



ARRL Periodicals Archive – Search Results

A membership benefit of ARRL and the ARRL Technical Information Service

ARRL Members: You may print a copy for personal use. Any other use of the information requires permission (see Copyright/Reprint Notice below).

Need a higher quality reprint or scan? Some of the scans contained within the periodical archive were produced with older imaging technology. If you require a higher quality reprint or scan, please contact the ARRL Technical Information Service for assistance. Photocopies are \$3 for ARRL members, \$5 for nonmembers. For members, TIS can send the photocopies immediately and include an invoice. Nonmembers must prepay. Details are available at www.arrl.org/tis or email photocopy@arrl.org.

QST on CD-ROM: Annual CD-ROMs are available for recent publication years. For details and ordering information, visit www.arrl.org/qst.

Non-Members: Get access to the ARRL Periodicals Archive when you join ARRL today at www.arrl.org/join. For a complete list of membership benefits, visit www.arrl.org/benefits.

Copyright/Reprint Notice

In general, all ARRL content is copyrighted. ARRL articles, pages, or documents--printed and online--are not in the public domain. Therefore, they may not be freely distributed or copied. Additionally, no part of this document may be copied, sold to third parties, or otherwise commercially exploited without the explicit prior written consent of ARRL. You cannot post this document to a Web site or otherwise distribute it to others through any electronic medium.

For permission to quote or reprint material from ARRL, send a request including the issue date, a description of the material requested, and a description of where you intend to use the reprinted material to the ARRL Editorial & Production Department: permission@arrl.org.

QST Issue: Jan 2005

Title: How Much is Enough?

Author: John H. Dilks III, K2TQN

[Click Here to Report a Problem with this File](#)



2009 ARRL Periodicals on CD-ROM

ARRL's popular journals are available on a compact, fully-searchable CD-ROM. Every word and photo published throughout 2009 is included!

- **QST** The official membership journal of ARRL
- **NCJ** National Contest Journal
- **QEX** Forum for Communications Experimenters

SEARCH the full text of every article by entering titles, call signs, names—almost any word. **SEE** every word, photo (including color images), drawing and table in technical and general-interest features, columns and product reviews, plus all advertisements. **PRINT** what you see, or copy it into other applications.

System Requirements: Microsoft Windows™ and Macintosh systems, using the industry standard Adobe® Acrobat® Reader® software. The Acrobat Reader is a free download at www.adobe.com.

2009 ARRL Periodicals on CD-ROM

ARRL Order No. 1486
Only \$24.95*

*plus shipping and handling

Additional sets available:

2008 Ed., ARRL Order No. 9406, \$24.95
2007 Ed., ARRL Order No. 1204, \$19.95
2006 Ed., ARRL Order No. 9841, \$19.95
2005 Ed., ARRL Order No. 9574, \$19.95
2004 Ed., ARRL Order No. 9396, \$19.95
2003 Ed., ARRL Order No. 9124, \$19.95
2002 Ed., ARRL Order No. 8802, \$19.95
2001 Ed., ARRL Order No. 8632, \$19.95



ARRL The national association for **AMATEUR RADIO™**

SHOP DIRECT or call for a dealer near you.
ONLINE WWW.ARRL.ORG/SHOP
ORDER TOLL-FREE 888/277-5289 (US)

OLD RADIO

How Much is Enough?

Why is it that some of us seem to gather more radios and parts than we could ever possibly use? Do we really think that whoever has the most at the end, wins? Or is it something about electronics, tube electronics, which causes us to do this? My wife thinks so.

During the last couple of dozen years I have had the pleasure of visiting many radio collectors. Most had their stash of parts and unfinished projects. Some had them well hidden in attics and garages. Some live with their collections, and some live within their collection.

And then there are the collectors who set a bad example for us with our spouses. Their collection is clean, neat, well organized and well planned. Typically, they have a room or an outbuilding dedicated to radio. After visiting one of these types, I always hear on the way home, "Why can't your collection look like his?" Of course, after being married for 40 years, I've learned you don't try to answer a question like that. Then it's usually a quiet ride for the next few miles.

Every once in a while an outstanding stash of parts pops up.

One Saturday I received a telephone call from one of my Elmers, Ray Morgenwick, K2QQF. Ray spent many hours helping me get my 6 meter station on the air back in the late 1950s. He told me about a house in his town that had a large pile of electronic trash sitting by the road. After telling me there were some radio tubes there, I jumped in the car and went over and found a couple of audio amps and a box of tubes. Thinking there might be more inside the house, I left a

note with my name and phone number on the front door.

About a month later I received a phone call from someone at that house telling me to come right over and pick up some tubes. It turned out it was the son of a deceased audio man who was cleaning up the house so he could sell the property. He lived out of town, about three hours away. He told me his father's specialty was movie projector and small audio system rentals. He had been in the business for years and never threw anything out!

I'll try to describe it.

It was a small, 2 bedroom bungalow, typical of those built after WW II. I was

allowed to enter the living room for a look, but told not to go into any other room. What I found was unbelievable.

There was one narrow path, which wound through the living room. On either side there were continuous piles of cardboard boxes, piled so high that the top box was actually wedged tight into the ceiling. While walking through the living room, in the center I found his father's bed. It was a single bed. The side of the bed facing the narrow path was clear, and I could see his pillow and blanket lying there—just as he must have left it the last time it was used. The back half of the bed had a neat row of boxes on it,

Heathkit
3-TUBE ALL WAVE
Cabinet EXTRA
RADIO KIT



\$ 8⁷⁵

An ideal way to learn radio. This kit is complete, ready to assemble, with tubes and all other parts. Operates from 110V. AC. Simple, clear detailed instructions make this a good radio training course. Covers regular broadcasts and short wave bands. Plug-in coils. Regenerative circuit. Operates loud speaker. Shipping Wt. 3 lbs.

