HOBBY CORNER

And the winner is...

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SEVERAL MONTHS AGO I TOLD YOU ABOUT some problems I had trying to help a friend build a small audio oscillator into an existing device (see the May, 1982 issue of **Radio-Electronics**). There was very little space and we had to find the smallest possible circuit.

As you may recall, I asked for your help and made it into a contest of sorts. That "contest" apparently caught the interest of many of you, as there were plenty of responses. To give you an idea of how tough the competition was, entries came from almost half of the states as well as from three countries.

The circuits themselves have been quite fascinating. Most were of expected types but a surprising number were unusual (or at least they used approaches that had not occurred to me). Many circuits used the 3909 LED flasher/oscillator, which indeed makes for a small device.

Also popular were transistor (bipolar and unijunction) circuits; all but a few of those used designs that eliminated the bulky audio transformer usually associated with such circuits. And, of course, there were a number of circuits using the 555 timer in an astable configuration. The rest of the circuits used less common techniques, and some were unique.

I would like to show you all of the different designs sent in but space will not permit that. Instead, I have included several of the circuits in Fig. 1 so that you can see some of the approaches used.

I hope you will try out some of those oscillators. Better yet, build and do a bit of experimenting with several of them—

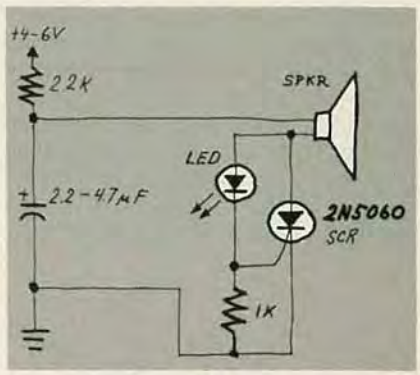

FIG. 1

find out how and why they work. If you can't do it right now, file the circuits away until you can, or at least until you need a small oscillator.

Getting back to the contest, you can imagine just how difficult it was to decide upon a winner. The one I eventually chose, shown in Fig. 2, was submitted by Peter Lefferts of San Martin, CA; it won out because of the unusual nature of the design.

As you can see from the schematic, the design certainly does not have the smallest parts count. However, as it uses a tear-drop-shaped tantalum capacitor, ¼-watt resistors, and a sub-miniature LED, it is a *small* oscillator.

Congratulations to you, Peter; your "prize"—a box of miscellaneous components (there *may* even be something in

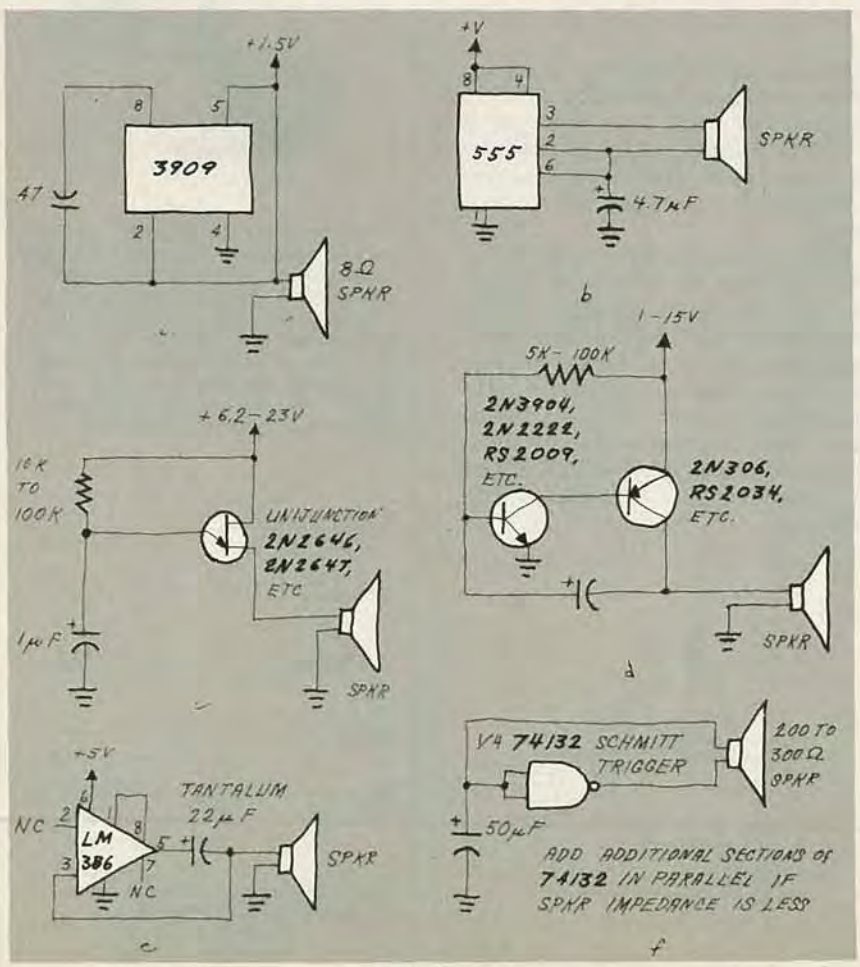

FIG. 2

AN INVITATION

To better meet your needs, "Hobby Corner" will undergo a change in direction. It will be changed to a question-and-answer form in the near future. You are invited to send us questions about general electronics and its applications. We'll do what we can to come up with an answer or, at least, suggest where you might find one.

If you need a basic circuit for some purpose, or want to know how or why one works, let us know. We'll print those of greatest interest here in "Hobby Corner." Please keep in mind that we cannot become a circuit-design service for esoteric applications; circuits must be as general and as simple as possible. Please address your correspondence to:

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