## CORRESPONDENCE

8 February 1951

The Joint Editors The Journal of the Institute of Actuaries Students' Society

Sirs,

Members of the Society are no doubt aware that a new electronic computing machine has recently been constructed at the National Physical Laboratory, Teddington, and that the Superintendent of the Mathematics Division will be glad to hear of industrial problems whose solving requires lengthy and intricate arithmetical calculations.

On hearing of this invitation I submitted a problem (the fitting of a Makeham curve to give a minimum value of  $\chi^2$ ) based on Appendix 2 to Mr H. A. R. Barnett's paper, 'Graduation tests and experiments' (*J.I.A.* LXXVII, 15) but the machine as constituted is unsuitable for this type of problem because, I am informed, there is too much initial data and too many widely different computation processes. The existing machine is a pilot model and a larger machine with more storage capacity will be constructed later; the new machine will undoubtedly be able to deal with such problems.

Nevertheless, the existing model may be suitable for other types of problems met with in actuarial work, and if any other members have submitted problems, or are considering doing so, it would be interesting to learn the result of their inquiries. I understand that the purpose of the invitation is to obtain experience for the construction of the larger model, and that actuarial problems will be considered equally with others.

> Yours faithfully, NOEL WILLIAMS

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