

Heathkit of the Month #A06:
by Bob Eckweiler, AF6C



BOOK REVIEW

HEATHKIT – A GUIDE TO THE AMATEUR RADIO PRODUCTS (Third Edition) 09/2021
by Chuck Penson - WA7ZZE

Introduction:

Chuck Penson released his first book in 1995. It was the first edition of **HEATHKIT, a Guide to the Amateur Radio Products**, and after in a short period of time it sold out. Chuck, instead of printing more copies, started on a second edition of the book making numerous additions and updates, and adding new appendices.

The second edition of the **Amateur Products** book¹ was printed by CQ Communications and released in May 2003. Unfortunately, due to unknown reasons, the photographs in the second edition were dark and grainy. Even with that, the book sold-out in a few years, though copies could still be found occasionally². Copies of both editions were scarce, but used copies could be found on Amazon and eBay, often listed at ridiculous prices³; one wonders if they ever sold at those prices?

Penson’s third book **The Titan II Handbook - A Civilian’s Guide to the Most Powerful ICBM America Ever Built**. is in its third printing

Here is a link to the index of Heathkit of the Month (HotM) articles:
http://www.w6ze.org/Heathkit/Heathkit_Index.html

1. Notes and links begin on page 6

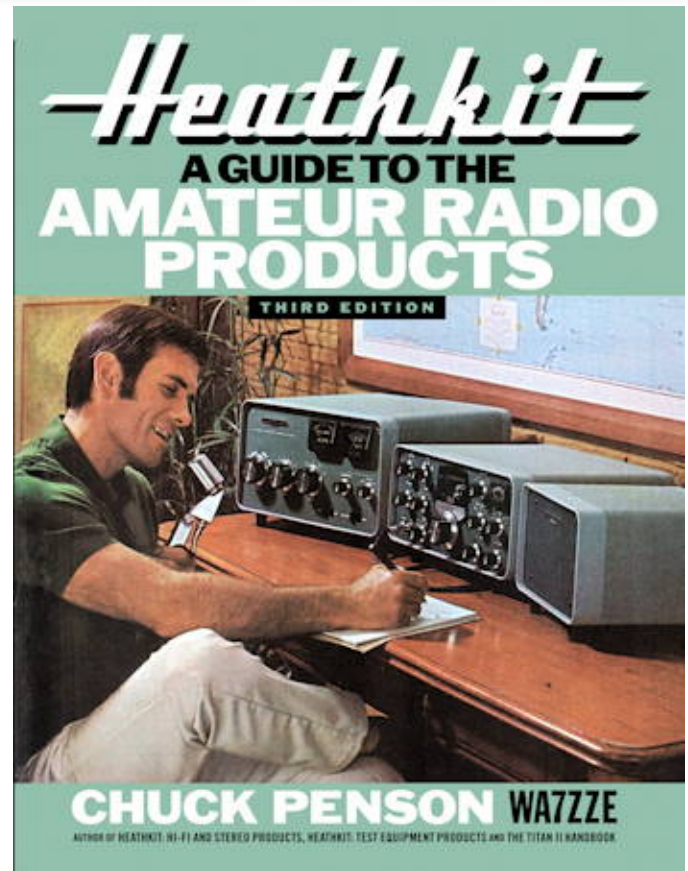


Figure 1: The Cover of the new Heathkit Amateur Radio Products book by Chuck Penson - WA7ZZE.

(2008, 2012 and 2019) with just minor changes between editions. It is available on-line at <https://titan2handbook.com>. Chuck Penson is the former archivist and historian for the Titan Missile Museum^{4, 5} near Tucson, AZ, now retired.

Book Information:

Title:	Heathkit A Guide to the Amateur Radio Products (Third Edition)
Author:	Chuck Penson - WA7ZZE
ISBN (13)	9 970578 910512:
Binding:	Deluxe Softbound
Release Date:	September 2021
Pages:	426
Size & Weight:	8½" X 11" X 1", 3 lb 8 oz
List Price:	\$34.95

TABLE I

Heathkit's first products were test equipment so it seemed reasonable for Chuck to feature test equipment in his next book. **Heathkit Test Equipment Products**⁶ published in 2014. This book is available on Amazon and now at Chuck's website⁷.

The test equipment book was followed in 2018 by **Heathkit Hi-Fi and Stereo Products**⁸. In its early years Heathkit went heavily into home high fidelity, and later stereo. It remained heavily in the field until the eighties. This book is also available.

