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Radiation Hazard Detector NASA technology has made commercially available a new, inexpensive, conveniently-carried device for protection of people exposed to potentially dangerous levels of microwave radiation.

Microwaves are radio emissions of extremely high frequency. They can be hazardous but the degree of hazard is not yet understood. Generally, it is believed that low intensity radiation of short duration is not harmful but that exposure to high levels can induce deep internal burns, affecting the circulatory and nervous systems, and particularly the eyes.

The Department of Labor's Occupational Safety and Health Administration (OSHA) has established an allowable safe threshold of exposure. However, people working near high intensity sources of microwave energy—for example, radar antennas and television transmitters—may be unknowingly exposed to radiation levels beyond the safe limit. This poses not only a personal safety problem but also a problem for employers in terms of productivity loss, workman's compensation claims and possible liability litigation.

Earlier-developed monitoring devices which warn personnel of dangerous radiation levels have their shortcomings. They can be cumbersome and awkward to use while working. They also require continual visual monitoring to determine if a person is in a dangerous area of radiation, and they are relatively expensive, another deterrent to their widespread adoption.

In response to the need for a cheaper and more effective warning system, Jet Propulsion Laboratory developed, under NASA auspices, a new, battery-powered Microwave Radiation Hazard Detector. To bring the product to the commercial market, California Institute Re-

search Foundation, the patent holder, granted an exclusive license to Cicoil Corporation, Chatsworth, California, an electronic components manufacturer.

Cicoil calls the unit the Micro~Gard* Model 100. Weighing only four ounces and about the size of a long cigarette pack, it can be carried in a shirt pocket or conveniently clipped to a worker's belt. The unit sounds an audible alarm when microwave radiation reaches a preset level—the OSHA safe limit or another threshold level decided by the user organization. Simple in design, it is priced well below earlier detectors. Production started last spring and already Cicoil's customers include numerous federal agencies and over 200 industrial users, including many of the nation's largest industrial firms.

*Registered trademark, Cicoil Corporation.

