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LA - 667

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The primary purpose of this paper was to determine to what extent the efficiency and hence the yield diminish as the bomb is scaled down in size. Two IBM problems, P and Q, were investigated for variation in yield. In addition, Problem Q full-scale was computed and compared with the measured yield of the Trinity bomb. On the basis of this comparison together with the absence of any basis for comparison in the case of other models, the absolute values of yields given herein should not be taken seriously. The variation of yield with scaling, however, has been checked by different computational methods wherever possible and may be assumed to be reliable.

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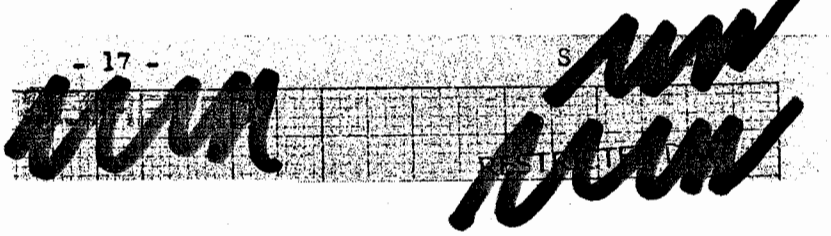

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APPENDIX B

CALCULATION OF MULTIPLICATION RATE

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APPENDIX D

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CULATION OF α AND δ USING LA-235 [1]

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[1] This method of calculating α and δ was originated by M. G. Holloway and R. E. Schreiber, both of the Los Alamos Scientific Laboratory, and involves the work of Rarita and Serber described in LA-235.

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4-19-93 Michael McNerney 1cy

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