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Scientific Workers in Government Employment.

THE Report of the Committee appointed by the Treasury in May 1929 "to examine the functions and organisation" of certain specified scientific establishments in the Government Service, and "to report on the method of recruitment and conditions of service of the civilian scientific and technical officers employed therein", has now been published (H.M. Stationery Office, 9*d*. net). The specified departments were:

(*a*) The research and experimental establishments under the Admiralty, War Office, Air Ministry, and Department of Scientific and Industrial Research; (*b*) the Department of the Government Chemist and the establishments under the Admiralty and War Office concerned with chemical analyses; and (*c*) the Meteorological Office.

The Report contains a number of important recommendations, and although it introduces differentiations which will inevitably give rise to dissatisfaction among certain sections of the staffs affected, its proposals, if put fully into effect, represent on the whole a great step forward in the direction of both higher status and fuller economic recognition for the scientific worker in Government employment.

The Committee, over which Sir Harold Carpenter presided, was a strong one and included, in addition to an administrative element drawn from the Treasury and War Office, Sir Robert Robertson, the Government Chemist; Dr. F. E. Smith, Secretary of the Department of Scientific and Industrial Research; Mr. H. T. Tizard, his predecessor in office and now Rector of the Imperial College; and Mr. H. E. Wimperis, Director of Scientific Research at the Air Ministry. Evidence was received from the heads of all the larger scientific establishments, while the views of the staffs concerned were represented to the Committee by the Institution of Professional Civil Servants.

The examination of radical proposals for a complete change in the relationships of the scientific departments would appear to have fallen well within the terms of reference. The Committee, however, showed the better part of valour by the ingenious gloss that, as the respective functions of the establishments under consideration had 'recently' (actually in 1928) been set out in considerable detail in the Report of the Research Co-ordination Sub-Committee of the Committee of Civil Research, they had "assumed the first part of our terms of reference to be an instruction, not to

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criticise and report on those functions, but to take note of them as the basis of our investigation into the conditions of service of the staffs employed ". Accordingly, " we have considered it unnecessary for us to report, for example, on a proposal (admittedly not unanimous) made to us by the Institution of Professional Civil Servants, for a unified State Scientific Service in the form of a Ministry of Science ".

Although the idea of closer unity of which a Ministry of Science is but the extreme form of organisation did not command the unanimous support of both wings of the Institution's membership, it will be a disappointment to all concerned that such an authoritative Committee should not have given a definite lead, or at least some guidance for the direction of the future development of the scientific services. The Committee has, however, made a series of proposals, following in principle very closely those submitted to the Committee by the Institution and endorsed by the Association of Scientific Workers, which will achieve a greater measure of uniformity in the conditions of service of the staffs concerned, and so pave the way to a more harmonious and progressive development of the scientific services than is at present practicable with the existing departmental structure.

As regards the contention that the present salaries and financial prospects of the scientific staffs in Government service are shown to be generally inadequate by the difficulty of recruiting and retaining officers of the requisite standard, the Report states that " it is open to question whether the State Services are at present attracting a fair proportion of the best recruits. In any case, we think that the present supply is neither so large nor so good as it might be if the conditions of employment were made more attractive." The Report goes on to remark that " the fact remains that the State has to compete with private industry as well as with the universities for the services of research workers, and we are clear that some steps must be taken to make that competition more effective ".

The Committee's proposals for an improved and unified system of salary scales are subject, however, to certain important reservations. It insists—and here it had the full support of the staff organisations—not only that the standard of recruitment must be high, but also that duties must be strictly graded so as to ensure that scientific officers " are always employed either on investigations which definitely require originality of outlook and execution, or on work which, though not demanding exceptional originality, does require wide knowledge and special experience ". Work of an " ancillary character " must, it is urged, be devolved upon a class of ' technical assistants ' corresponding in principle with such existing classes as those of ' observer ' and ' technical assistant ' in the Department of Scientific and Industrial Research and ' test assistant ' at the Royal Aircraft Establishment, for whom improved salary scales and prospects are also recommended.

The new grades and salary scales do not go beyond the existing rank of Principal Scientific Officer at the National Physical Laboratory or its equivalent. Of this senior grade it is stated that the qualifications will normally include both scientific attainment and power to organise and direct research; but the latter is not regarded as essential, and the important recommendation is made that it should be possible for a research officer to reach this grade solely on his merits as an individual investigator. The Committee states that it looks forward to " the Government research establishments being ultimately so organised and recruited that every research officer will be able to reach this grade before retirement, provided only that his proved capacity on appointment is followed by normal development during service ". This departure from civil service practice is an innovation which will be warmly approved by those who feel that the principles and methods of promotion normally applied in the civil service among the non-technical staffs are somewhat too rigid in their application to those engaged in creative scientific work.

