

Introduction

THE art of short waves has become the greatest of all hobbies. Old as well as young, find enjoyment in listening to stations located in remote parts of the earth.

There are hundreds of short wave stations in operation, and they are providing no end of thrill for the short wave

and the particular part of the sun-spot cycle during which reception is attempted.

Just receiving these stations and listening to their programs is not the only source of entertainment. Many short wave fans collect verification cards which are sent out by the stations. If you wish to collect cards of this nature, merely make a note of the time of day, date, station call letters, and type of program received. Also add other notes such as will be of interest to the station's operators, and help them to carry on their commendable task of providing world-wide entertainment. These details, together with an international reply coupon, should be mailed to the station. The coupon can be obtained from your local post office for \$.09 each. While nearly all of the short wave stations send out verification cards, there are a few who do not. Most notable among the latter are those operated by the British post office. Do not expect a "veri", as they are sometimes called, from the British or "G" stations.

The receivers described in this book are those most prominently found in use by short wave fans and amateurs. They are all of the simple regenerative type. These receivers are easy to build, easy to get going and easy to operate. As pointed out before, the success of these



Short wave listeners make a hobby of collecting these QSL cards.

fan. While some of these stations are using very powerful transmitting apparatus, and can be received almost daily, others are using low power and are difficult to receive. These low powered "DX" stations provide greatest enjoyment. Almost any type of receiver will pick up the stronger stations so long as it is tuned to their frequency. Of course, these stations provide plenty of entertainment, such as, news of their native countries, and musical renditions such as operas and plays that have to do with their particular mode of living. Also political talks are given which tend to broaden one's knowledge of international affairs.

The weaker stations are entertaining, not so much from the program standpoint, but from the fact that it takes a good man at the controls, and a well-designed receiver using precision parts to pull them in. Then, there are other factors such as atmospheric conditions, time of day or night,



A rare catch from Manila.

receivers lies in the use of the best parts and careful operation, together with an effective antenna system. The technique of operating a short wave receiver can only be developed by experience. The operator must get the "feel" of the receiver, learn just what each control does and just how a slight adjustment will affect reception of the weaker stations. The most critical control of this type of receiver is the regeneration control. This must be carefully adjusted for not only greatest sensitivity, but for a compromise between low background noise, loudest signal and elimination of interference from other stations. In the operation of a short wave receiver, as in all other arts, practice makes perfect.

In order to provide a wide selection of popular short wave receivers, we have contacted the editors of various prominent short wave magazines. Through correspondence with their readers, they have been able to recommend the types of receivers commonly used by the short wave fan, experimenter, and also by the new-comer.

These receivers have all been built in our laboratory and carefully designed to give the utmost of performance with a minimum of difficulty.

We have also included a two-page list of short wave stations. The station list editors of all popular magazines submitted a list of what they have found to



OSL from QX2QY in the Arctic

be the most important and most consistently heard stations. From these lists we have compiled the condensed list shown. While all of the stations now operating are not listed, this list will serve as a guide; complete monthly lists appear in nearly every worthwhile short wave magazine. We recommend the use of such lists because they include the



Commander MacGregor and his ship.

many changes, as pertaining to operating schedules, that are made from time to time by the stations to facilitate reception.

Aside from regular short wave commercial stations, there are thousands of amateur stations operating daily. These "Ham" stations, as they are commonly called, do not broadcast music or other popular types of programs, but are important to the short wave listener who is after "DX". These amateur stations, as a rule, employ low power transmitters and many of them provide good "catches" for the "DX" fan. Also, their varied conversations provide no end of amusing entertainment.

The latter part of this book is devoted to the amateur and contains time-proven circuits of simple transmitters. The new-comer to amateur radio will find these transmitters easy to construct and very efficient in operation. Originally the transmitters were designed by the headquarters staff of the ARRL and described in the amateurs' official magazine, Q.S.T. However, they have been reconstructed and thoroughly tested in the Hammarlund laboratories, thus doubly assuring the builder that he will be more than repaid for his efforts in constructing them.