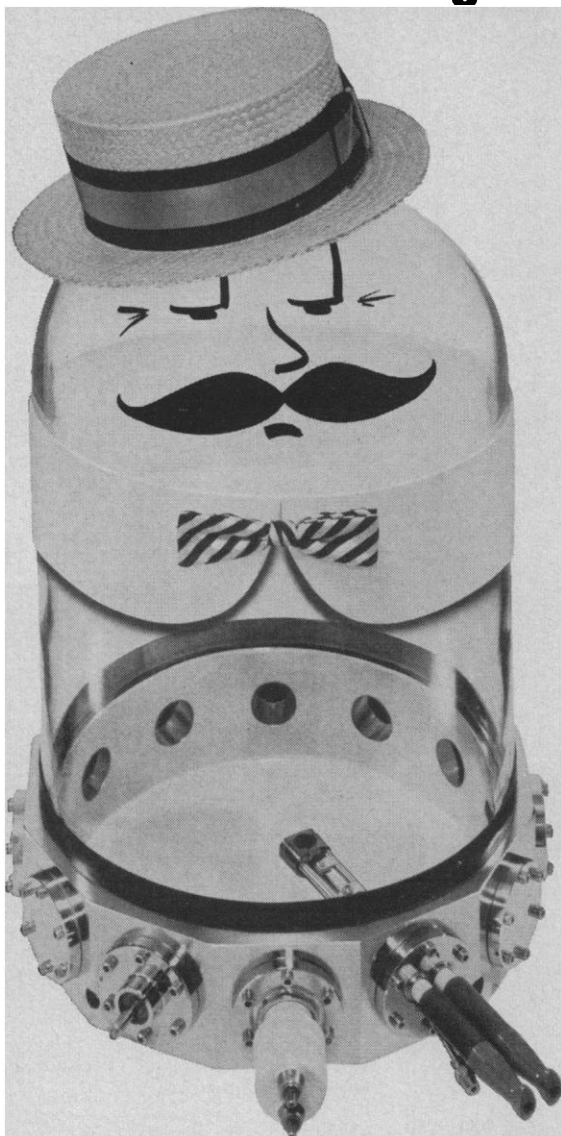


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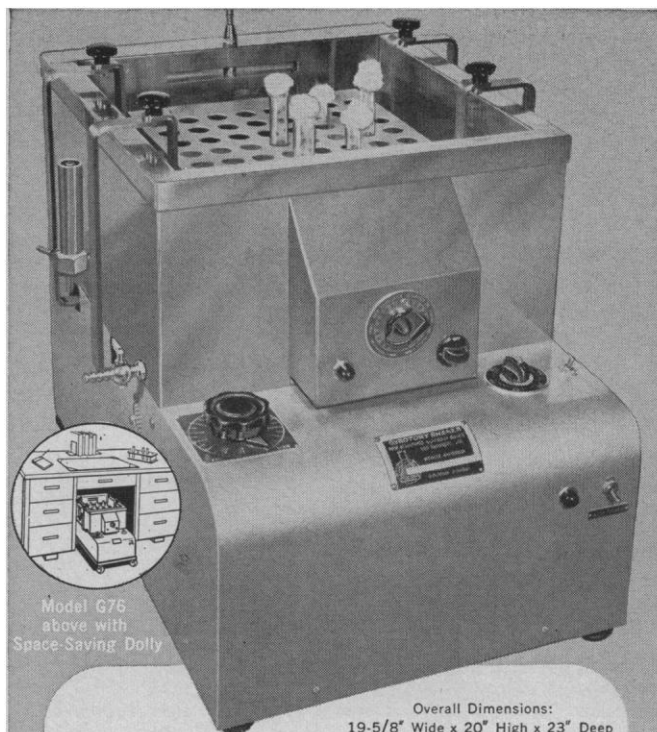
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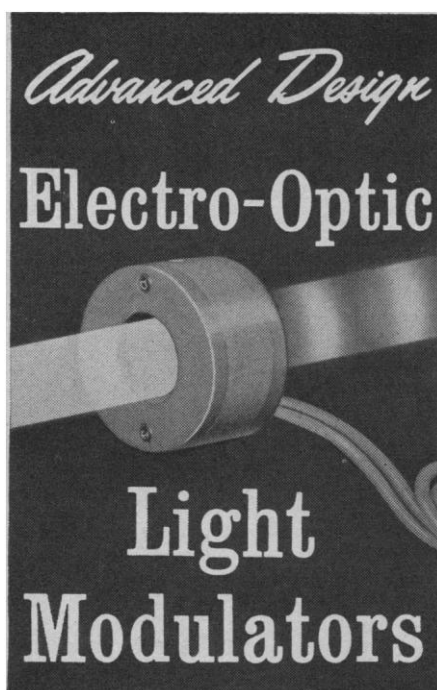


