

This book is revised and brought up to date (at irregular intervals) as necessitated by technical progress.

THE RADIO HANDBOOK

Fifteenth Edition

The Standard of the Field —
*for advanced amateurs
practical radiomen
practical engineers
practical technicians*

WILLIAM I. ORR, W6SAI
Editor, 15th Edition

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FIFTEENTH EDITION

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THE RADIO HANDBOOK

15th Edition

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FOREWORD TO THE FIFTEENTH EDITION

Over two decades ago the historic first edition of the RADIO HANDBOOK was published as a unique, independent, communications manual written especially for the advanced radio amateur and electronic engineer. Since that early issue, great pains have been taken to keep each succeeding edition of the RADIO HANDBOOK abreast of the rapidly expanding field of electronics.

So quickly has the electron invaded our everyday affairs that it is now no longer possible to segregate one particular branch of electronics and define it as radio communications; rather, the transfer of intelligence by electrical means encompasses more than the vacuum tube, the antenna, and the tuning capacitor.

Included in this new, advanced Fifteenth Edition of the RADIO HANDBOOK are fresh chapters covering electronic computers, r.f. feedback amplifiers, and high fidelity techniques, plus greatly expanded chapters dealing with semi-conductors and special vacuum tube circuits. The other chapters of this Handbook have been thoroughly revised and brought up to date, touching briefly on those aspects in the industrial and military electronic fields that are of immediate interest to the electronic engineer and the radio amateur. The construction chapters have been completely re-edited. All new equipments described therein are of modern design, free of TVI problems and various unwanted parasitic oscillations. An attempt has been made not to duplicate items that have been featured in contemporary magazines. The transceiver makes its major bow in this edition of the RADIO HANDBOOK, and it is felt that this complete, inexpensive, compact "radio station" design will become more popular during the coming years.

The writing and preparation of this Handbook would have been impossible without the lavish help that was tendered the editor by fellow amateurs and sympathetic electronic organizations. Their friendly assistance and helpful suggestions were freely given in the true amateur spirit to help make the 15th edition of the RADIO HANDBOOK an outstanding success.

The editor and publisher wish to thank these individuals and companies whose unselfish support made the compilation and publication of this book an interesting and inspired task.

—WILLIAM I. ORR, W6SAI, 3A2AF, Editor

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