While the Committee's grading proposals are based on the conception of uniformity, they retain the present distinctions between ' research ' staffs on one hand and ' technical development ' and chemical staffs on the other hand, as regards provision for superannuation. For the former, the continuance of the Federated Universities Superannuation Scheme is proposed, and for the latter the normal superannuation provision for established civil servants made by the Superannuation Acts. Taking this line of cleavage, the Committee differentiates markedly between the careers to be offered on the respective sides, notably in the earlier stages of service. In the case of staffs under the ' F.U.S.S.', the new entrant, who will normally be a university graduate with first or second class honours, will be appointed as a ' junior scientific officer ' on a scale of £200-15-260 (basic). When he reaches his maximum of £260, steps are to be taken " to assess his capacity for

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research work ". His record will be reviewed by a selection board, which will keep in mind that the next grade of 'scientific officer' "should include on the one hand officers who must be specially qualified to undertake research work, and on the other hand those who will be engaged on work which although of a responsible nature and best undertaken by officers recruited after graduation at a university, requires scientific experience rather than special aptitude for research ". If he is found to be qualified for the duties of a 'scientific officer', he will be promoted to that grade, the basic scale for which will be £300-550; while if he is recommended as exceptionally qualified to undertake research, he may enter the scale at £350 (basic). It is further recommended that a junior scientific officer "who after being two years at his maximum, has not been recommended as suitable for appointment as scientific officer, should be required to leave his department, unless he can be appointed to a vacancy in one of the assistant grades ". This process of selection for retention in the service as a scientific officer and the power of allowing the research worker of exceptional promise to jump to £350 (basic) are extremely important suggestions and will do much to render more attractive the research side of the scientific services.

Unfortunately, however, the counterparts of these proposals for the junior grades in the 'technical' and chemical establishments are not identical, with the result that although some existing anomalies are removed among the F.U.S.S. staffs, new differentiations will be introduced in the Air Ministry and Admiralty as between the 'scientific' and 'technical' pools, the members of which are at present uniformly graded. The differentiations will, however, on balance involve a wide measure of unification; for the existing welter of grades and salaries will be replaced by two simple hierarchies, which will be identical in the case of senior officers.

The claims made on behalf of the staffs within the Committee's terms of reference involved complete unification and a commencing basic salary of £250 after a suitable period of probation; and the suggestion that only "limited" prospects should be offered to the technical and chemical staffs of going beyond £450 (basic) will not only give rise to serious dissatisfaction, but also go far to nullify the Committee's efforts to make the State scientific services more attractive. So far as the technical and chemical departments are concerned, it will still be the case that a more lucrative career will be open to the secondary school boy of scientific leanings if he enters the civil service in a non-technical capacity, through, say, the Executive Class examination at the age of eighteen years, for success in that examination will ensure him a clear run through to a salary of £400 (basic) without special efficiency bars and without expensive training, and on first promotion he will be assured of a jump to a scale rising from £400 to £500 basic.

While the Committee makes no specific recommendations with regard to the posts graded higher than principal scientific officer which carry administrative as well as scientific responsibilities, it is pointed out that it is obvious that if the other recommendations are accepted, the position of senior officers will call for review, and that the salaries attaching to many of these posts will have to be increased. As some members of the Committee were in the category in question, it is suggested that a small *ad hoc* committee should be appointed to consider the higher posts. In this connexion it is pointed out that those members of the Committee who have had direct responsibility for recruitment to scientific research staffs have found the inadequacy of the prospects offered by the higher posts a serious obstacle.

On a superficial examination, the Report would appear to be primarily concerned with economic questions affecting the conditions of employment of the State scientific worker, but when the Report is read in conjunction with a knowledge of the diversity of minutely differentiated salary scales and general conditions of employment that obtains in the scientific departments, it will be seen that it represents a very important stage in the development of those services. The recognition of the fact that the scientific workers in State employment are as a class performing a distinctive service will be more readily achieved now that, like other distinctive classes of civil servants, their conditions of employment have been closely assimilated. Moreover, by its insistence upon the need for a departure from normal service practice in the case of the socially valuable but often unrecognised gifted individual research worker without administrative talents, the Committee has made a break with precedent which must have important results. While scientific workers in Government employment as a whole will deprecate the discrimination against technical and chemical staffs, they will, we are sure, be grateful for the care which has obviously been devoted to examining their conditions of employment, and it is to be hoped that the Government will refrain from devising the familiar official excuses for pigeon-holing the Report.

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