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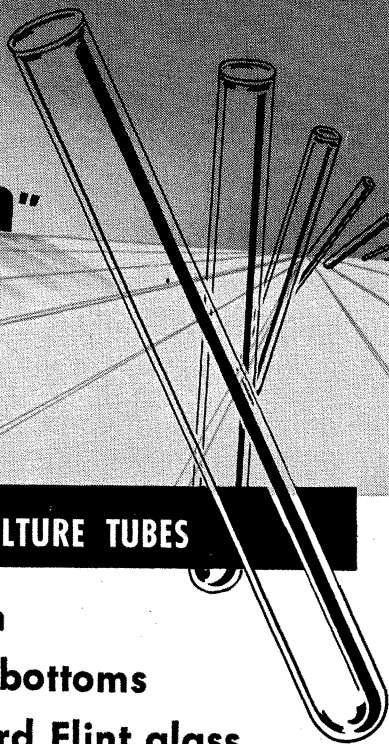
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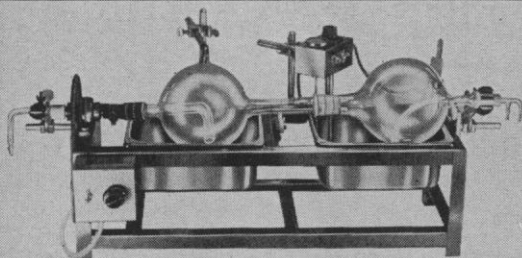
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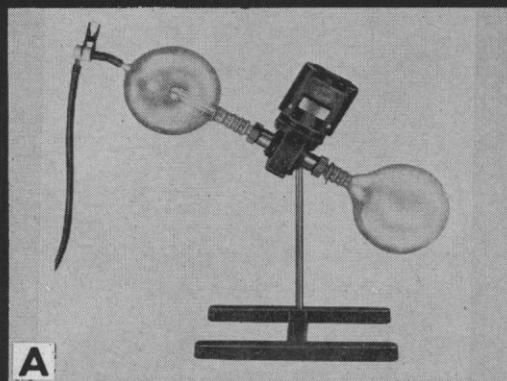
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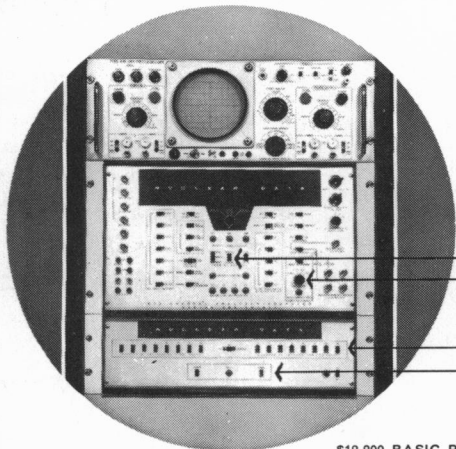
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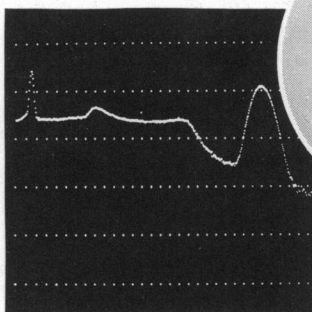
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CONTROL

SPECTRUM  
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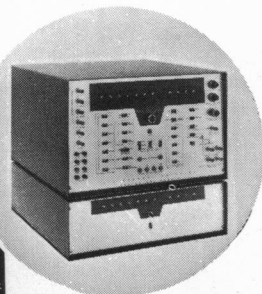
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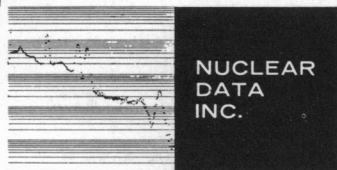


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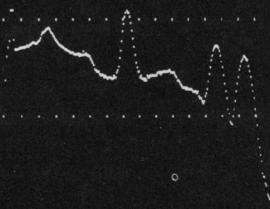


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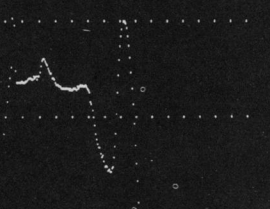


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MADISON 13, WISCONSIN

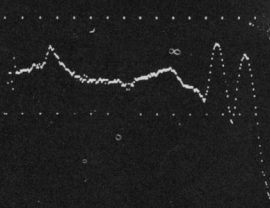
## DATA REDUCTION



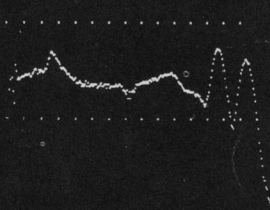
Step 1. Measurement of mixture. Data in first memory half.



Step 2. Read-in of standard cesium 137 spectrum into second memory half.



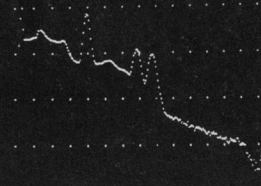
Step 3. Result after subtraction of 1.00 units of standard.