The New Heathkit Amateur Radio Products III:

The book came via media mail with a tracking number in a heavy cardboard mailer. Media mail shipping from Penson's website is just \$5 to a US address. Foreign shipping is available. Opening the shipping mailer, the first thing you'll notice is the heft of the book. It weighs three-and-a-half pounds; that is almost twice the weight of the second edition (1 lb. 13 oz.). Some of the additional weight is the additional 98 pages in the third edition. Opening the book you'll see the pages are of heavy quality paper, and the photographs are clear and sharp, as are the numerous technical drawings. Book information is given in **Table I**.

If you are familiar with the first and/or second Amateur Products edition(s), you will notice a major change in the book's layout. In the previous editions the models were shown alphabetically by their model number. In the third edition the models are broken into chapters by category first, and then arranged by model number in each chapter. This is similar to the organization of the Test Equipment Products and HI-FI and Stereo Products books. Should a product belong in more than one category it appears in one in its entirety, and cross-referenced in the other.

Heathkit Amateur Radio Products Third Edition 2021 Book Layout

Preface Section:	Pages
Dedication	2
Table of Contents	2
Forward	2
Introduction	6
A Brief History [of the Heath Co.]	48
Products Section:	Pages
1 HF Transmitters	24
2 HF Receivers	38
3 HF Transceivers	44
4 HF Amplifiers	14
5 Tuners	8
6 VHF Equipment	44
7 Power Supplies	22
8 Scopes	14
9 Speakers	6
10 Meters	20
11 Microphones	6
12 Accessories	54
13 CB Equipment	24
14 Clocks and Weather Instruments	38
Index Section:	Pages
[by] Model Number	4
[by] Product Type	6
[by] Chronological [order]	4

TABLE II

If you've ever hung out in one of the many Heathkit forums, you're familiar with people asking for help, but giving just a kit model number and no description. The description is important, and saves a lot of labor by those you're asking help from. In this book, if you're looking for a receiver whose model you forgot, you only have to search in the receiver section instead of cover-to-cover.

• The Preface Section:

Don't skip the book's prefaces. After Chuck dedicates this book in memory of Terry Hanson - WAØTWZ and after the T.O.C., is a surprise forward by Chas Gilmore - W8IAI, former Executive Vice President and General Manager for Heathkit. Chas first joined

Heath Company in 1966 and retired in the early nineties. In just a page and a half he brings a lot of insight into the Heath Company.

In the 6-page introduction Chuck briefly explains the timing and philosophy that made Heathkit successful during its heyday. Here also, you will get an understanding of the guidelines that a product must meet to be included in the book and information to help you use the Products Section to its full advantage. Here Chuck also acknowledges those who have contributed to the book, whether it be by providing photographs and other material, proofreading text or pondering the technical questions that arose during the editing.

“A Brief History” [of the Heath Company] is totally rewritten and enhances the history told in the previous edition. Penson spent a lot of time searching for articles about Heath Company and Howard Anthony from numerous newspaper archives. These bits of information add detail to the post-war years as Heath became the primo electronic kit company. Even if you read the history of Heath in a previous edition, take the time to refresh your knowledge by reading this one. It’s just 48 pages, with lots of illustrations, and reads fast.

