

Using Radio Communications

A guide for those wishing to use Private Mobile Radio



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0845 300 1818

Introduction

This is the third edition of this factsheet explaining in detail The Scout Association's Private Mobile Radio Licence and the mechanism for applicants wishing to obtain a sub-licence in order to use such equipment on Scout events.

Further editions may be produced as a result of experience or changes in the requirements of the national regulatory agency. The publication of future editions will be announced in SCOUTING Magazine, Talking Points and the Activities Newsletter.

Why do we need radio communications?

How often have you wished that you could keep in touch with your staff or been aware that someone was safe and well and had no means of contacting other staff or leaders to reassure them!

Radio communications could be the answer. It can also mean a saving in vehicle fuel costs and assist in making best use of limited staff resources.

How can we get communications facilities?

There are two ways to go about it. There is a network of Scout Communication Teams who are able to provide a wide range of communication skills and equipment. They can provide PMR, paging, telephones, sound systems and datalinks to meet the most stringent requirements. They have the personnel to plan, install, manage and staff everything from a small night hike to a large international camp or national event. They will also provide equipment and training so that YOU can use the equipment on your event.

If you feel that you have the finances, staff and expertise to set up your own communications facility, the Association is able, with the agreement of the appropriate Commissioner, to issue an authority (otherwise referred to as a User Licence) to operate Private Mobile Radio equipment on Scout allocated frequencies.

The difference between a Communication Team licence and a User Licence are detailed in the paragraphs that follow.

How much does it cost?

A Communications Team (Regional, County or District) may have equipment valued at tens of thousands of pounds so that they are able to supply a wide range of facilities to the Movement. They are in general self-financing and ask for a donation towards the cost of maintenance and renewal.

The cost of purchasing radio equipment, which conforms to the correct standards, is within the budgets of most Counties or Districts. The cost of a single handportable or mobile radio set can be from about £150, but battery chargers, spare batteries and other accessories can add another 25% to this figure.

As a minimum working system is three sets little change can be expected from £1000 for such a system. In addition, there is an annual licence fee of £10 per year (paid in a three yearly cycle) and a budget for maintenance should be provided to ensure that equipment does not fall into disrepair and become an expensive unused facility.

The Scout Information Centre

Gilwell Park Chingford London E4 7QW Tel + 44 (0)20 8433 7100 Fax + 44 (0)20 8433 7103 email info.centre@scout.org.uk www.scoutbase.org.uk

How many sets can I use and what can I use them for?

Should you require large numbers of sets for a particular event, then your best source is one of the Scout Communications Teams. If on the other hand you have a regular requirement for a small number of sets you can consider applying for a sub-licence on your own account. As experience in operating is gained, it should be possible to increase the number of sets on your sub-licence. These licences are issued every three years with the approval of the appropriate Commissioner on payment of the licence fee.

Why Radio Use needs to be Regulated?

Radio frequencies are in great demand, and uncoordinated use can cause interference to other users, both Scout and other organisations (we do NOT have exclusive use of the channels). Interference can have serious consequences for safety of life. Improper use may also interfere with the conduct of business or cause annoyance to the private individual. The Scout Association operates an agreement with the Department of Trade and Industry Radiocommunications Agency (RA) to licence equipment used by The Association and its membership. Applications for licences should be made to the Programme and Development Department and NOT to the RA.

The Radiocommunications Agency has a statutory obligation under the Wireless Telegraphy Act 1949 (WT Act), amended 1998, to plan and regulate the use of radio. It is therefore keen to promote good practice amongst users in order to avoid interference problems and to ensure that best use is made of radio for the benefit of everyone.

Because of this, it is illegal to use radio transmitters in the UK except under licence issued under the WT Act. Radio equipment must be type approved (or self certified) to the relevant standard - usually the Radiocommunications Agency's "MPT" series or, increasingly, a European Telecommunications Standard (ETS).

Maximum use of the radio spectrum with the minimum of interference is only achieved by careful central planning and co-ordination. This takes time and effort, and costs money. The cost of providing this service is met by the licence fee and collected by the Radiocommunications Agency or other agents appointed by the Secretary of State.

All equipment must conform to the current Radiocommunications Agency MPT. The approval authority issues an RTD number and this number should be sought from your supplier and will be required on any licence application. Second hand equipment which does not conform to these requirements cannot be licensed. A channel will be allocated; this may be on Low Band, Mid Band, High Band or UHF Band, with FM emission appropriate to your location and use.

