A Radio Amateur's Guide to London and the UK

What to do, what to see—and how to open UK repeaters with your funny accent.

you have planned a trip to London (or your spouse has 9 planned one) and you wonder if there is something for you to look forward to other than the National Gallery, the National Portrait Gallery and Buckingham Palace. Just beneath the surface of "London for the tourist" there exists a wealth of places, people, and events for the radio amateur. But, you will not find any of these listed in Fodor's, Frommer's or any commercial travel guides. These guides are excellent for the general visitor but you have a special interest-Amateur Radio. What you need is a "Travel Guide for Radio Amateurs," and that is exactly what this article is about.

When you plan your trip to London leave some extra time for Amateur Radio activities, and leave some time before your trip to arrange the visits and contacts you would like to make while you are there. A little planning before you leave will work out quite nicely when you finally do arrive.

First, think about a practical matter. Consider taking a dual or tri-band handheld with you on the trip. The handheld

will place you in immediate and direct contact with the local amateurs (who speak a language strangely close to our own). When I lived in London recently I had a Yaesu VX-5R with me. This radio is ideal because it has 2 meters, 70 centimeters and 6 meters, but also serves as a general purpose receiver (more on that a bit later). The entire UK is covered under the CEPT reciprocal licensing program, so there is no need for you to apply for a separate UK Amateur Radio license (see CEPT information in the sidebar). The ARRL recommends that you take three forms of documentation with you for operation in most European countries: (1) your original US license, (2) proof of US citizenship (your passport, for example) and (3) a copy (printed from the ARRL Web site) of the CEPT agreement itself. These documents will work for operating from most of the European countries. Remember that once in London the Continent is only a three-hour train ride away on the Eurostar through the Chunnel.

Repeaters and Tones in the UK

The UK and the Continent rarely use

CTCSS tones for repeater access; instead, they currently use a 1750 Hz "tone burst" to open the repeater. (They are, however, changing to CTCSS and DCS tones.) Luckily, some of the available handhelds sold in this country already have this feature built into the rig. The VX-5R is one of these. The tone burst is sent at the beginning of a repeater contact and is only sent once. After the repeater is "opened" by the tone burst you may identify yourself. If you join a conversation already in progress there is no need to send the tone burst because one of the other operators must have already sent the tone and opened the repeater.

What if your handheld does not support tone burst? This may not be as significant a problem as it appears. You could simply break into existing conversations or you can employ the mysterious and exciting "whistle technique." The whistle technique is implemented by keying and whistling into your mike. As you whistle, just run up and down through the entire musical scale. Sooner or later you will hit a note close to 1750 Hz and the repeater will open. I know this sounds



The British Airways London Eye, the perfect place to extend the range of your handheld radio.



The Ilford Group—J. R., Alan and Robb. Just look at all those parts in the background!

bizarre but it does work and you will get the hang of it quickly. I was caught in the act in an Oxford laundromat one day whistling into my older ICOM 24-AT. While my fellow laundromat inhabitants thought I was crazy, the technique worked as advertised. As soon as the repeater opened, I started a conversation; there was no further need to annoy my laundromat neighbors.

A list of all available repeaters, their offsets and maps of their locations is available from the Repeater Management Committee of the Radio Society of Great Britain (RSGB) Web site (see sidebar).

Right off the bat the small number of repeaters available both in London and the rest of the UK will surprise you. If you were in any American city of comparable size you would expect a large number of available open repeaters. In London there are only two amateur repeaters that you will be able to hit consistently. One is actually used by amateurs and you will hear quite a few conversations throughout the day (the R0 pair at 145.00 input and 145.600 output). The other repeater will sound different; the conversations will all be between "black cab" drivers (these conversations take place on the R7 pair at 145.175 input and 145.775 output). This second repeater is also an amateur repeater but it is used almost exclusively by the cab drivers while they are waiting for customers (ask for directions on this repeater and you will not be disappointed; the directions you receive will be accurate and detailed, since all London cab drivers must pass a grueling exam covering every street and alley in London).

There are relatively few frequency pairs in use in the UK (only 14 VHF pairs are used) and there is no need to worry about CTCSS tones. This means it is probably best to just program in all the pairs on your handheld before you leave the United States. In this way, you will be ready no matter where you travel in the UK. Remember, however, the UK is 220-V electric service and you'll need to be mindful of how you will recharge your handheld. I used my regular charger with a small voltage converter available at



The secret's out. Sign just outside the town of Kelvedon Hatch.