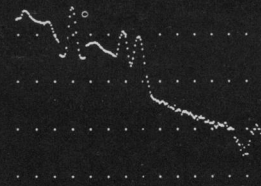
Step 4. Result after subtraction of 1.02 units, showing sensitivity of method.

NOTE: These are untouched oscilloscope photographs.

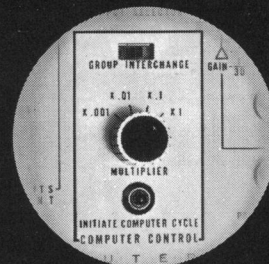
## INTEGRATION



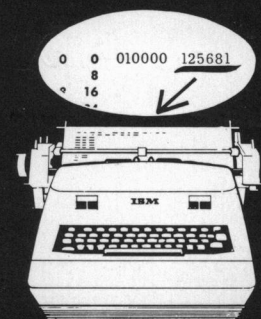
Step 1: Analyze the unknown radiation source. Correct for background counts, if desired, by utilizing the data reduction controls.



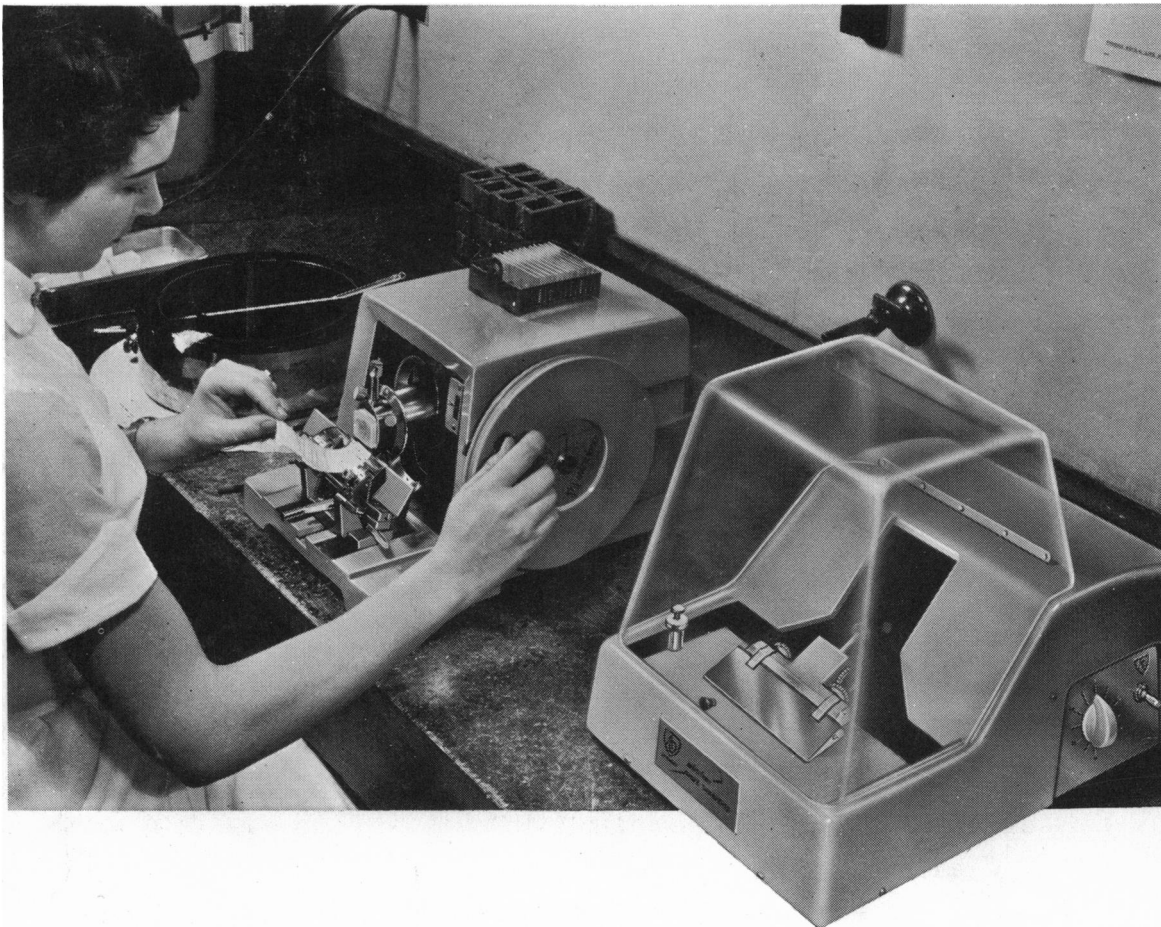
Step 2: Select any region of the spectrum by simple switch operations. The selected regions are displayed for instant visual examination. The channel numbers involved are indicated exactly by the switch settings.



Step 3: Depress the "initiate computer cycle" button. The sum of all data points in the selected region, only, is accumulated in a second or two. The sum, divided by ten if desired in order to avoid count overflow, is recorded into analyzer channel number one.



Step 4: Read out the answer in channel one by means of the IBM computer readout typewriter. That's all. No more tedious adding machine operations. No more adding errors.



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