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Chapter 1. So you want to be a Successful Ham Radio Operator

Have you just passed a ham radio exam? Congratulations! Or are you coming back to the hobby after years away for a career and family? Welcome back! The wonderful world of amateur radio awaits you. You can dip your toe in to test the waters or jump in the deep end of the pool. In any event, there are many things to learn to be a successful amateur radio operator. This book is designed to help you achieve that goal.

A successful operator is one who knows how the equipment operates. For example, understanding how a noise blanker works is critical to using it effectively. Your operator's manual will tell you how to activate the noise blanker in your rig. This book will help you understand how it operates and why it works in some situations and doesn't in others.

A successful operator is one who understands how radio signals propagate from one place to another without the benefit of an underlying \$trillion infrastructure of cell phone networks and the internet. This is the magical part of ham radio. We will help you understand what it takes to have an effective antenna to accomplish this and why some antenna choices may be less than optimal.

A successful operator is one who knows how to be a good neighbor on the amateur bands. Knowing what kind of behavior is acceptable and what is not is part of being a successful operator. We will touch on some of that throughout the following chapters.

What this Book Doesn't Do

This book is not a primer to help you get your license. There are many web-based resources and books to help you do that. It is not a source of regulations for your country. The book is not targeted to a specific manufacture's radio. Thus we can't tell you which knob to adjust for which function. You have your owner's manual for that. This is not a reference book for antennas, transmission lines, towers or construction practices. You should refer to the *ARRL Handbook* and the *ARRL Antenna Handbook* for in-depth information on these topics. This is not a definitive source of information for contest rules, DX listing, public and emergency service activities, but we will give you links and pointers to this information to use when you are ready.

We won't be explaining how to set up and use the rapidly appearing (and sometimes disappearing) special digital operating modes (with the exception of WSJT-X) because in the end, these are just different ways of modulating a radio signal to carry information and are controlled by a application running on your computer. Once you have your radio and computer audio levels set up to transmit and receive signals, using these modes is a matter of learning the computer application. We can't help you with that.

What You Should Do

Becoming a successful ham radio operator is truly a process of learning and trying new things and becoming involved in multiple aspects of the hobby.

- Join a local radio club. Here you will find many helpful (and maybe some who are not so helpful) hams to help you learn about amateur radio. Seek out those who would help. Many of us fondly remember a special person who was very helpful. He or she was our "Elmer" who solved many of the mysteries that confronted us when we were starting out.

- Get a computer if you do not all ready have one. You will be missing out on much of the fun and challenges of ham radio if you do not have one. Any of the popular brands and models will serve you well but many ham radio software programs are Windows-based. It doesn't have to be the latest, fastest or largest model but it should have the most up-to-date operating system. If you are not comfortable with purchasing a computer, ask for help from club members, but remember there is apt to be considerable brand loyalty (PCs vs. Macs).¹
- Join in club activities providing communications for public service events or operating in special events. The last weekend in June is an event called "Field Day" where groups take their gear into the field and set up antennas to simulate operating in emergency conditions. Field Day is a great event to get to see all the pieces of an operating station come together and to get your feet wet in a friendly contesting environment.
- Most areas with a ham population have conventions, called hamventions. These usually have seminars and programs and have vendors displaying their latest wares. There might be a flea market to search for treasures (also called boat anchors). Gather a group of friends and go.
- Join the American Radio Relay League (ARRL), Radio Amateurs of Canada (RAC) or your national amateur radio organization. The ARRL is the national body in the US that represents amateurs in national affairs. Most nations with significant ham populations will have a similar body.² These national bodies lobby their governments to protect the allocation of radio spectrum for amateur radio. Usually, a publication with articles of interest (QST in the case of the ARRL, TCA for Canada) will come with your membership.
- Purchase more reference books. Among those especially recommended are the ARRL Handbook and the ARRL Antenna Book. Browse to www.arrl.org/shop to see these and other interesting books.

1.1 Challenges

Many non-hams ask "What is the point of ham radio? I can talk to just about anybody in the world using my cell phone." James Ramsey Ullman, noted mountaineer and author, once said "Challenge is the core and the mainspring of all human activity. If there's an ocean, we cross it; if there's a disease, we cure it; if there's a wrong, we right it; if there's a record, we break it; and finally, if there's a mountain, we climb it". While the challenges we might encounter in becoming a successful ham radio operator might not be on the scale of curing cancer or climbing Mt. Everest, accepting challenges large and small is a good thing. Simply getting your ham radio license probably was a challenge at some level so think about great you felt when you passed that test. Hopefully you said to yourself, "Now where do I go from here?" This chapter will show some of the challenges you might sink your teeth into as you progress in your ham radio career. Succeeding chapters will help you learn the skills and techniques you will need to take on these challenges.

1.1.1 Awards and Certificates

Many hams work for certificates attesting that they have achieved a challenging goal. Some of the most common awards are listed below. Most require some sort of documentation verifying the contact used

¹ If you are in the right age demographic, you could ask a grandchild for help!

² RAC – Radio Amateurs of Canada (wp.rac.ca), RSBG – Radio Society of Great Britain (rsb.org), DARC -- Deutscher Amateur Radio Club (<https://www.darc.de/home/>), REF -- Réseau des Émetteurs Français (<http://www.r-e-f.org/>), Russian Amateur Radio Union