

## Nuclear Merger

IN contrast with the United States and West Germany, Britain has not been a successful exporter of nuclear instruments and equipment. The Parliamentary Select Committee on Science and Technology has explained the poor export performance of British nucleonic firms by the fact that most of them were small, and centred scientifically as well as geographically about Atomic Energy Authority establishments, so that some of them have no customers apart from the authority, and many have no research departments.

The recent merger of three of the largest nucleonics firms, Nuclear Enterprises (GB), and the nucleonics subsidiaries of EMI and Elliott-Automation, so as to create a £2m company, is an important event for the industry. The Industrial Reorganization Corporation supplied Nuclear Enterprises with £600,000 for the take over, all the more willingly, no doubt, because Elliott-Automation had been negotiating the sale of its subsidiary with the American company, Teledyne. The factories of the enlarged Nuclear Enterprises will be at Edinburgh and near Aldermaston, the EMI staff moving from their present sites at Hayes and Wells.

Nuclear Enterprises itself concentrated on the manufacture of instruments such as radiation detectors, gamma-ray cameras, and automatic radioactive sample changers used in research in hospitals, universities and industry. To this range will now be added the health physics equipment, notably hand and foot monitors, and data processing machinery produced by EMI, as well as the extensive contribution of industrial analytic and gauging equipment from Elliott-Automation. Most important, the new Nuclear Enterprises will be able to offer two British made multi-channel analysers, where it previously only acted as import agent for Italian machines.

It is claimed that the new firm will be the biggest of its kind in Europe, but, as so often in the industry of advanced technology, this only means that the company compares with a medium-sized American firm. Nuclear Chicago, to give an indication of American scale, sells \$23m worth of instruments each year, exporting 20 per cent of its output—more than \$750,000—to Britain alone; the top six British firms have a combined turnover of about three million pounds.

The amalgamation of three of Britain's biggest manufacturers of nucleonics may encourage similar association among some of the other three or four bigger firms and subsidiaries. But if and when the big can be persuaded to become bigger, there will still be the problem of how to encourage export and research activity among the forty or so smaller nucleonic firms within the satrapies of the various AEA establishments.

## Trade in Technology

WITHIN the next month or so, the Ministry of Technology is hoping to sign a new technological agreement with the Soviet Union. Mr Anthony Wedgwood Benn, the minister, is particularly keen about the agreement. "It will pave the way for closer contact between Britain and the Soviet Union in the future. Each has a great deal to gain from an exchange of information in the fields of forward research, industrial technology and

planning techniques." But Mr Benn thinks that the greatest gains will come from the development of international systems for the exchange of scientific and technological information by means of a world information retrieval and dissemination system.

Similar agreements have already been signed by the United Kingdom with Poland and Hungary and, if they are anything to go by, the Anglo-Soviet agreement is likely to be a pretty innocuous document. But this need not matter very much. The first reaction from industrialists was that with agreements of this sort, what they say is often less important than the cordial relations they foster. The Confederation of British Industry is enthusiastic about the agreement. "The important thing is not the pious statements of intent, but the fact that there is a determination to make the agreements work," one CBI official said. The CBI sent a mission to the Soviet Union recently, and has been surprised how quickly the benefits have been showing themselves. It has also been surprised at the wide range of projects on which the Russians were eager to collaborate—instead of searching around for points of contact, the mission found it was easier to add up the number of things in which the Russians were not interested. Eight particular areas of interest emerged from the CBI mission—electricity supply and generation, heavy generating plant, the motor industry, the metallurgical industry, industrial pollution, patents, the railway system with particular emphasis on containers, and standards. Some of these subjects may be mentioned in the agreement when it is signed; other possible subjects are coal mining machinery, computers and electronics, and chemicals and chemical plants. It is also thought that the Russians may be interested in civil aviation technology. This is a field where Russian designs would be unlikely to sell on a world market, even if there were no political barriers. For one thing, the period between engine overhauls in Russian civil aircraft has tended to be much too short for airline economics.

Some of the bigger British firms already have a foot in the door. Imperial Chemical Industries, for instance, has negotiated its own agreement with Russia, after Sir Paul Chambers met Mr A. Kosygin in 1964. The agreement, signed in October 1966, provides for collaboration in plastics, petrochemicals and synthetic fibres. And British Motor Holdings, while admitting that the new agreement would "obviously be very useful", says that it has already submitted plans for a complete car plant to build two BMC models, the 1100 and 1800, in the Soviet Union. A team of BMC engineers will be going to Russia next month to hold discussions, principally about engines, automatic transmissions and suspension systems. Leyland and Courtaulds are two other British companies which have shown interest in the Russian market, and Leyland has put forward plans for a complete factory to build commercial vehicles in Russia. English Electric has sold a number of computers to Eastern Europe, most recently a System 4 computer to Russia.

But what of Mr Benn's ambitious schemes for an international data storage and retrieval system? So far the Soviet Union has shown interest in only one such proposal, put forward by the International Atomic Energy Agency. This is a development of the scheme now in operation for sharing nuclear cross-sections internationally, and would provide an inter-