

The BMA, at present the sole negotiating body which represents all doctors, admits to suffering a small decrease in membership following the recent increase of its subscription from 12 to 16 guineas, but expects this to be only temporary; its membership of some 50,000 British doctors has remained roughly constant for several years. Amongst its members are some 9,000 of the estimated 16-17,000 junior hospital doctors. The membership of the JHDA is 3-3,500, and increasing at a steady 100 doctors each month.

The argument between the two bodies concerns the extent of the representation of junior doctors within medicine. The JHDA believes that its profession is too much controlled by non-democratic bodies. It is dissatisfied with the part played by the General Medical Council, and has advised doctors to refuse to pay the £2 annual retention fee recently introduced by the GMC and declared compulsory for all doctors. The BMA has advised its members to pay, at least for this year. The JHDA also has a bone to pick with the BMA in which, it feels, junior doctors are inadequately represented and their needs overlooked. The BMA says it is trying to improve the conditions of junior doctors, but its attempts to achieve better representation for them have been wrecked by members of the JHDA.

#### ENGINEERING

### Becoming a Professional

WHAT is an engineer? That is the problem which the Society of Engineers is trying to simplify, and it goes deeper than the semantic difference between higher technician and technologist. It is all a question of paper qualifications and status, and the situation is complicated by the plethora of qualifications by which an engineer can be recognized.

The Society of Engineers, one of the oldest professional engineering bodies in the UK, is attempting to provide a route to professional engineering status for those who have not been to university or to a polytechnic. There are, of course, already established routes through the Higher National Certificate (HNC) and the examinations of the Council of Engineering Institutions (CEI) to the status of chartered engineer. But, because the Society of Engineers is not affiliated to the CEI, it is attempting to get its entrance examinations accepted as a Diploma in Technology, which would have a similar status to the CEI's qualification. If it fails to do this, the label of professional engineer might be degraded with respect to the label of chartered engineer, and the society itself would lose some of its status.

The society would accept candidates with HNC or Higher National Diploma qualifications together with some industrial experience, and put them through a part-time course leading to examinations in general engineering, design and management. Last year it circulated these proposals to industry and to institutions of higher and further education, and invited them all to a conference last week. What emerged from the conference is that the industrial representatives are broadly in favour of the proposals with some modification; the CEI will not recognize the proposed diploma, and industry is fighting a war of attrition with some technical education establishments.

Mr K. R. Addison, a chartered engineer working for

GEC-AEI Telecommunications and a speaker at the conference, believed that the present education system is not providing him with the type of engineer he requires. Full-time university or college courses turn out engineers with insufficient experience, and he doubted the cost-effectiveness of the Engineering Industry Training Board schemes. He could not see arrangements other than evenings-only college attendance being accepted by industry, however, and asked the society to provide two routes to the proposed diploma—an intensive one year course, and an ordinary two year course. Such a diploma, "though only a salve on the very large ulcer of vocational education ineffectiveness, deserved the fullest support from industry", he said.

Mr T. M. Scanlon, a member of the Inner London Education Authority's Technical Studies Consultative Panel, and Mr B. J. Bell, a consulting engineer and senior lecturer at the Polytechnic of the South Bank, both argued that the present system produces two classes of engineer—technician and technologist and the system of CEI chartered engineer qualification provides little opportunity for the technician to graduate to the technologist level. The main problem, they said, is that the CEI course is outdated, and that study by evening classes is unpopular. Much of the discussion was, however, taken up with a rather fruitless argument between Mr Addison and the representatives of education institutions, which was sparked off by the comment that "it is most annoying for mature practising engineers to be so often subjected to pontification by others who, though trained as engineers, gave up their profession to become teachers". But there was no escape for those who did not want to listen to the argument, because the conference was held on a catamaran in the middle of the Thames.

#### SOVIET UNION

### One Woman in Space

WHY after nearly a decade of human space flight has only one woman flown in orbit? If the experiment was vindicated, why has it not been repeated by the Soviet Union in the seven years since Valentina Tereshkova (as she then was) returned to Earth after her three days in Vostok 6? The only woman cosmonaut herself puts an end to much of the speculation that has persisted since her flight in 1963 by a frank article, "Women in Space", in the latest issue of UNESCO's journal *Impact*, which is entirely devoted to the theme "women in the age of science and technology".

The first revelation is that she was not the only female cosmonaut to be trained in the Soviet Union. A number of girl-parachutists from the same air club to which she belonged volunteered on the same occasion as she, soon after the Gagarin flight in 1961 when a military liaison group visited them. At the Cosmodrome the women's training was the same as for the men, she writes. The chief difference seems to have been in their manner of recruitment; the women needed only to be qualified as first-class parachutists whereas the men were required to be first-class jet pilots.

"The girl's sub-unit attracted close attention on the part of the medicos and biologists", she writes. In