Keyboards attack market with double-edged sword

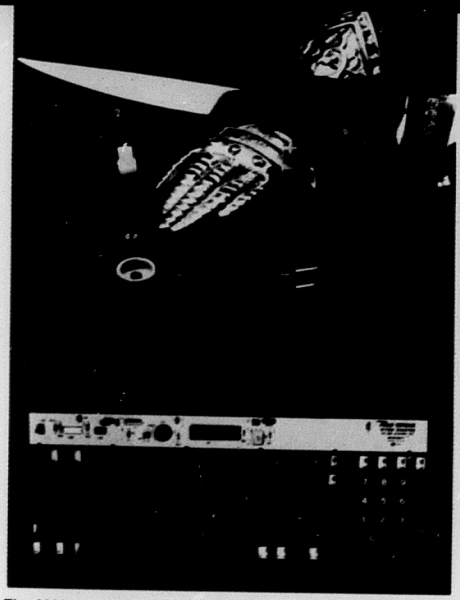
Minneapolis, MN—Keyboards offer the benefits of two powerful new technologies, according to the Maxi-Switch Co., here.

The Series 6000 keyboard offers passive-make gold contacts with a 100-million-plus operation life cycle while the 8000 Series has been tested to more than 60 million operations. The 8000 Series carbon contacts maintain a constant contact resistance over their operational life and are inert to hostile environments containing fumes, gases and contaminants. Both full-travel switch types are easily replaced.

The "Maxi-Switch" variable debounce control featured in both keyboards, provides correct output, regardless of contact type. In addition, both series feature microprocessor-based electronic hysteresis and software techniques compatible with both switch types. In addition, both models are mounted in steel panels for EMI/RFI protection and are available with up to 128 keys, fully encoded to ASCII with parallel or serial output at selectable baud rates (300 to 9600 baud).

On powering up, the keyboards present a self-diagnostic sequence to automatically check for shorted switches and check the microprocessor for program integrity. Internal microprocessor and software provide a library of BASIC commands which can be dedicated to user-definable keys. The company's "Maxikey" rollover protection helps assure accurate keystroke interpretation by the keyboard at any typing speed or operator proficiency.

Key layouts are available in QWERTY, AZERTY, QWERTZ or the AS format endorsed by ANSI. □



The 6000 and 8000 Series keyboards from Maxi-Switch come in standard types or may be ordered with customized hard- and software configurations. Key tops may be flat, stepped, sculptured, relegendable or lighted.

Small canisters of metal specimens undergo fast, breeder-like stress tests at Westinghouse Hanford Fast Flux Test Facility.

Breeder reactor metals analyzed

Richland, WA—Some 2000 specimens of reactor metals hang in canisters like bananas on a stalk in the Westinghouse Hanford Co.'s Fast Flux Test Facility (FFTF) where irradiation tests simulate sodium-cooled fast breeder reactors. The tests' goal is to extend the life of reactor core components to three years or more, lowering fuel and components costs.

The test device, the Materials Open Test Assembly (MOTA), comprises a 40-foot-long cylinder with a complex array of instruments. It houses the tiny specimens of stainless steels and other alloys at specified experiment conditions within the 400-megawatt-thermal FFTF reactor vessel.

"Compared with previous materials test assemblies for breeder reactor technology, MOTA provides five times more test volume, accumulates irradiation levels twice as fast, and permits test conditions 10 times more precise," enthuses Dr. Herbert H. Yoshikawa, Westinghouse Hanford's manager of technology.

The 40 eight-inch-long, one-inch-dia canisters hang at eight different levels. Some canisters are placed above the reactor fuel core, some below it and some within it.

Each canister contains 30 to 100 specimens, including tiny pressurized tubes for stress rupture tests. A tag-gas system reads the in-reactor stress rupture.

MOTA's first irradiation testing began this year. All design goals were met, according to Yoshikawa. Temperature monitoring of all canisters was successful. So was the individual temperature control of 31 specially sealed canisters with the specimens encased in argon-helium insulating gas. This "gas-gap" design let the researchers study alloy behavior in fast