NOTES ON THE TRANSACTIONS OF THE FACULTY OF ACTUARIES

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D. A. PORTEOUS. *Superannuation funds—A brief survey, and notes on some current problems, with special reference to the funds of local authorities*, pp. 227–269. The problems referred to arose mainly in connexion with funds established under the Local Government Superannuation Act, 1937, (see *J.I.A.* Vol. LXIX, p. 93) or the corresponding Act for Scotland. The paper discusses the increase in the number of superannuation schemes of all types in the inter-war period, the position of employees on war service and of temporary employees and the effect of war bonuses, the rate of interest and the practice of some local authorities of borrowing their superannuation funds at short-term rates (with the result that the yields on those funds are very low), and the new National Insurance scheme and difficulties arising in the modification of superannuation schemes to avoid duplication of benefits. In his reply to the discussion the author gives useful information regarding 'transfer values' of persons transferred from the employ of óne local authority to that of another.

PROFESSOR F. A. E. CREW, F.R.S., M.D., etc. *The role of statistics in the furtherance of medical research*, pp. 270–283. The motif of this address is that wartime development of Army medical statistics has yielded a new vision of how statistics can serve and advance medicine in the interests of society as a whole.

A. W. JOSEPH AND G. J. LIDSTONE. *The determination of the constants in Stoodley's varying-interest curve*, pp. 293–299. A development of the paper by Joseph on pp. 62–65 of this volume, which itself arose out of Stoodley's paper in Vol. XIV.

CORRESPONDENCE, pp. 300–302. A letter from A. R. Reid shows that the classical Jellicoe formulae for a uniform life interest can be reconciled with the formulae obtained by Lidstone in his paper, *The investment value of a varying life interest*, on pp. 106–118 of this volume.

VOL. XVIII, PART I, 1946

J. G. KYD. *Presidential Address*, pp. 1–11. Gives instances of the application of actuarial training to the science of war, leading to the main theme which is that there is a vast untilled field of research for which the actuary is eminently suited. Examples discussed include the interpretation of Government statistics and of vital statistics, and research into demographic and medical problems. Mention is made of proposals for collaboration between the Faculty and the Scottish Universities for research in the fields of medicine, economics, social science, and other subjects. Reference is also made to the Faculty's post-war examination and tuition arrangements.

Sir William P. Elderton. *Mortality options in life assurance*, pp. 12–36. Studies the effect of options under convertible term assurances. It is supposed that the group of lives assured can be divided into sections, some of which will experience light and others heavy mortality; and the effect is investigated of assuming that the assurances on the lives in the latter sections are converted to whole-life assurances to a greater extent than those in the former. Similar examinations are made of the option to surrender whole-life assurances and of the cash option under children's deferred assurances.

VOL. XVIII, PART II, 1946

R. G. Deas. *The actuary's tool-kit*, pp. 37–73. Reviews various types of mortality table and makes suggestions for rendering future tables easier to work with in practice. The matter is dealt with under two headings: (1) principles and methods of construction, (2) form of presentation of the factors for practical use.

VOL. XVIII, PART III, 1946

F. W. Robertson. *Legal aspects of life assurance policies*, pp. 75–124. Among the matters dealt with are: the question of which country's laws shall govern a contract of life assurance, places of business at which notices of assignment can be given, proof of death, presumed death, suicide, death at the hands of justice, requirements as to title and payment, forfeiture and trusts, payment in sterling when place of payment is outside the United Kingdom, problems of title to children's policies, points in connexion with Married Women's Acts, simultaneous deaths, partnership policies, requests for payment of estate duty by office out of policy moneys.

VOL. XVIII, PART IV, 1947

Sir Alexander M. Carr-Saunders, LL.D. *Some thoughts on the actuarial profession*, pp. 125–135. This lecture discusses the general need for competent statisticians, invites actuaries to extend their interests to embrace the subject of population statistics, and suggests closer association between the actuarial profession and the universities.

L. Solomon. *Integral equations: some applications to actuarial science*, pp. 139–165. Gives methods of solution of certain types of integral equations, and applies them to examples in actuarial science.