RadioShack to recharge mine (RS #273-1410). The converter is no larger than a small "wall wart" but note that it is only for intermittent use with small items. Also be sure to take a UK three-pronged plug with the voltage converter.

Step Back In Time...

To see how radio has developed in Britain take a step back in time. It's 1939, and you are a radio amateur in Great Britain. You may be 14 years of age or you could be 75. No matter, you possess a skill that your country needs. Adolph Hitler is in power in Germany and he has invaded Poland, leaving little for Britain to do but come to the aid of their allies and declare war on the Reich. Before the Poles are overrun, they manage to provide the British with an important gift—a working German Enigma code machine.

The skill you possess that is valuable to the war effort is your knowledge of radio operation and Morse code. Britain has secretly been cracking the Enigma code used by all the German armed forces in one way or another. The code key changes frequently and large numbers of intercepts are needed to keep the code breakers "in business." Britain sets up the famous Y-Stations. These are intercept stations and are primarily manned by Amateur Radio operators at the beginning of hostilities. The stations include little more than a short-wave receiver, antenna and someone who understands and can copy Morse code accurately. Some of these Y-Station employees are only 14-year-old, newly licensed, amateur operators. The Y-Stations are given either a frequency to listen to and copy all traffic from or a band spread on which to report all activity.

The Y-station operators, located throughout the UK, carefully logged all German radio messages before sending them to Bletchley Park by teleprinter or motorcycle courier. At peak times of activity, up to 3000 messages a day would arrive at Bletchley by courier.

Bletchley Park in the 21st Century

You can re-live these accomplishments of the radio amateurs and even operate the famous Station X [Roman numeral 10]. Station X was the name given by Prime Minister Winston Churchill to the Government Code and Cipher School station at Bletchley Park. In reality the location was not a school at all; that was a subterfuge. It was, instead, the code breaking headquarters for Britain's best minds (including Alan Turing, one of the inventors of the modern computer).

An estate outside London that has been set aside as a national trust, Bletchley Park is a delightful place to



The author at the controls of GB2BP

visit any time of year. It is just a one-hour ride from London's Euston Station (Euston is also a Tube, or underground, station). Trains leave frequently and the ride is pleasant (see the sidebar for Railtrack information). The Milton Keynes Central rail station is a short walk from the front gate of Bletchley Park. There is even a sign in front of the station directing you to the footpath leading to Bletchley (10 minute walk). There is an entry fee to the grounds but it is one of the great bargains in the UK!

The Bletchley Park Trust is not just the former estate turned code school. It also houses more than 20 interest groups covering military vehicles, model railroads, vintage radio equipment, military reenactment groups, model aircraft enthusiasts and more. Your small entry fee (about \$7) admits you to all the exhibits, which are manned by their members on most weekends. Your visit should include the current Station X run by the Milton Keynes Amateur Radio Society. If they are not too busy, you can operate the station. With the recognizable call sign, GB2BP, you'll be like rare DX!

Tours are given once you enter Bletchley Park and start in the mansion. GB2BP is part of the tour. Be sure to also leave some time for the displays of "spy radios" used by both the Allies and the German infiltrators. Unlike a typical museum, the atmosphere at Bletchley is casual and you are allowed to "look under the hood" of the rigs.

GMT, Zulu and the Prime Meridian

Another short trip from the center of London will take you to the site of something all radio amateurs will recognize: GMT, Zulu and the Prime Meridian. You can reach Greenwich by Tube, or you can take a passenger ferry from the docks on the Thames near the Embankment Tube stop. The boat is by far the best way to see the Thames while you travel right to the dock at the Royal Observatory, the home of the Prime Meridian. The observatory is open for inspection and you may straddle the Prime Meridian, which is



The attractive GB2BP QSL card.

marked by something that looks like a railroad track set in the pavement. While you are in Greenwich consider meeting with some local amateurs. Greenwich is the home to the Clifton Amateur Radio Society (see sidebar for their Web site). Their meetings are informal and take place in a community center. Visiting the community center is itself an experience.

Local Clubs

Most UK Amateur Radio clubs meet in community centers. These are buildings owned by the local government council and used by many groups in any given week. One very accommodating club I visited does not meet in a community center. They started meeting "temporarily" some 25 years ago at the home of J. R. Hooper, and they are still meeting there today. The Ilford Group is a small but active club with a real interest in building.

Both the Clifton Amateur Radio Society and the Ilford Group were very accommodating when I rang up to see if they welcomed visitors. Give a call before hand and do try to arrange a visit with some amateurs during your visit.

