

Hello All,

As always, please send any questions about the reading assignment directly to me at oldtimetelephones@goeaston.net. I will bundle questions if necessary, repeat the questions, and give answers in an e-mail to the TCI List Server before moving on to the next reading assignment. This way everyone will benefit from these questions and answers. By sending questions directly to me, we will avoid unnecessary clutter on the List Server. Previous reading assignments, notes, questions, and answers are available in the TCI Library at <http://www.telephonecollectors.info/telephony-101/>.

Please read pages 39 through 42, but stop at the section on Electrical Properties of Ringers. We will take that section next time.

Although the principles involved in selective ringing are quite simple, I was very surprised when I first learned how selective ringers worked. I hope you find it as interesting as I did. The way split windings are used will not be covered until Chapter 17, so just slough over this concept right now. Although this reading material is a little tedious, I think it is relatively clear and doesn't need additional comments before you read it.

When I was trying to learn about frequency ringers to write this section in the book, I acquired a number of different frequency ringers from club members. I found that I could measure the frequency of these ringers by simply connecting a multimeter to the coil wires and plucking the clapper. Of course it was a good multimeter, but not too special. My old Fluke 83 digital multimeter (see p. 194) had a button labeled Hz, and if you pushed that button when the dial was set on ac volts, it would show the frequency of the ac voltage being measured. Where did the ac voltage come from? When I plucked the clapper on the ringer, the clapper would vibrate at its resonant frequency. The vibrating clapper would perturb the magnetic field of the polarized ringer, and the Faraday-Henry principle would kick in. This perturbation (variation) would induce the ac voltage – almost exactly like Bell's experiment in June 1875! This is just an interesting sidelight, but you should understand it clearly by now.

By the way, I still have a bunch of these frequency ringers and if anyone would like one (or more) just let me know (free – just pay shipping).

If there are any questions about the current reading assignment, we will deal with the questions before moving on to the next reading assignment.

Ralph