

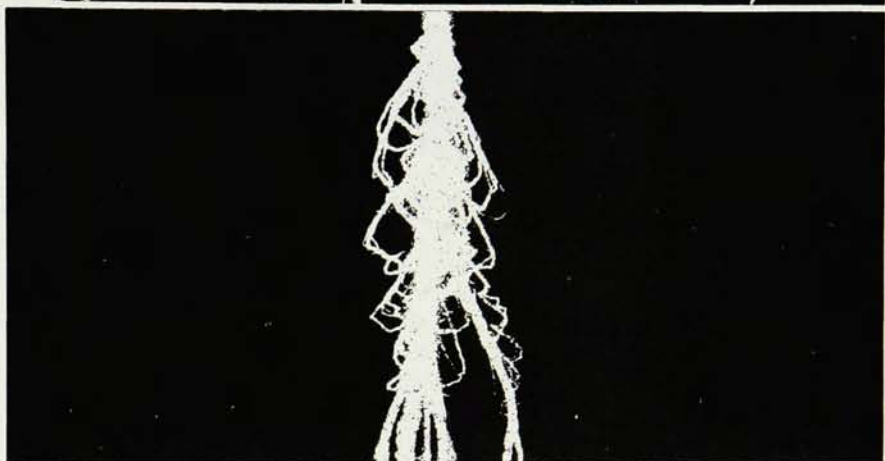


INFRARED DETECTOR (tiny black spot in center of white circle), dwarfed by eye of accompanying bee, is being used to analyze radiation from the earth's horizon.

flake of thermistor material is embedded to convert incoming infrared energy into an electrical signal. Germanium was selected for the lens because it is an excellent transmitter of infrared energy and an efficient shield against interfering light.

... also of Interest: Lifetimes, Superconductors and Space

Protons live at least 2×10^{28} years, possibly more than 8×10^{29} years, according to a recent experiment by Frederick Reines and his collaborators. A 162-m² sr scintillation detector in a South African mine, 3200-meters deep, established the new lifetime limit, previously reported at 6×10^{27} to 4×10^{28} years. The choice of lifetime depends on the decay mode that is assumed for the proton . . . By making a thin sandwich of superconductor, dielectric and superconductor, experimenters have raised the superconducting transition temperature that the superconductor alone would have by as much as 1.8°K. Myron Strongin, O.F. Kammerer (Brookhaven), David Douglass Jr and Morrel Cohen (University of Chicago) think the increase may be due to pairing of electrons across the barrier . . . During this month Jet Propulsion Lab scientists were scheduled to measure concentrations of solar high-energy particles encountered by Mariner 5 and Mariner 4 while the two spacecraft were in the same direct line with Earth and Sun. □



HONORABLE DISCHARGE



Our new FX-15-S system is in a classification all its own: 1 MeV max. for \$19,500. (That's about 2¢ a volt, if you're inclined to comparison shop.) The pulse width isn't too bad either.

This is the ideal small system for pulse radiolysis, biomedical research, radiation effects studies, and flash radiography. X-ray dose at the anode is 50 rad. Electron flux at 5 cm is 50 joules per square cm.

And here are some of the bonuses. Excellent reproducibility of radiation output ($\pm 3\%$) and beam position (± 0.1 cm). Repetition rate of several shots per minute. Conversion from electrons to X-rays in less than 30 minutes. Reliability derived from over 20 years' experience in high voltage technology. Low maintenance and operating costs due to inherent simplicity of design.

There is more — written in the FX-15-S specifications, which are yours for the asking. Be assured our papers are in good order.



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