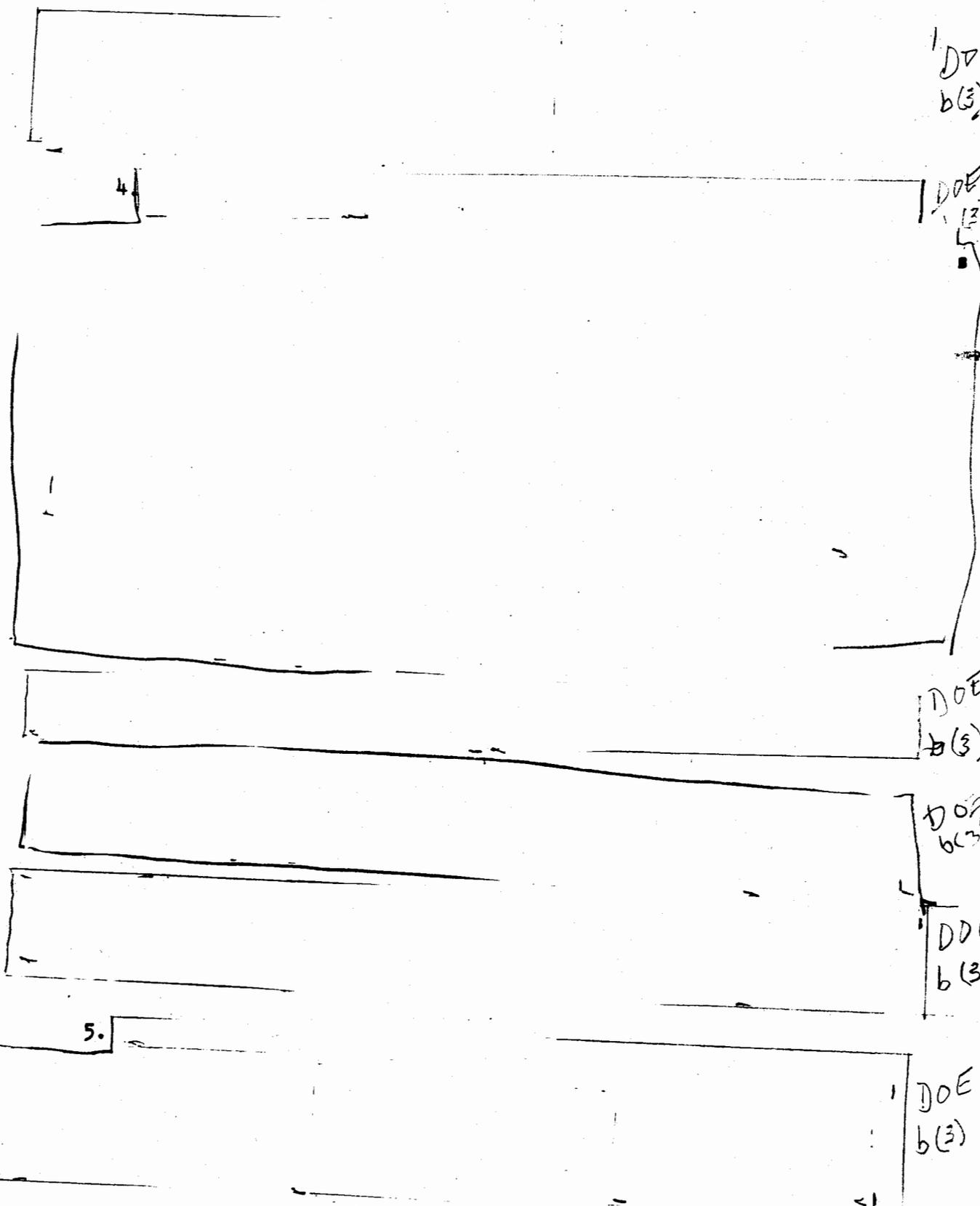


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SEAC Problem M-3



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Bethe presented the following considerations.

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DOE
b(3)

