

volved problems of supersonic wing theory and wing/body interference, which led on to his work on swept wings, to his complementary experimental programme and to his active interest in the application of numerical methods and modern digital computers to outstanding problems in fluid dynamics. It is of considerable interest to note that Dr. Lock's work is in direct line of descent from the work that his father, the late C. N. H. Lock, pioneered at the National Physical Laboratory in the 1930's.

### National Instrument Service in Britain

THE Science Research Council, in collaboration with the Ministry of Technology and the Office of Scientific and Technical Information, set up earlier this year a Panel under the chairmanship of Prof. G. Porter (University of Sheffield) to consider the feasibility and economics of a centralized national instrument service. A number of expensive, physicochemical instruments could provide a rapid service of routine measurements, on a repayment basis, for all scientists, such as those in Government, industrial and university laboratories. This service would enable physical-analytical techniques to be more widely available than at present and would thereby encourage the use of new instrumental techniques. Such a centralized arrangement would have additional advantages, particularly if it were associated with an interpretation service and data-store facilities. The Panel is hoping to find out whether such a service would be an effective means of meeting more economically the growing needs of research scientists for routine measurements on increasingly expensive research instruments. A description of some services which might be offered is being circulated, together with a brief questionnaire, to a cross-section of potential customers. The answers received will enable an assessment to be made of the need for services of this kind and of their economic viability. When this assessment has been thoroughly studied, the Panel will make recommendations to the Science Research Council regarding any future action.

### Cambridge Engineering Freshmen

It is too early to know the state of this year's entry of students into the technological faculties of all universities and colleges of advanced technology, but a fact which should cheer industry is that at the University of Cambridge the number of freshmen entering the Engineering Department is 304, the highest in any year since the Mechanical Sciences Tripos was established in 1892. The exceptional quality of these men is indicated by the fact that 208 of them have been admitted to the fast stream which enables them to complete the course leading to the Mechanical Sciences Tripos Part I after two years of study instead of the normal three. As recently as 1960 the rate of freshmen entering the fast stream was only about one-third of the total intake.

### I.C.S.U. Bulletin

The *I.C.S.U. Bulletin* (No. 4; July 1965), issued by the International Council of Scientific Unions, contains a brief account of the third meeting of the Executive Committee of the International Council of Scientific Unions, to which was presented a report on the Scientific Committee on Oceanic Research. There has been a steady increase in the activities of this Committee, which now has twenty-seven national adhering institutions. A report was also presented from the Scientific Committee on Antarctic Research, and a discussion on the work of this Committee directed attention to the near extinction of some species in Antarctica due to efficient and intensive fishing operations, and it was suggested that the restricted areas around Antarctica should be extended from 3 to 10 miles. The Executive Committee agreed that immediate action was necessary to prevent certain whales, particularly the blue whale, from becoming extinct. It also

discussed at length the increasing importance of solar terrestrial physics and the activities of the Inter-Union Commission on Solar Terrestrial Relations, its terms of reference and membership. A report was also presented from the Working Group on Relations with Developing Countries, and the suggestion was made that scientists from advanced countries should be encouraged to undertake missions in the developing countries. Scientists from the latter countries should be assisted to enable them to attend international meetings. The *Bulletin* also contains news from the scientific unions, including reports on: the work of the Committee on Atmospheric Sciences; the work of the Naples Zoological Station; the International Union of Biochemistry; and other reports from the Scientific Committee on Oceanic Research, the Committee on Space Research, the Federation of Astronomical and Geophysical Services, the Special Committee for the International Years of the Quiet Sun, and on the International Committee for Geophysics. There is also a list of publications, and the usual calendar of meetings for August 1965–January 1966.

### International Paper Size

THE proposed change-over to the metric system in Britain will necessarily take a long time for full realization and it will pose many practical problems, both industrial and domestic. Not the least of these is the effect on paper sizes and printing, where tradition is likely to die very hard. If the proposed scheme of the metric-based 'International Paper Sizes' is adopted, it will completely revolutionize the present practice of the printing and publishing trades, with consequent repercussions in commerce, professional and private customs, particularly where books, pamphlets, display leaflets, stationery and envelopes are concerned, to mention only a few of the items involved. The keyword behind the conception of 'International Paper Sizes', as it is known, is simply rationalization. It means "... the introduction of a completely new range of paper sizes, from small to large, each based upon a metric measure and each related, in logical sequence and proportion, to the rest of the range". One result, perhaps not unwelcome, will be the replacement of the time-honoured words 'quarto', 'crown', 'octavo', etc., by a numerical code, which will be universally understood. An impartial and non-technical exposition of the definitions, advantages and disadvantages of the 'International Paper Sizes' system has recently been published in the form of a booklet entitled *Paper at Work Number 4: International Paper Sizes* (A Series of Spicers Guides. Pp. 8. London: Spicers, Ltd., 1965). Included in this booklet is a full-sized A1 sheet (23.4 in. × 33.1 in.), which is half the A0 size of 1 square metre. This A1 sheet is folded to demonstrate physically the full sizes of A2, A3, A4 and A5 and their relationship to each other. This example adequately illustrates the new code; the system is based on three series of sizes—all of the same proportion—designated A, B and C. The A series is perhaps the most widely used, for example, for stationery and general leaflet printing; the B series is intended primarily for larger printed items such as posters, wall-charts, etc.; the C series, in conjunction with some of the B sizes, is intended for envelopes. In the ultimate adoption of this 'International Paper Size' system there are undoubtedly benefits of cost, convenience, international standardization and simplification. The disadvantages also have to be faced, but in the long run should not prove insuperable; for example, some printers' machinery may not be geared to handle 'International Paper Size' with optimum productivity; also office filing, filing equipment, addressing machines, etc., may not be suitable for dealing with 'International Paper Size' sizes; but these hazards will be overcome eventually, and meanwhile everybody concerned has time for consideration and thoughtful reappraisal of the important