

## DESIGN NOTES

### Reader Feedback and Technology News

#### Re: August Design Notes column

Gary,

Several years ago, I tried to obtain a copy of King, Mimno and Wing from Dover Publications, the last publisher of record. Out of print! No luck with Powell's Books, a used book dealer. Today I "Googled" the authors and Amazon came up listing 6 copies available from several sources, and I bought one.

Dover published the book in 1965. It is possible that the copyright has lapsed. If so, and if you are interested, you may be able to republish it. Dover publishes "classics" in their Phoenix Editions, including, Steinmetz in a 2-volume edition and Maxwell in a 2-volume edition. These are case bound as opposed to conventional paperbacks of traditional Dover. Also, John C. Slater's *Electromagnetism* (ISBN 0486622630) is available in the Phoenix Editions.

I hope this information will be of some value.

*Jim Olsen (W3KMN)*

*Jim—earlier in my career, a company I worked at republished classic RF and microwave books, but now I think that task is best accomplished online. I'm not a collector per se, but I enjoy finding and reading past textbooks and reference books. They provide a valuable historical perspective, and occasionally reveal useful design ideas that are not well known today.*

*—Gary Breed, Editorial Director*

#### Another note on August Design Notes

Hi Gary,

I enjoyed your "More Notes from History" column in the August 2011 issue of *High Frequency Electronics*. Indeed, this type of feature, that you do on occasion, is particularly interesting to me.

You mentioned not being sure of the availability of the classic King-Mimno-Wing textbook. I was curious about this, so I looked at some of the book brokers linked to Amazon.com. Below is one such link where, apparently, a couple of copies may still be found.

Thanks for all that you do.

*Dave Hughes, Electrical Engineer  
Atlanta, Georgia*

*Dave's link was a bit long for publication, but was basically the result of searching "Transmission-Lines-Antennas-Wave-Guides" or the authors' names at the Amazon.com web site: <http://www.amazon.com/>*

#### Need information on PA feedback circuits

Hi Gary,

I am a radio Amateur and I believe over the years I have seen you say you were as well. I am looking for some reference material, tutorials, etc. that would Allow me to understand/design simple RC negative feedback networks for amateur transceivers of a specific manufacturer who did not address the problem back in the day.

I have done some Internet searching and come up with lengthy papers of the overall design of HF PAs, but not much on the negative feedback networks that can stabilize them.

Any ideas? Thanks.

*Mike Williamson (KA5DVR)  
Denver, CO*

*Any readers with a good reference on the design of simple feedback networks can contact me, and I'll relay the message to Mike. I found several PA design examples from the early era of RF power transistors that include a feedback network, but none of them addresses the methodology for determining the component values. I believe some of the designs were determined by trial-and-error iteration.*

*—Gary Breed: [gary@highfrequencyelectronics.com](mailto:gary@highfrequencyelectronics.com)*

#### Technology News: New Graphene Research Center

The Massachusetts Institute of Technology has announced the creation of the MIT/MTL Center for Graphene Devices and Systems (MIT-CG). This inter-departmental center, part of the Microsystems Technology Laboratories (MTL), brings together MIT researchers and industrial partners to advance the science and engineering of graphene-based technologies.

Until recently, most studies have focused on the basic physical properties of graphene. Work at the new Center will explore advanced technologies and strategies that will lead to graphene-based materials, devices and systems for a variety of applications, including graphene-enabled systems for energy generation, smart fabrics and materials, RF communications, and sensing, to name a few.

This Center benefits from very close collaboration with industrial partners, coordinating the work of more than 15 MIT research groups working on graphene, and leveraging several existing collaborative efforts in graphene science that currently exist on campus, including work with Harvard and Boston University related to a multi-university grant from the Office of Naval Research.