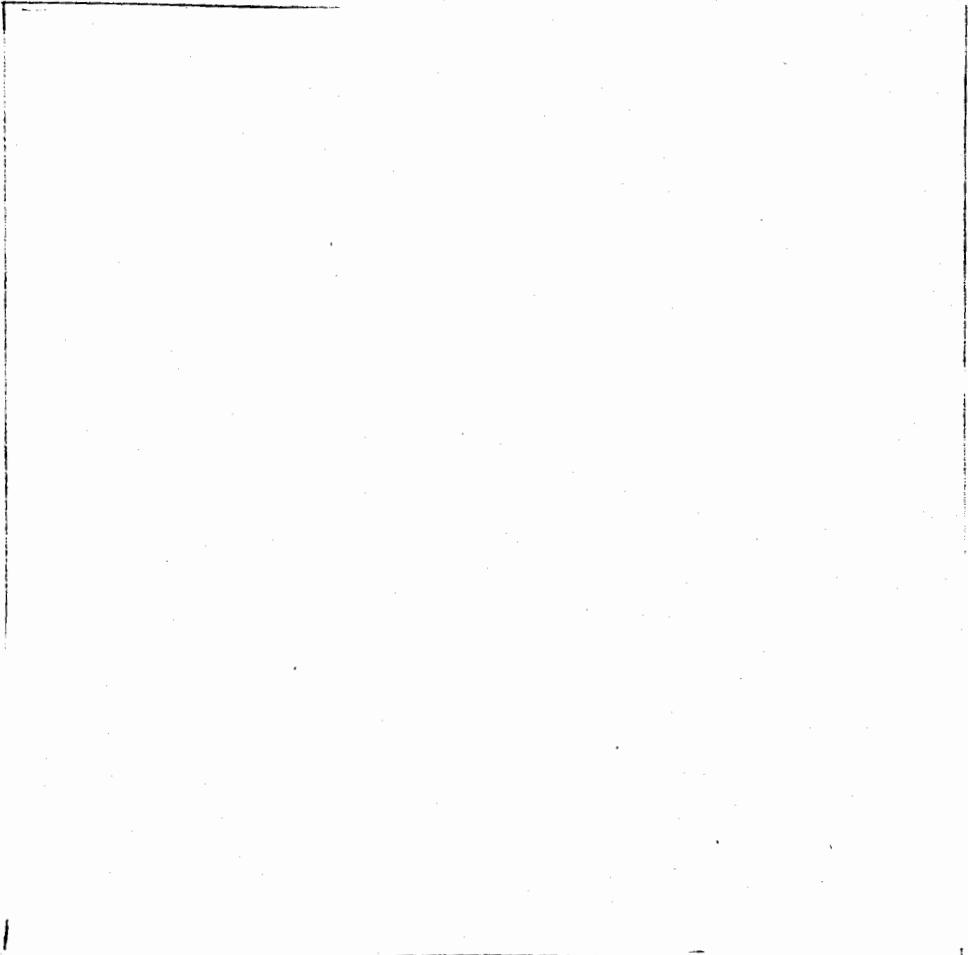
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(3)

Some adverse conclusions to be drawn from this are the following:

(a)



DOE
b(3)

(b)

The above assumes that a steady state equilibrium has been established.



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b(3)

5.1) As a check on the reliability of Bethe's approximation, Rosenbluth fitted two similarity solutions together. From conservation of momentum:

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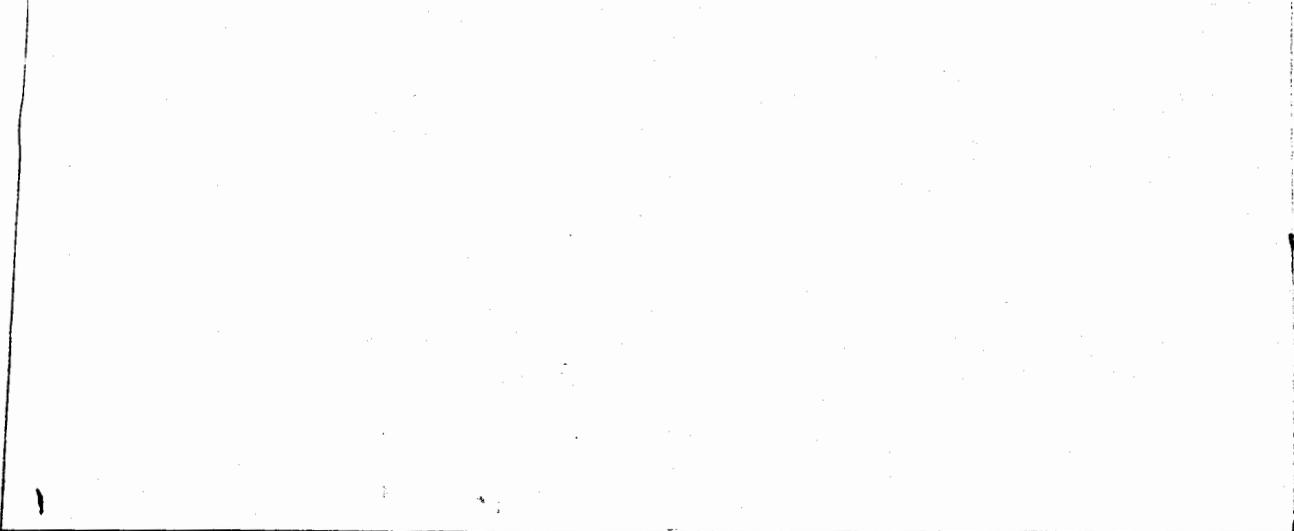
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(6)



DOE
b(3)

Varying the temperature does not help matters because at low temperatures radiation flow and heat capacity each vary about as T^3 so that the time required for heat flow, which depends on their ratio, will be unchanged. At higher temperatures radiation flow varies as T^2 and heat capacity as T^3 , with consequent loss.

DOE
b(3)

Beths, Broyles, and Freeman will prepare a problem for either CPC or SEAC operation which is expected to give a good treatment of propagation along the channel.

7. Experiments planned for Snapper.

J-Division's primary interest is to investigate experimental techniques proposed for the Ivy test.

Zero time would be obtained from an external phosphor.

The streak cameras have, in principle, a 2 shake resolution time but the over-all time uncertainty was expected to be perhaps 10 shakes. Framing cameras with 1/3 usec resolution will obtain over-all pictures of the gadget.

The uncertainties discussed in the above sections have enhanced the interest of TMG in this experiment. In consequence, during a discussion following the regular meeting, certain modifications of the original design were requested.

Certain other kinds of observations and other observational positions were discussed but no final decisions on these were reached at this meeting. It was first stated that 8 to 10 observational spots was a maximum; it appeared later that by avoiding some duplication this number could be extended if desirable.

R. W. Goranson
R. W. Goranson

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DOE
b(3)

DOE
b(3)

DOE
b(3)

DOE
b(3)

DOE
b(3)

(4)

