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# \$275 Radiation Detector Introduced

[by General Microwave]

FARMINGDALE, NY — A \$275 radiation detector, designated Model 2, is scheduled for announcement later this month by General Microwave. The detector's price tag is \$200 lower than the Model 1 now available from the company. The new unit, according to president Sherman A. Rinkel, offers the same accuracy as the Model 1 but is crystal-operated and frequency-limited.

Rinkel anticipates a growing need for free-air microwave radiation detectors because of the expanding use of industrial equipment operating at microwave frequencies. Model 2 covers 100 MHz to 4 GHz, which makes it adequate for most industrial applications but not for radar equipment. Model 1, because of its upper frequency limit of 18 GHz, can be used to check radiation from radar systems as well as from microwave ovens and dryers.

Rinkel expects that the publicity stemming from the Russian low-level, long-life radiation studies of factory workers will stimulate interest in low-cost probe-type detectors. He points out that his company's current detectors are tricky to operate in that the user must take readings from different directions and add the results. A new model, slated for introduction in mid-April, will, however, read out in total radiation and indicate the direction of propagation as well.

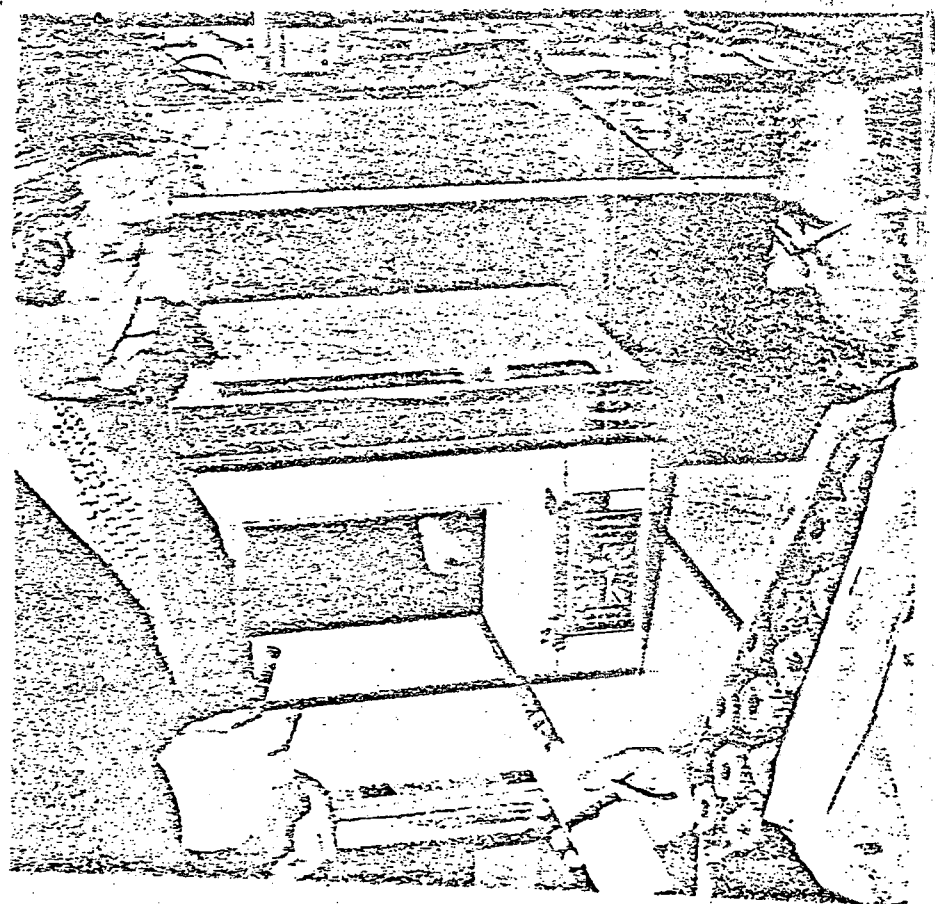
## Standards Needed

"Standards really don't exist to protect the engineer or worker who might be exposed to radiation," says Rinkel. "Since 10 mW/cm<sup>2</sup> is considered the maximum safe level, many engineers design to hold leakage to 5 mW/cm<sup>2</sup> and feel their equipment is properly built." Adds Rinkel, "But this doesn't necessarily take into account the equivalent thermal effects of high fields capable of affecting eyesight, for

example. Low-level radiation has also been known to affect pacemaker operation."

Rinkel suggests that companies employing equipment capable of giving off microwave radiation might install a detector on the equipment that would buzz or generate an alarm system when radiation exceeds a predetermined level. But he notes that legislation would likely be needed to enforce such a proposal. He warns that the problem of radiation detection could become serious in the near future because of some of the recently developed uses for microwave-frequency-operated industrial equipment. An example cited by Rinkel is microwave-frequency-operated controls in the food-processing industry.

A price has not as yet been set for the radiation hazard meter scheduled for announcement in April. Rinkel anticipates that it will sell for approximately \$750.



Moe Wind, vice president of marketing, watches as Sherman A. Rinkel, president of General Microwave demonstrates use of radiation hazard detector model 2.