The Barking Amateur Radio Society (Barking is accessible by Tube) has meetings in a community center as well but they also have one of the most unusual operating locations I have ever seen. Picture yourself operating a special event station while located three stories underground in a "secret" nuclear bunker. The Barking Society runs GBØSNB in the Kelvedon Hatch nuclear bunker (note the clever call sign mnemonics). Bill Chewter and his group have operated HF, VHF, UHF, packet and APRS from the bunker, which is located some 20 miles from the center of London (see the sidebar for the Web site). The Kelvedon Hatch bunker was to be used by government officials in the event of a nuclear attack. The site can be toured and includes an impressive array of Cold War memorabilia; it also has a small cafeteria. It may be a bit of a



HMS Belfast QSL card. The cruiser, built in 1938, saw service during WW II and the Korean War.

stretch to find, but just go to Kelvedon Hatch and look for the sign!

Operate from the Belfast

The same club also has an association with a permanent operating location in the very heart of London and one you will surely not want to miss. Imagine operating from the radio room of a WW II cruiser. It's possible because the Royal Naval Amateur Radio Society and the Barking Amateur Radio Society keep the beautiful radio room aboard HMS *Belfast* in working condition. Where is the *Belfast* located? It is moored just next to Tower Bridge in the heart of London on the Thames. It is also a part of the National Trust and can be toured for a small fee.

For amateurs, the radio room will be the first place to go. Here there is modern HF equipment connected to some of the best antennas in London (as the tide rises, the ship rises and the antennas rise to a working height well above surrounding structures). When I operated the station, hosted by the Royal Navy Amateur Radio Society, the propagation was excellent for a downtown location. If you are a veteran of the Navy, you are even eligible for membership in the Society

The RSGB

No visit to the UK would be complete for the radio amateur without a visit to the Radio Society of Great Britain (the UK equivalent of the ARRL). Getting to their headquarters involves only a short ride from Kings Cross Station (this is the station used in the first Harry Potter film—take a photo on the passenger platform and your grandchildren will surely recognize the gate to Hogwarts School). The train ride is about a half-hour and the station to look for is Potters Bar. It is a short walk from the train station to the headquarters and the RSGB will be glad

to e-mail you exact directions. Check with the RSGB before visiting because the club station, GB3RS, is available for guest use only at certain hours. The head-quarters also houses a small radio museum and the QSL Bureau for the UK. Pick up some reading material there as well since they sell all the RSGB publications.

Rallies

Depending upon when you decide to visit the UK you might consider attending a "rally"—what we call a hamfest. Just this past year the RSGB has decided to stop sponsorship of the largest rally in the UK but that doesn't mean that rallies will cease to be held (see sidebar for a listing). Radiosport, a commercial firm that had cosponsored the rallies will continue to hold them in the London area.

When I attended last year's London Amateur Radio and Computer Show I was a bit surprised. Rallies in the UK operate on an entirely different scale than our hamfests. My local hamfest in South Bend is actually larger than the largest rally in the UK! There is also a difference in what one finds at the rally versus a hamfest. The UK London rally included only a few talks during its two-day event. The main attraction was the booths, but even here there was a surprise. The UK version of our flea market is the "bringand-buy." But at the UK London show there were very few items for sale in the bring-and-buy corral—and the items that were there had been well used.

Our amateurs would also have missed some of the staples of our hamfests. Only one of the booths in London had any QRP equipment and that booth had very few pieces for sale. The largest booth at the rally was taken by the UK equivalent of our FCC. This was a surprise; they seemed to simply pass out general information relating to all the regulations

they enforce concerning frequency spectrum of all types. Few of the pieces of information had anything at all to do with Amateur Radio. The other shocker was located on the price stickers of the items for sale. I selected a few items to examine for comparison shopper purposes; in almost every case the UK price of an item identical to one purchased in the USA was 50 percent higher. Why? The import

taxes on these items raised their street prices to levels we in the States would see as outrageous. This is not the place for you to look for bargains to carry back across the pond. My visit to the rally (I attended two) left me very appreciative of the competitive prices we face in the United States. It also left me with an appreciation of the immense selection we face at even our local hamfests, not to mention the Dayton Hamvention.

