

advise the Chancellor of the Exchequer where such further resources might be deployed. These projects are to be additional to the developments of higher technological education already in progress.

International Council of Scientific Unions : Report for 1951

THE report of the executive committee of the International Council of Scientific Unions for 1951, edited by Prof. F. J. M. Stratton (pp. 108; from the Secretariat, Gonville and Caius College, Cambridge; 1952), includes the text of the revised agreement between the Council and the United Nations Educational, Scientific and Cultural Organization (Unesco) which brings the agreement into line with those made between Unesco and other organizations. The Council has also been granted consultative status by the Economic and Social Council of the United Nations. Rules for Joint Commissions of the Council have been approved by the executive board and are also appended, and under the new rules the future status of five Joint Commissions, which have been in existence for more than three years, was discussed. The Joint Commission for Rheology was renewed for one year on the understanding that it would become a section of the International Union for Theoretical and Applied Mechanics, and the Joint Commissions for the Ionosphere, for Solar and Terrestrial Relationships, for Radiometeorology and for Oceanography were renewed for three years, but the terms of reference of the last-named were restricted to "the investigation of the deep-sea floor". The title of the Joint Commission for Radioactive Standards, Units and Constants has been changed to Joint Commission on Radioactivity. A proposal to form a new Joint Commission on Electronic Microscopy was approved. The Joint Committee on Physics Abstracting was dissolved at its own request, and the formation of an International Service of Science Abstracting was approved; the new International Abstracting Board—the agreed title for the service—will not accept fresh subjects, however, until the experimental stage with the Committee on Physics Abstracting is complete and the Board well established in that field. Decisions on the admission of the International Unions of Biochemistry and of Scientific Psychology were deferred. In spite of the steady position of the financial balance in the accounts, printing costs give rise to anxiety. Appended to the report of the Executive Committee are the customary reports from the International Unions and the various Joint Commissions. These include a first report from the Joint Commission on High Altitude Research Stations, which held its first meeting at Bagnères-de-Bigorre during August 23–26, 1950, a meeting which appears to have considerably stimulated, *inter alia*, high-altitude research in South America as an international activity.

Short Circuits set up by Kestrels

MR. H. LLOYD, of the Yorkshire Electricity Board, writes: "66,000 volts transmission lines in the Yorkshire and North Lincolnshire areas had been subject to a number of mysterious faults, which nearly always occurred about dawn, for several years before the trouble was found to be caused by kestrels which were escaping alive. The points of interest in pursuing the investigation into this were, first, how it was that the birds were surviving 38,000 volts applied across their bodies, and second, what was attracting them to the lines? The incidents

always occurred in the early morning or in the misty weather when the birds' plumage could be assumed to be damp. The flashover is initiated across the damp wings when the bird is banking steeply with its back to the insulators, and current does not pass through the bird's body. The speed at which the bird is travelling takes it out of the path of the arc before it becomes too severely burnt. Other birds subject to high voltages are normally completely carbonized. It was at first thought that a few enterprising birds had discovered that it was possible to survey the surrounding ground less obtrusively and with less effort when static from a 45-ft. high perch. Gamekeepers and others thought this improbable, and the theory did not agree with the damage to the birds. There was no evidence that small birds were using the somewhat exposed cross-arms as perches, and we were informed again that kestrels generally preferred ground game. One day, a substation attendant, during misty weather, noticed a kestrel circling a string of insulators in ever-narrowing circles and, had the bird not been scared off, it would probably have run into trouble. The insulators, as is usual under humid conditions, were discharging and emitting an intermittent buzzing noise, and this seems to provide the attraction. In a very recent case the weather was foggy and visibility limited to a few yards. This seems to imply that kestrels hunt by ear as well as sight, and it occurred to me that this might be of interest to ornithologists and others. Bird lovers will be glad to know that, with later forms of construction, two kestrels will have to execute a very complex movement before they get into trouble".

This interesting observation is most likely explained by the possibility of kestrels hunting by ear as well as by sight. Miss Frances Pitt writes: "The kestrel certainly has good hearing. A tame one I had came from a considerable distance when called in a quite low voice. But the bird's method of hunting suggests that it depends on its eyes to find prey".

Science and Film

A RECENT issue of *Science and Film* is largely taken up with the activities which went on at the International Scientific Film Association's sixth yearly congress in Paris during September 1952 (1, No. 4; December 1952). Among the films which were presented at the congress was one, "Introducing the New Worker", which deals with the problem of works relations and factory psychology. A remarkable film was one from Eastern Germany called "Arbeit aus neuem Geist", dealing with methods of raising production-levels by means of the analysis of work done and by creating a profitable emulation or 'activism' in each team of workers. The high-speed camera was used in France for making a valuable research film on argon arc-welding, while another research film from France was the "Study of Flames", made for the Institut de la Recherche dans la Sidérurgie. Among industrial training and instructional films presented at the congress were the British films, "Basic Principles of Lubrication", "Submarine Control" and "Hardening and Tempering Carbon Steel". From Czechoslovakia came the "Polarograph" and "Electro-erosive Machining", while France supplied "Les Miroirs Plans", a teaching film on plane mirrors. Among the more outstanding documentary films were "Le Cuivre", describing the process of copper-mining in the Belgian Congo; "Charge de Rupture", describing the work of the