HS30 Headphones per set	\$1.00
2 1/2" Permanent Magnet Loudspeaker	1.95
Mahogany Cabinet	2.95



Figure 1—Heathkit AR-1 Ham Receiver, introduced in 1949.



Figure 2—Heathkit AR-2 Ham Receiver, introduced in 1952.

which towered all the way to the ceiling. It was apparent that the father only had half of the bed to sleep on.

At one end of the path was an open door, into what used to be a bedroom. Looking in, I saw the room was piled full of boxes, again all the way, tight to the ceiling. He didn't need to ask me not to enter, as there was no path, no open space. It was piled wall to wall and right up to the door.

Then the owner said, "Dad was a packrat."

At the other end of the path I found the kitchen, or what was once a kitchen. Again the room was piled high from floor to ceiling with boxes. There was a narrow path passing through, leading to the bathroom and rear door (I guess).

The owner told me to take the boxes of tubes he had pulled out and to pick through the trash pile for anything else I wanted. I found a couple of small amplifiers, a tube tester and some more tubes. I thanked him and offered to pay him. He refused, but I gave him something anyway. I asked him to call me the next time he came to clean out.

Over the next year I received several phone calls, which produced thousands of tubes. Most of his tubes were used, but tested. On each he had placed a piece of masking tape with the tube tester readings. I also picked up a few tube testers, some test equipment and additional amplifiers. I passed up hundreds of 16 mm projectors, which eventually went into a dumpster.

Aside from all of this, the hidden treasure turned out to be thousands of 16 mm movies. The son had a great time selling these on eBay. Some movies were 16 mm versions of major films, and some were the typical movies we used to watch at school assemblies, before videotapes were available.

Finding a Rare Heathkit

On the last trip there I found a huge dumpster in the front yard that was already loaded with everything that could not be sold or given away. There were piles of projectors, broken furniture, pots and pans and typewriters, and I saw some radios in really poor condition. I resisted the urge to climb in.

As I was loading the last few boxes of tubes, the son said, "Here. Here is an old Heathkit I saved for you. I pulled this out from under the house this morning."

I thanked him, putting it into my car along with the tubes.

Much to my surprise, it turned out to be a Heathkit AR-1, A for Amateur, R for Radio, and I as in the first model they made. It was in rough shape, but restorable. Most important, though, it had the

accessory Heath AR-1 "Tuner Cabinet."

It turns out the AR-1 is really rare. Several friends told me that the cabinet is almost never found, making this radio a really great find.

Three Early Heathkit Ham Receivers

Heathkit started with a 3-tube All Wave Radio Kit for \$8.75 in the late 1940s. I have searched to find one for my collection for years, without any luck. I've included an early advertisement so you can see what it looks like.

Then in time for Christmas 1949, Heathkit introduced the AR-1 for \$23.50. The cabinet and speaker were optional. It is a 6-tube 550-kHz to 20-MHz superhet with band switching and a transformer full-wave power supply. It lacks a BFO and bandspread tuning.

See the AR-1 photo. This is the one that was given to me. The photo has been enhanced to make it look more like it did when new. The knobs are unlike those shown in the ad, but are the same as Heathkit used with other products of the time, and are believed to be original.


An improved receiver kit, the AR-2,

was introduced in 1952 for \$25.50. And still later, in 1956, Heathkit introduced the popular AR-3 for \$27.95. The AR-3 receiver is the one you are most likely to find at hamfests. Thousands were sold. The AR-2 and AR-3 look similar.

So you can spot the differences between the three radios, remember this easy-to-remember rule: The AR-1 has four knobs, the AR-2 has six knobs and the AR-3 has seven knobs. This should help you at the next hamfest.

If you are interested in seeing additional photos of the AR-1 and AR-2, or checking the schematics and other technical data, please visit my Web site, www.eht.com/oldradio/ar1/index.html.

Conclusion

This is the beginning of the sixth year for this column. I want to thank you for all of your support. I get a lot of e-mail with ideas for future columns. Please keep them coming. If you have a unique radio or ham radio item, or something with an interesting story or some history attached to it, please contact me. The best stories come from you. Thanks.—K2TQN 

Receiver Kits



Model AR-1 3 Band Receiver Kit covers from 550 Kc. to over 20 Mc. Shipping Wt. 10 lbs.

\$23.50

Both receivers have full AVC action fed to two stages, and inverse feedback to the audio output stage for improved frequency response. Tuning is easy with the dial drum tuning assembly and the 6 inch calibrated slide rule dial provides easy reading.

The receivers have two IF transformers, output transformer, complete provisions for phono operation (including phono motor outlet), completely punched and formed chassis, all tubes, and all parts (less cabinet and speaker). The instruction manual makes construction procedure simple and clear.

Get your receiver kit today and enjoy the thrill of building your own - plus, making a big saving over ready built receivers.

No. 320 5" Speaker, Shipping Wt. 2 lbs.....\$2.75

Heathkit

TUNER CABINETS

Modern communications type, table model metal cabinet for Heathkit receivers only. Has mounting for 5" speaker. Painted deep blue to match receiver panel included with receiver. Size 8" deep, 14" long, 7" high. (Panel or speaker not included with cabinet).

Specify No. 335 Shipping Wt. 6 lbs.



\$4.50