

ELITISM FINELY DRAWN

The results of the mythical quiz on electronics sent to our 400,000 or so primary readers as a prelude to accepting their subscriptions have finally been tallied (by computer, of course).

The first part of the test was simple enough. It concerned dc theory; I=E/R and all that. Only 5% failed, leaving us with 380,000 potential readers. The second test covered ac theory, which included vector algebra and some trigonometric functions. (We graciously supplied formulas.) An impressive-enough number handled polar coordinates, the *j* factor and the Pythagorean theorem to earn our respect. We only lost 15% of the remaining subscribers on this one, leaving us 323,000 electronics buffs.

In the third section, cricuit analysis techniques, we decided to forgive those who missed solving multiple-source networks with the superposition theorem. After all, this could be picked up quite easily. Employing this tactic, 258,400 determined people were left. (Females did better on this one, though they account for only 0.1% of the testees.)

I must be candid and say that I did not fully agree with the questions posed in the fourth part. They covered too much ground, I believe, ranging from transistor theory to operational amplifier operation with feedback, inverting, etc., as well as radio and TV circuits. After all, how many of us can draw a synchroguide circuit from memory? So we marked everyone right on this one problem. Nevertheless, a hefty 30% dropped by the wayside, with 180,880 left.

The fifth part really separated the men from the boys. It concerned digital electronics. Most did rather well on gates and such, but when it came to Karnaugh-Veitch maps. . . . Would you believe only about 18,000 made it? It was the *n* variables that did it!

The final test was composed of a *potpourri* of special interests, designed to check the broad base of electronics knowledge that our potential readers had. It included an analysis of SQ and QS matrix systems, designing a proportional control system for radio-control purposes, interpreting a host of logic timing scope traces, Brillouin scattering (everyone should know something about quantum electronics, right?), and an essay on how the Intel 8080 MPU works, among others.

To our surprise, only one person came through with flying colors—Marcia Swampfelder. This single subscription was processed.

After publishing our next issue for one subscriber, we instituted a PE reader attitude study (to keep a finger on the pulse, so to speak). The only subscriber left responded: "I'm too qualified to fully enjoy it."

The moral of this parable is clear. Elitism can be carried too far. That's why POPULAR ELECTRONICS touches all bases in electronics—high level and lower level, from audio to microcomputers, from news to new-development details, tutorials and construction projects. Through PE, there's always the joy and stimulation of being exposed to some facet of electronics that is new to a reader. The excitement is in unfamiliarity, whether it's a PE "breakthrough" project, a refreshingly different description of a device to give one new insight, or an explanation of how a particular circuit works. Happily, too, age is not a disqualifier, as attested by two sixth-grade girls who recently won the Crest Hill Science Fair in Wyoming with a Kirlian photography project. They said, "What we learned came mostly from POPULAR ELECTRONICS magazine."

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