Generic Risk Assessment for Radio Communications Activities

	Activity	Hazards Identified	Existing Controls	Residual Risk Acceptable YES or NO	Additional Controls	Residual Risk Acceptable YES or NO
1	Handling / Carriage of Batteries.	Placing batteries in pockets containing metal, causing electrical short, fire or explosion.	Spare batteries are to be placed in a pocket that is free from any other conductor or metallic material.	YES		
2	Changing of batteries.	electrical short and possible fire, explosion, caused by changing of batteries while equipment still switched on	Training and supervision of cadets will illuminate this practice. Alternatively; senior staff may wish to take charge of and change all batteries.	YES		
3	Packing batteries in boxes / cases.	Placing batteries in such a way that contacts can touch causing electrical short and possible fire, explosion.	Batteries should be placed or stored in such a way that the electrical contact cannot touch another battery causing the two to short out. Separation by separate compartments within the case using a non-conductive material is recommended.	YES		
4	Use and correct selection of Batteries.	Use of wet cell Batteries. Fear of acid slashing and the possible inhalation of gas and possible explosion whilst charging.	Wet cell batteries are not recommended and should be replaced by 12V dry cell “leisure” batteries such as car “jump start” packs.	YES		
5	Storage of batteries.	Possible fire, explosion by Placing batteries in such a way that contacts can touch causing electrical short.	Batteries should be stored in such a way that the contact cannot touch other battery cells. Separation by separate compartments within the case using a non-conductive material is recommended.	YES		
6	Disposal of Batteries.	Incorrect disposal of dry cell and possible wet cell batteries.	All batteries are to be disposed of in accordance with the manufacturer’s guidelines.	YES		
7	Opening / servicing of hand held Radio(s)	Shorting out and possible battery explosion due to failure to switch set off before opening or removing the cover.	This activity should only be undertaken by trained staff or authorised dealers and with the batteries removed and placed away from the working area or demonstrated with broken equipment used just for demonstration purposes.	YES		
8	Maintenance of mains operated Radios.	Electrocution, Failure to isolate the set from the mains before opening or removing the cover.	This activity should only be undertaken by trained staff or authorised dealers and with the batteries removed and placed away from the working area or demonstrated with broken equipment used just for demonstration purposes.	YES		

9	Erection of aerials; temporary or permanent.	Manual Handling issues with the lifting of aerial	Training and supervision is recommended when lifting any equipment. Make sure that there are enough cadets and staff available and that the recommended procedure for erecting the aerial is observed.	YES		
10	Erection of aerials; temporary or permanent aerials including using hydraulic systems.	Possible hazard from falling components from the aerial.	Cadets and staff are to wear hard hats, gloves and eye protection when performing this operation. Training and Supervision. Provision of a First Aid Box including eye-wash.	YES		
11		Cuts and abrasions from parts of the aerial or the guide ropes and fittings.		YES		
12		Possible ejection of hydraulic fluid from the equipment in the event of equipment failure.		YES		
13	Maintenance of Aerials and coax cables.	Cuts and abrasions from sharp parts of aerial and exposed wire though the outer protective coating.	Training and supervision. Suitable tools and equipment for the task. Provision of a First Aid Box.	YES		
14	Working at height on aerials.	Possible slipping / falling from equipment used to reach aerials at height.	Staff and Cadets are discouraged from climbing up or using equipment to gain height to repair aerials or masts; this should be undertaken by SERFCA.	YES		
15	Fitting of plugs and connectors.	Cuts from sharp tools used, and stabbing from exposed wire ends.	Training and supervision. Suitable tools and equipment for the task. Provision of a First Aid Box.	YES		
16	Use of soldering irons.	Burns from hot irons. Spitting of solder into eyes.	Training and Supervision. In the event of burning availability to place burnt area in cold running water. Safety grasses are to be worn when carrying out this procedure.	YES		
17	Use of Solder and Flux.	Possible health risk if ingested	Cadets and staff are to be informed of the possible health risk of swallowing or ingesting lead based solder. Cadets and Staff are to wash hands after using solder and before eating / drinking.	YES		
18	Adjustment to the SWR on Radio equipment.	Radio Frequency RF radiation burns caused by operating radio whilst holding aerial.	Training and Supervision Wearing of suitable gloves. Making sure that the PPT button cannot be operated while adjustment is being made.	YES		
19	Installation of permanent radio equipment or installation in the field	Shorting out and possible fire due to Incorrect or poor electrical wiring	Trained and competent personnel only should carry out this type of work. Having the installation checked regularly by qualified person.	YES		
20	Installation of permanent radio equipment.	Entrapment; poor design and layout of radio room causing obstruction in the event of fire.	Planning of a Radio room and its layout prior to build. Room not to be used for storage of other materials causing obstruction or fire risk.	YES		

21	Installation of permanent radio equipment.	Manual handling Poor storage of equipment causing possible injury if moved.	Storage of heavy or large items should be at the bottom and smaller lighter items on upper shelves.	YES		
22	Installation of Radio equipment in motor vehicles.	Shorting out causing fire from Incorrect or poor electrical wiring.	Trained and competent personnel should only carry out this type of work. Having the installation checked over by another person.	YES		
23	Temporary installation of Radio equipment in the field.	Use of wet cell Batteries. Fear of acid slashing and the possible inhalation of gas and possible explosion whilst charging.	Wet cell batteries are not recommended and should be replaced by 12V dry cell “leisure” batteries such as car “jump start” packs.	YES		
24	Using Radio when driving	Loss of concentration.	Radio equipment should not be used by the driver of a moving vehicle.	YES		
25	Using Radio when refuelling vehicle or using gas canisters.	Fire / explosion caused by sparking from Radio equipment	All radio equipment should be turned off prior to refuelling, or using gas fired equipment.	YES		
26	Using radio in wet conditions	Fire / Explosion of batteries caused by Shorting out of radio equipment.	Caution is to be taken and ensuring that the battery and electrical component do not get wet. Caution is to be taken if covering the equipment that there is sufficient air movement to cool the equipment reducing the risk of Fire.	YES		
27	Placing hand-held Radio aerials in mouth.	Stabbing to back of throat or choking on aerial.	Training and supervision. Cadets are to be discouraged from placing or carrying hand-held radios in their mouth	YES		
28	Placing hand held Radio aerials in mouth (and transmitting).	Burning to mouth and lips due to radio frequency (RF) radiation	Training and supervision. Cadets are to be discouraged from placing or carrying Hand held radios in their mouth	YES		
29	Holding of radio to side of head when operating.	Burn or brain damage due to radio frequency (RF) radiation	The radio frequency is not in the microwave range. The frequency of use is minimal.	YES		
30	Portable Appliance Testing	Poor maintenance of electrical equipment	All portable equipment is to be tested in accordance with PAT regulations and a record of inspection and testing kept.	YES		
31	Personal Protective Equipment	Incorrect wearing / selection of equipment.	All PPE is to be suitable for use and inspected for damage prior to use.	YES		