...Letters

Environmental footnote

I would just like to add a footnote to your report "Revising the record of island birds" (SN: 8/14/82, p. 103). By far the bulk of the data for the Olson and James report in SCIENCE came from recent archaeological excavations at Barbers Point, Oahu. The Barbers Point area is a coral plain with hundreds of small sinkholes containing rich bird bone deposits. Several hundred acres of this sinkhole area are currently being destroyed by the construction of a major harbor. The rest of the area is soon to be destroyed by the expansion of the existing industrial park. This is like paving over Dinosaur National Monument. The final EIS [environmental impact statement] for the harbor project doesn't even mention these significant bird bone deposits. The supplement to the final EIS mentions the bones, but just barely. The scientific community has been shortchanged by this pork barrel harbor project that the National Wildlife Federation listed as one of the ten most wasteful water projects in the United States. Plenty of money for a harbor we don't need, no money for the bones of extinct, endemic Hawaiian birds. That's the rest of the story.

Earl Neller Honolulu, Hawaii

Fission confusion

The article "Verdict: U.S. Deceived Court in Fallout Case" (SN: 8/14/82, p. 100) contains the startling statement that 252 kilotons of fission products were "spewed into the atmosphere as fallout" by the atomic bomb testing project Upshot-Knothole. I don't believe it.

It appears to me that you are confusing yield, which is the weight of TNT that would be required to produce the same energy release, with the actual weight of the device and its associated fission products. This is something else altogether and orders of magnitude less. To release 252 kilotons of fission products would take 252 kilotons of uranium-235 or plutonium, which is, I believe, more than that which could be used by only 11 devices, which for practical reasons have to be light enough to transport. This is a rather simple, unrealistic mistake that should never be made in any science publica-

Weight of fission products is a useless datum anyway. The proper units to use are curies (or becquerels) specifying each isotope. Weight, per se, is meaningless.

William G. Nabor Irvine. Calif.

(The number, as Nabor suggests, is incorrect. But SCIENCE NEWS did not invent it. The figure, in fact, comes from Judge A. Sherman Christensen's Aug. 4 decision in Bulloch et al. v. The United States (the sheep decision) under the heading Findings of Fact. Specifically, it claims that, "during the 'Upshot-Knothole' multishot experiment of 11 atmospheric nuclear tests conducted between March 17 and June 4, 1953, at the Nevada Test Site, 252 kilotons of nuclear fission products were emitted as radioactive fallout.

According to the Defense Nuclear Agency, the judge indeed erred by confusing the weapons' total TNT-equivalent yield with the weight of the fission products. "So he [Nabor] was right," a DNA official told SN, "but we can't tell you what the right weight [of the fission products] was, because that figure is classified. The DNA official also pointed out that 45 percent of the 252kiloton yield represented air bursts. Fission products from those detonations were spewed so high that they "typically didn't come down lo-cally as fallout," he said, but instead scattered globally—Ed.)

Now NRI takes you inside the new TRS-80 Model III microcomputer to train you at home as the new breed of computer specialist!

NRI teams up with Radio Shack advanced technology to teach you how to use, program and service state-of-the-art microcomputers...

It's no longer enough to be just a programmer or a technician. With microcomputers moving into the fabric of our lives (over 250,000 of the TRS-80TM alone have been sold), interdisciplinary skills are demanded. And NRI can prepare you with the first course of its kind, covering the complete world of the microcomputer.

Learn At Home in Your Spare Time

With NRI training, the programmer gains practical knowledge of hardware,

use and keep. enabling him to design simpler, more effective

programs. And, with advanced programming skills, the technician can test and debug systems quickly and easily.

Only NRI gives you both kinds of training with the convenience of home study. No classroom pressures, no night school, no gasoline wasted. You learn at your convenience, at your own pace. Yet you're always backed by the NRI staff and your instructor, answering questions and giving you guidance.

You Get Your Own Computer to Learn On and Keep

NRI training is hands-on training with

practical experiments and demonstrations. You don't just program your computer, you go inside it... watch how circuits interact... interface with other systems gain a real insight into its nature.

You also work with an advanced liquid crystal display hand-held multi-meter and the NRI Discovery Lab,* performing over 60 separate experiments. Both microcomputer and equipment come as part of your training for you to

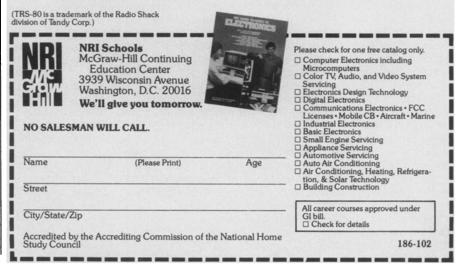
Computer Assisted Instruction

Your TRS-80 even helps train you. You receive 8 special lesson tapes in BASIC computer language. Using them in your microcomputer, you "talk" to it as you progress. Errors are

explained, graphics and animation drive home key points. Within a matter of minutes, you'll be able to write simple programs yourself.

Send for Free Catalog. No Salesman Will Call

Get all the details on this exciting course in NRI's free, 100-page catalog. It shows all equipment, lesson outlines, and facts on other electronics courses such as Electronic Design, Industrial Electronics, TV/Audio/Video Servicing...11 different career opportunities in all. Send today, no salesman will ever bother you. Keep up with the latest technology as you learn on the latest model of the world's most popular computer. If coupon has been used, write to NRI Schools, 3939 Wisconsin Ave., Washington, D.C. 20016.



OCTOBER 9, 1982 237