if more than one RAYNET member is involved in an activity at a particular location, the overall responsibility for Health and Safety lies with the person appointed to co-ordinate that activity.

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<sup>5</sup> Issued in RAY-Link October 2000 and also in the RAYNET Manual Section 7