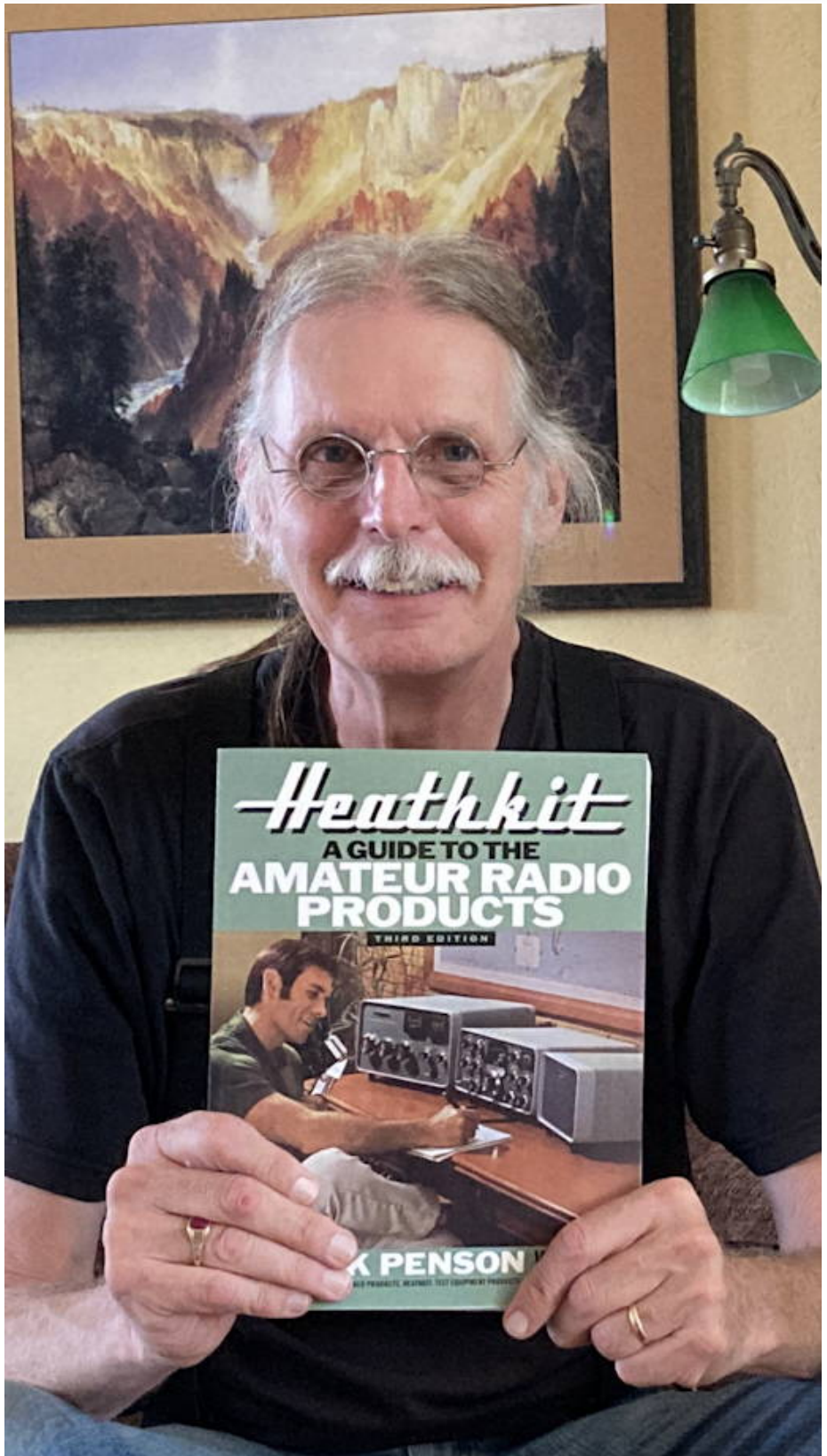


Figure 2: Chuck Penson - WA7ZZE proudly holds a preliminary copy of his new book.

• The Product Section:

Here is the meat of the book. The Heathkit amateur radio products have been broken into 14 categories, each a separate chapter, as listed in **TABLE II**. With a few exceptions only products “designed by Heath” and “available in kit form” are listed. Thus you won’t find the Heath HK-21 “Pocket Packet”, the SB-1400 transceiver or the HW-6502 handheld; they are only available fully assembled and were not designed by Heath. Exceptions exist, two are the inclusion of the SB-1000 HF Amplifier and HK-232 TNC kits. They are products from Ameritron and AEA repackaged by Heath and sold as kits.

Chuck Penson is providing, on his website⁹, 26 sample pages that covers all 14 product chapters of the book. A typical chapter entry starts with the model number, with the model name directly below, followed by the years the product was sold, and the initial selling price. See **Figure 3**. This is followed by text describing the kit. In the case of the SB-400 the fourteen paragraphs of text along with three photos and three detailed drawings take up about three full columns.

