

Jones, said that about 250,000 persons were employed in all branches of the aircraft industry and on present orders and inquiries it would be about 150,000 in five years time. He had recommended the industry to pursue a policy of diversification, so that problems arising from the contraction of orders for aircraft would be mitigated. His Department was not at present giving financial support to an Earth satellite programme but there were constant consultations with the Lord President of the Council and the Royal Society as to the scientific value of such a programme.

Committee on the Composition of Milk

THE committee on the Composition of Milk, set up in May by the Ministry of Agriculture, Fisheries and Food, held its first meeting on June 27, and decided to invite written evidence from any interested persons or associations. The committee's terms of reference, which include all aspects of milk composition at all stages of production and distribution, are as follows: "To consider the composition of milk sold off farms in the United Kingdom from the standpoint both of human nutrition and animal husbandry, and to recommend any legislative or other changes that may be desirable". The members of the committee are: Dr. J. W. Cook (chairman), Prof. R. G. Baskett, Mr. S. Clifford, Miss R. L. Cohen, Prof. E. L. Crossley, Dr. D. P. Cuthbertson, Dr. P. R. Evans, Mr. G. N. Gould, Prof. W. Holmes, Dr. H. E. Magee, Prof. B. S. Platt, Dr. A. Robertson, Dr. R. Waite, Mr. H. L. Webb and Dr. E. C. Wood. Evidence should be sent not later than October 31 to the Joint Secretaries, Ministry of Agriculture, Fisheries and Food, Great Westminster House (Room 280), Horseferry Road, London, S.W.1.

Causation of Cancer

AN introduction by Prof. A. Haddow, in which he pays tribute to Sir Ernest Kennaway's work, and twenty summaries of work in the different fields of cancer research have recently been published in "Causation of Cancer" (*The British Medical Bulletin*, 14, No. 2; May 1958. Edited by Prof. E. Boyland. Pp. 73-196+4 plates. London: British Council, 1958. 25s. net). Haddow summarizes the vast field of the mode of action of chemical carcinogens, and L. A. Elson discusses some dynamic aspects of chemical carcinogens. Cocarcinogenesis is dealt with by M. H. Salaman, and experiments indicating the irreversibility of the changes in the epidermal cell of the mouse after application of carcinogen are described by J. W. Orr, who, from a histologist's point of view, favours the concept of tumourigenesis as being the result of colonies of six or seven adjacent mutated cells. Avian carcinogenesis is reviewed by P. R. Peacock, who directs attention to McGowan's finding of weasel bites as a possible clue to the etiology of fowl tumours. Peacock's observation that cauterization 2-9 days after inoculation with virus will produce tumours anywhere in the fowl seems to offer possibilities of a quantitative estimation of viral antibody formation. F. Bielschowsky and E. S. Horning review the aspects of endocrine carcinogenesis, and H. N. Green describes his immunological theory of cancer. The present knowledge of possible exogenous factors in the causation of lung cancer is summarized by the late Sir Ernest Kennaway and A. J. Lindsay. There are papers by G. M. Bonser, D. B. Clayson and J. W. Jull on chemically induced bladder tumours, the biochemistry of bladder cancer

by E. Boyland, on chemically induced liver tumours by J. M. Barnes and R. Schoental, radiation-induced skin tumours by Glücksmann, and radiation-induced tumours of the thyroid gland by I. Doniach. Occupational carcinogenesis is reviewed by M. W. Goldblatt, and A. L. Walpole and M. H. C. Williams describe the carcinogenic hazards encountered in the aromatic amine industry, and the work on the carcinogenicity of different fractions of mineral oil is reported by J. W. Cook, W. Carruthers and D. L. Woodhouse. I. Hieger presents data on the extremely important question of the carcinogenicity of cholesterol. Unfortunately, the table presented seems to indicate that the desiderata for biological examination of carcinogenic substances as described by E. Boyland earlier in the volume have not been fulfilled. W. M. Court-Brown summarizes work on the incidence of leukaemia and radiation, and R. H. Mole deals with the development of radiation leukaemias in animals and the dose-response relationship in radiation carcinogenesis. Many of the summaries contain data and points of view which have been published earlier and in some instances the limited space available has had a severely restricting effect upon the selection of relevant data.

Science Education in South Africa

THE Cape Section of the South African Association for the Advancement of Science has recently conducted experiments on methods for the popularizing of science for the general public and on improvement of science education in schools. First, its Subcommittee on Science Education suggested to the Department of Extra-Mural Studies in the University of Cape Town that it should hold a refresher course for science teachers as one of its vacation courses. In July 1957 courses covering the physical and biological sciences were attended by 160 science teachers and inspectors. Further courses will be held annually, and other South African universities in each of the four provinces are now following suit and holding similar refresher courses. Secondly, in collaboration with the Royal Society of South Africa and the Adult Education section of the Department of Education, Arts and Science, the Association organized a science exhibition in Cape Town in March of this year. Held in the historic eighteenth century Old Supreme Court, twenty-two exhibits on various aspects of scientific research in Cape Town were displayed by some departments of the University as well as the South African Museum, the Royal Observatory and numerous industrial and medical research institutions, and amateur scientists. The main purpose was to present to the general public current research problems in a simple manner, so as to offer the layman the opportunity of becoming more knowledgeable about science and the role of science in society. The newspapers gave full coverage in feature articles and editorials, indicating clearly that such knowledge has become almost a civic duty for an informed democracy in the present age; radio broadcasts were also given along similar lines. All local schools were invited to send senior pupils so as to arouse interest in the young in taking up science as a career. During the five-day period that the exhibition was open, 5,000 people of all ages and races attended. Simultaneously, a series of science films were shown by the Association. As an experiment it was highly successful, and the Association is now planning a similar exhibition on a national scale.