Contact Points for Visiting London and the UK

Bletchley Park Official Site

By Rail: London Euston, Milton Keynes Central (Bletchley Park and GB2BP are located 200 yards from Bletchley railway station in Milton Keynes)

www.project-x.org.uk/bletpark.html

GB2BP Amateur Radio at Bletchley Park www.project-x.org.uk/ bphamrp.html E-mail gb2bp@geocities.com

Station X Information www.bletchleypark.org.uk

WW II Codes and Ciphers www.codesandciphers.co.uk

Imperial War Museum in London www.iwm.org.uk

Barking Amateur Radio Society ourworld.compuserve.com/ homepages/billchewter

Secret Nuclear Bunker at Kelvedon Hatch, home of GBØSNB www.japar.demon.co.uk

The Ilford Group, G3PCA (RSGB Club) www.qsl.net/g3xrt/xrt-homepage.htm

Clifton Amateur Radio Society in Greenwich myweb.tiscali.co.uk/cliftonars

Amateur Radio Clubs in the London Area www.users.zetnet.co.uk/kama/ soceast.htm

Scanner Frequencies for the UK www.transmission1.net

HMS Belfast Home Page www.iwm.org.uk/belfast/index.htm

GB2RN Amateur Radio on the HMS Belfast www.rnars.org.uk

Radio Society of Great Britain (RSGB) at Potters Bar, Home of GB3RS and the National Amateur Radio Museum

Lambda House, Cranborne Rd, Potters Bar, Herts EN6 3JE Phone: +44 (0) 870 904 7373 E-Mail postmaster@rsgb.org.uk www.rsgb.org

CEPT (European Conference of Postal and Telecommunications Administrations) www.arrl.org/FandES/field/ regulations/io/#cept Amateur Radio Hamfests ("Rallies") website.lineone.net/~harrison.elec/rallylist.htm

Explanation of Metropolitan Police MetRadio www.metradio.co.uk

Radiosport: Sponsors of UK Rallies www.radiosport.co.uk

UK Amateur Radio Frequently Asked Questions and Answers www.r-clarke.org.uk/hamfaq1.htm

British Airways London Eye (take your handheld radio and cover the South of Britain) www.londoneye.com

London Repeaters

145.600 receive, 145.000 transmit, 1750 toneburst required; 145.7750 receive, 145.1750 transmit, 1750 toneburst required

Repeater Management Committee of the Radio Society of Great Britain (lists all repeater pairs for the UK for all bands) www.coldal.org.uk/channels.htm

Favorite Frequencies for Listening

453.9250 and 456.3500—The National Gallery. 453.0625, 446.1125, 446.2750—The

Tate Gallery.
444.4750—The Horse Guards—daily activity especially during the Buckingham Palace changing of the

guard. 446.2875—Tower Bridge—busy when river traffic picks up. 462.3625—London Eye (Millenium

Eye); hear them control the gigantic Ferris wheel.
152.5875—Palace detail of the Metropolitan Police; busy when the guard changes at Buckingham Palace.

156.0250, 160.6250, 156.0500, 160.6500, 160.7000—River traffic on the Thames near London.

List of London Commercial Radio Stations (program them in before you visit)

homepages.enterprise.net/ paulbaker/london_radio/am.html

The BBC online (lists all the frequencies they use: shortwave, AM, FM and longwave) www.bbc.co.uk

UK Railtrack www.railtrack.com

The Best Place to Use Your Handheld

Let me close by telling you the best operating position to use with that handheld radio you are bringing to London. By far the best location I found is one of the most popular tourist venues in London. The British Airways London Eye (also called the Millennium Eye) is an enormous Ferris wheel located on the South Bank, across from the Houses of Parliament. Take along your spouse (and your children and grandchildren). There's plenty of room in each of the fully enclosed glass pods; each pod is capable of holding up to 35 people. The wheel takes about an hour to complete one revolution and once you are clear of the tops of surrounding buildings your handheld will be able to hit quite a few repeaters cleanly.

On my first trip on the Eye I pulled out my small handheld and began to identify quietly with the earphone and lapel mike. A gentleman standing next to me said, "Darn, I wish I had thought to bring my radio along!" The chap turned out to be a local amateur and we ended up sharing the radio and having a delightful hour speaking with a good part of the London amateur crowd.

Have a Great Time!

Radio amateurs in the UK are a delightful group of people from every walk of life. You will miss the real flavor of London and the rest of the UK if you don't take the time and effort to meet a few of these terrific individuals. The contact information you need is in the sidebar. Plan your trip well in advance and have a great time in a very accommodating country.

Photos by the author.

Barry Keating, WD4MSM, is an ARRL member and a member of an ARRL Special Service Club (the Michiana Amateur Radio Club). Barry is the Jesse H. Jones Professor at the Mendoza College of Business, University of Notre Dame. You can contact Barry at wd4msm@arrl.net.