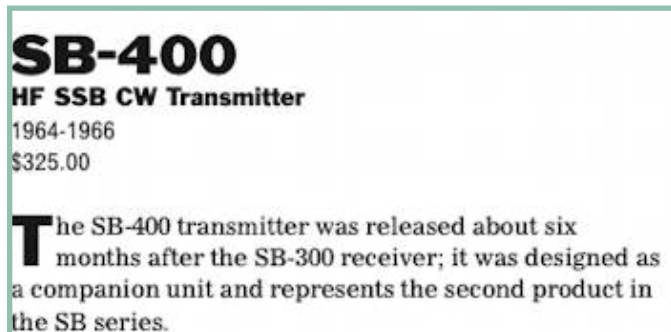


Figure 3: See Text

The text discusses the kit, including a little history, connection details, controls, changes made by Heath (if any), and anything that might be pertinent to that model. On products like the DX-60 that also has an ‘A’ and ‘B’ variant, the text presents their significant

differences. For the person looking for used Heathkits, caveats are often pointed out, such as: *“The SB-400 is supplied with all needed heterodyne oscillator crystals so it can be used with any other make or model of receiver. Be sure that the crystals are installed.”* and *“Note: because of the different size and mounting hole configurations, SB-400 and SB-401 crystal filters are mutually incompatible.”*

Following the text are **References** that list magazine articles that cover the kit such as reviews and modifications. These are from the popular ham magazines: *QST*, *Ham Radio*, *73 Amateur Radio*, *CQ*, *Electric Radio* and others. All these issues are available either online free¹⁰, through the publisher, or, in the case of *QST*, free to ARRL members on the ARRL website.

Specifications follow the **References**. In most cases they are from one of the manuals. For the few that a manual was not available, specifications came from a Heathkit catalog listing. Heath did change specifications over time, so your manual might occasionally show a slightly different spec.

Overall, the book has over 1,000 sharp photos and illustrations.

• The Index Section:

The third section of the book is the index; actually there are three indices to help you find what you’re looking for fast. They are:

- By Model # - DX-40; VF-1.
- By Type - HF Transmitter, DX-40; VFO, VF-1.
- By Chronological Order - 1954-1961, VF-1; 1957-1960, DX-40.

The appendices of the second edition are no longer at the back of the book, Vacuum tubes are no longer in an appendix table but are included in the specifications for each prod-

uct. The same is true of the Product References appendix (and separate *Electric Radio* index) except they now reside in the References section for each product. The Sales Data appendix has been removed from the book, likely because the data is spotty and

incomplete and other than 1972 sales data, little sales information has surfaced.

I have yet to find anything that is in error. However, to keep your third edition up to date, Chuck is planning an errata page on his website.

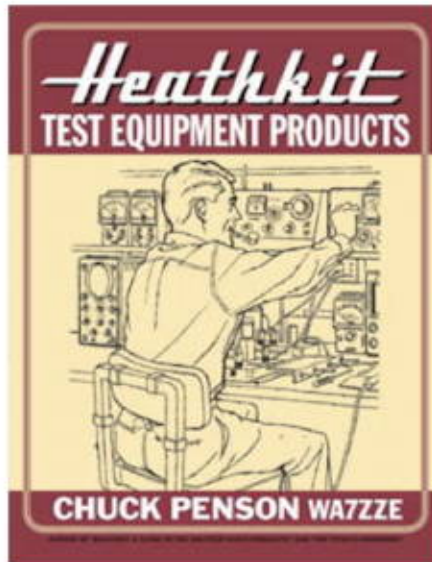
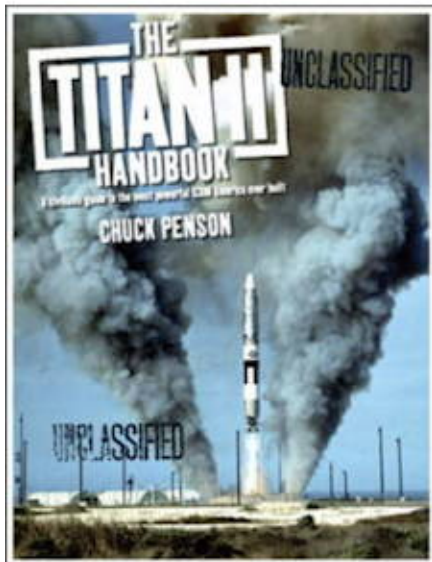
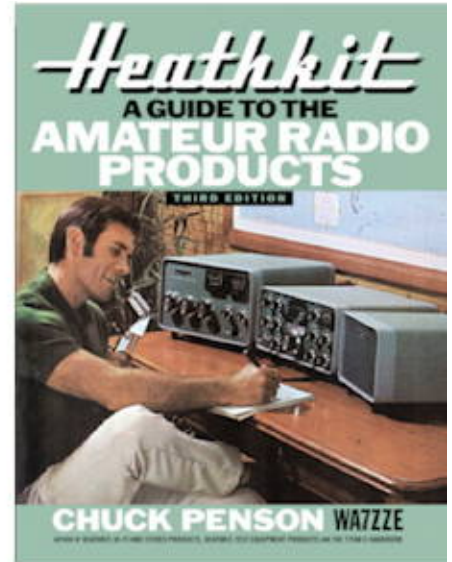
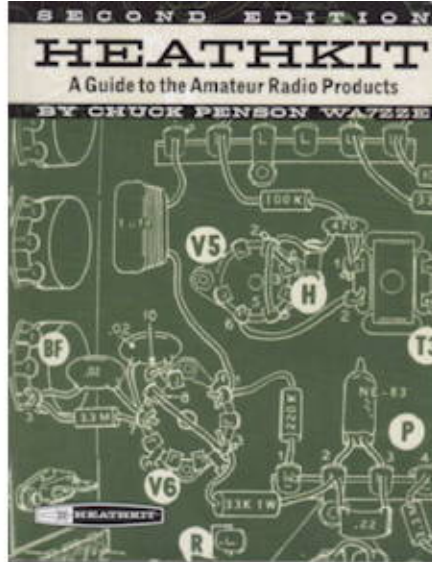