Equipment should not be ordered or purchased prior to agreement from The Association. Channels may change as they are subject to International agreements. Limitations on antennas, power of equipment and interference are contained within the licence. You should discuss these with the Programme and Development Department (Activities Office) and your supplier before purchasing any equipment.

Regional Co-ordination

It is a requirement that all those using the radio channel co-ordinate their use to ensure a minimum of interference. The liaison between all radio users in an area is vital to ensure the safety of young people that we serve. Benefits may also accrue from the transfer of experience from long established users to those new to the field.

In order to assist this process four Regional Co-ordinators have been appointed throughout the United Kingdom. They will act as a source of information on local facilities and advise on your application. Assistance may also be available on sources of equipment in your area. Details of your Regional Co-ordinator should be obtained from the Activities Office at Gilwell Park by calling 0845 300 1818.

What are the operational requirements?

Users of radio must store and operate the equipment only under the supervision of the licensee who should be a Member of the Association. The equipment may not be loaned or hired to anyone outside the Association without approval from Headquarters. The licensee is responsible for training and ensuring that good operating procedure and everyone using the equipment maintains the use of callsigns. Your local Regional Co-ordinator will be glad to help you with training.

As users of radio, the Regional Co-ordinator is your first contact point for local assistance. Radio users are only licensed to provide communications at Scout events. Communication Teams, because of the standards of equipment and staff skills are licensed to provide communications at Scout, Youth and Community events.

The DTI Radio investigation Service (RIS) are responsible for inspecting and monitoring private mobile radio users and liaison with their staff is an important part of the licensee's responsibilities. Operation will be limited to an area and movement outside that area is by mutual agreement with the Regional Co-ordinator in the area in which you wish to operate.

Carrying and use of radio equipment whilst on activities of any type should not be regarded as the only safety provision. You should not be tempted to take part in an activity, or attempt an activity with a higher risk element, simply because you are equipped with radio communications. The Activity Rules of the Scout Association MUST be observed at all times.

The equipment cannot be used on vessels other than on inland waters, rivers and canals. The use of radio equipment on the sea and estuaries requires the use of a marine licence and different equipment. The factsheet FS120502 Radio Communications on Scout Events - A Guide for Leaders gives further details.

What do I do next?

When a Group, District or County wishes to operate radio equipment and believes that they can meet the requirements set out above they should submit the attached form via their District and/or County Commissioner to The Scout Association, Programme and Development Department (Activities Office), Gilwell Park, Chingford, London E4 7QW. The Commissioner should satisfy themselves that the equipment would be stored and used in such a way that the Terms and Conditions of the Licence issued to the Association by the Radiocommunications Agency will be strictly adhered to.

No equipment should be purchased at this point. If this application is acceptable, an "Authority to Operate" will be issued to the applicant who is then free to purchase or acquire the authorised radio equipment.

On receipt of the equipment, the form "List of Approved Equipment for Inclusion in Licence" must be returned to the Programme and Development Department (Activities Office) at Gilwell Park.

If in doubt please ask. The Programme and Development Department (Activities Office) and the Regional Co-ordinators shall be delighted to assist and guide you to make best use of mobile radio equipment, but please remember unauthorised use of equipment which requires a licence is illegal and could mean immediate termination of use; a fine of up to £5,000 and/or 6 months imprisonment on summary conviction or - for conviction on indictment - an unlimited fine and 2 years imprisonment and the forfeiture of the equipment.

Terms and Conditions

Full and detailed terms and conditions will be attached to the formal letter of authority issued on approval of your application. Your mobile radio licence will be issued subject to the following requirements. Please read them carefully. If you do not understand what they mean please ask your Regional Co-ordinator to explain them to you as operation of radio equipment except in

accordance with the terms and conditions is an offence and may result in forfeiture of equipment and licence authority.

Subject to approval of your district and County/Area Commissioner and your proposed equipment meeting RA Type approval an allocation will be made on an appropriate frequency depending on the use to be made of the system and the area in which you will be operating. These will be in the following frequency bands, depending on your required use:

<u>VHF Low Band</u>	<u>VHF Mid Band</u>
86.3625 MHz	164.0500 MHz
86.3500 MHz	164.0625 MHz
<u>VHF High Band</u>	<u>UHF1</u>
169.0875 MHz	449.3125 MHz
169.3125 MHz	449.4000 MHz

UHF2

461.4500 MHz

You should not purchase any equipment at this stage but should consult with your supplier and Regional Co-ordinator. You are advised to choose a reputable supplier who is able to ensure that your equipment is maintained to conform to the licence conditions.

The Scout Association and the Secretary of state reserve the right to withdraw any authority or to amend the conditions, limitations and frequency allocations as necessary.

Unless specifically authorised the authority is to use mobile radio equipment for the purpose of passing messages on behalf of The Scout Association at Scouting events.

The licence is not transferable.

Operation of any radio equipment without a valid licence is an offence.

The licence is issued every three by the Secretary of State to the Scout Association and the licence authorities are renewed every three years subject to completion of the relevant documents, the approval of the relevant District and County/Area

Commissioner together with payment of the licence fee to The Scout Association.

All and any changes to the radio service that you operate must first be authorised by The Scout Association. All changes in equipment must be notified on the appropriate form before the equipment is used.

The authorised person must ensure that all persons operating the stations observe the conditions of the licence.

Every message sent from any station must start and end with a callsign allocated by The Scout Association. Correct procedure must be used.

No indecent, obscene or grossly offensive messages shall be sent.

The stations shall not be used deliberately to receive messages other than those authorised by the licence.

The relaying of messages to the public is prohibited.

The stations and the letter of authority shall be available for inspection at all reasonable times by a person acting under the authority of the Secretary of State.

The radio equipment used must be of a type approved by and maintained to the current Radiocommunications Agency performance specifications. Equipment approved to a specification, which is no longer current, may only be used if the Secretary of State permits. (Note: In practice this usually means that it is unlikely that the use of second hand equipment will be permitted.)

The operation of the radio equipment must not cause any avoidable interference to any other radio user, to domestic radio or other electronic equipment.

The RA reserves the right to allocate other users to the channels specified in the licence. This means that you will need to co-operate with other non-Scout radio users. Always be polite and remember that you BOTH have a right to use the channel.

The stations shall transmit and receive only on the frequencies specified in the licence.

The effective radiated power (ERP) of the stations must not exceed the value specified in the licence. The maximum power (ERP) of any equipment is 5 watts.

In general the frequencies allocated are UK General, single frequency operation where all stations transmit and receive on the same frequency.

The use of base stations is not permitted.

The use of CTCSS (Continuous tone controlled signalling system) is advised and will be allocated when the licence authority is issued.

The RIS may inspect your equipment at any time to ensure that it complies with the licence. The officers of the RIS have the authority to inspect your licence authority and to restrict your operation, close down any station or confiscate equipment if it is causing interference or does not conform to the standards as detailed above. They are however, usually most helpful and will try to assist whenever a genuine mistake has been made.

All stations shall close down at any time on demand by a person acting under the authority of the Secretary of State or Headquarters of The Scout Association.

All correspondence with regard to the licence shall be addressed to the Scout Association and NOT the RA.

The carrying and use of radio equipment whilst on activities of any type must not be regarded as a safety provision under the activity rules, which must be observed at all times.

The equipment shall not be used on vessels other than on inland waters, rivers and canals. The use of the equipment on the sea requires the use of a separate marine licence.

Publications Cross Reference

Radio Communications on Scout Events - A Guide for Leaders (FS120502)

Application for Private Mobile Radio sub-Licence



Group		District	
County			
Based at		Grid Reference	
Name of Applicant			
Address		Postcode	
Telephone (home)		Telephone (work)	
Email			

The above applicant wishes to apply for authority to use radio equipment on the Private Mobile Radio Licence issued to The Scout Association by the Department of Trade and Industry Radiocommunications Agency.

Details of proposed equipment

Supplier			
Manufacturer		Type	
RTD Number		Quantity	
Purpose of use			
Is it intended for permanent use on a Scout campsite?	Yes <input type="checkbox"/> No <input type="checkbox"/>		
Area of coverage required			

We agree that the equipment will be the property of The Scout Association and that in the event of the dissolution of the facility, the equipment will be returned to the District/County/Area Scout Council.

Signature of Applicant		Date	
Signature of District Commissioner		Date	
Signature of County/Area Commissioner		Date	

For Programme and Development Department use only

Signature of PMR Regional Co-ordinator		Date	
Approved by P&D Department		Date	