Figure 4: Six Books by Chuck Penson - WA7ZZE

Clockwise from top left:

HEATHKIT A Guide to the Amateur Radio Products - First Edition 1995 (Out of Print); **HEATHKIT A Guide to the Amateur Radio Products** - Second Edition 2003 (Out of Print); **HEATHKIT A Guide to the Amateur Radio Products** - Third Edition (Newly Available); **Heathkit HI-FI and Stereo Products** - First Edition 2018 (In Print); **Heathkit Test Equipment Products** - First Edition 2014 (In Print); **The Titan II Handbook** - Third Edition 2008 (In Print).

Figure 5 (Right): An interesting Rear Cover 

The Book Covers:

The front cover layout is similar to the 2018 HiFi and Stereo Products book. Each use a photo from the cover of a Heathkit catalog. This book's cover is from the Christmas 1970 catalog. It shows an SB-220 2KW linear, an SB-102 HF Transceiver, an SB-600 speaker (likely containing an HP-23A power supply), and an HDP-21A microphone. Both the SB-220 and SB-102 were released in 1970.

The rear cover has an interesting story. An old SB-100 was acquired by Chuck: and Gerhard - DF1DA helped with the disassembly; many of these parts are world travelers! Then Chuck painfully laid out the parts on the floor. How he took the photo he won't tell, but one has visions of Penson, suspended on wires a-la *Mission Impossible* movie style. That pile in the upper right are screws, nuts and other hardware. The vast number of parts show how Heathkit could, with good planning and exceptional manuals, have a human, young or old, male or female, of any profession, assemble those parts and end up with a working complex radio transceiver. Their motto "We Won't Let You Fail" held true for many decades - unless you used acid core solder!!!

73, from AF6C 

Remember, if you are getting rid of any old Heathkit Manuals or Catalogs, please pass them along to me for my research.

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Thanks - AF6C



NOTES:

1. Book review by the author at: [https://www.w6ze.org/Heathkit/MiscArticles/Heathkit Article A04.pdf](https://www.w6ze.org/Heathkit/MiscArticles/Heathkit%20Article%20A04.pdf)
2. The author found a copy of the second edition at Ham Radio Outlet in Anaheim in June of 2014.
3. Actual 2017 prices listed for the second edition included one for \$500 and one for \$1399.
4. <https://titanmissilemuseum.org>
5. <https://youtu.be/uH9FegYLQYM> is a video of Chuck Penson giving a tour at the Titan museum.
6. Book Review by the author at: [https://www.w6ze.org/Heathkit/MiscArticles/Heathkit Article A03.pdf](https://www.w6ze.org/Heathkit/MiscArticles/Heathkit%20Article%20A03.pdf)
7. The Heath Trilogy: <https://wa7zze.com>
8. Book review by the author at: [https://www.w6ze.org/Heathkit/MiscArticles/Heathkit Article A05.pdf](https://www.w6ze.org/Heathkit/MiscArticles/Heathkit%20Article%20A05.pdf)
9. Go to: <https://wa7zze.com/amateur-radio> - Scroll down to "Download a sample" and click on it. The download is about 12 MB.
10. <https://worldradiohistory.com/> A site with many many scanned radio, TV and electronics magazines, catalogs and books.