

ployer-employee relationship that currently prevails. Philip Hounsell, division organiser for ASTMS at Guys Hospital welcomes an organisation like ARMS. Hounsell feels that only by rank and file organising at the local level can sufficient strength be built to have a real effect. Both Davison and Hounsell emphasise however that without proper trade union organisation and support it is doubtful whether the authorities can be persuaded to act.

The 30,000 member AUT is approaching the problem at a higher level. It has negotiating rights for the universities and successfully negotiated national salary scales for researchers in 1975. John Akker, deputy general secretary, says that the AUT handles "scores of cases" of senior research workers, many with international reputations who have been made redundant at the age 40-45. The hardship is even worse he says because "many people are so specialised as to be unemployable".

The AUT offers legal services to members faced with dismissal and has been able to negotiate cash settlements in many cases and is in the process of formulating a code of practice for the employment of research staff. The AUT is attempting to move its efforts into the ministerial arena. "The MRC claims that the universities are the

employer and the universities say since the MRC provides the money it is up to the MRC to sort it out", says Akker. Even if the research councils were to become actively involved there are still 78 autonomous institutions to deal with. The AUT wants the government to convene a committee with trade unions, universities, research councils and government representatives on it.

Whether the government is prepared to take on the issue is unclear. Certainly the universities are acting as if they have just discovered 19th century labour relations. Insisting on the value of piece work places academia in the league of garment manufacturers in a pre-trade union situation. This sensibility is reproduced in many researchers themselves who accept the line that a good student can always find a position and who reject trade union protection as being unprofessional.

But since research is an integral part of a modern economy some pressure exists for researchers to be able to make some changes. Certainly young potential scientists will begin to reject a scientific career if they become aware of the true conditions of research work. And there is nothing to prevent out of work scientists from organising just such a campaign if they are angry enough. □

People before pounds, say SRC

BRITAIN'S Science Research Council is no longer so worried about money, but is finding itself with another problem: manpower. The chairman of the SRC, Professor Geoffrey Allen, said last week that "the manpower problem is preventing us from diversifying".

Professor Allen was presenting a fairly encouraging annual report for the year to April 1978. The budget reduction of 1.7% per year imposed on the SRC by the Advisory Board for the Research Councils had been held to 1%, and merely another £20 million over the next 4-5 years would make the SRC comfortable. A 2-3% increase in the 'science vote' (the money allocated to the ABRC by the government for disbursement to the research councils) would give the ABRC all that the ABRC thinks is needed nationally.

Professor Allen is taking the training function of the SRC very seriously, and hopes to introduce courses for "topping up" in new technologies. This is "the major issue now" in training. And he wants to introduce a five person "think tank" into the Council which will concern itself with improving the links between university and industry. This call for five new people

underlines Professor Allen's concern for SRC manpower.

The development of new activities at the Rutherford and Daresbury laboratories, whose subnuclear physics accelerators were closed in the year under review, is also raising manpower problems. The SRC, like many other government bodies, is under a directive to reduce its manpower—in the SRC's case at 1% per annum. This would mean a loss of some 30 people per year; but with fairly young staff it is a hard target to reach through natural wastage and early retirement.

While it has been possible to retrain many of the displaced high energy physicists at Rutherford and Daresbury in subjects like energy research and computing, it is not so easy to turn a physicist into a biologist to run, say, a biology support team at the new synchrotron radiation source. The central problem is that a few key people are needed, with special talents, to implement the changes which Professor Allen would like the SRC to undergo. "We now need different types of scientists to maintain our central facilities and links with universities", says Professor Allen. The SRC is a potential employer of scientists. But at the moment it is being held back.

Robert Walgate



Skylark rockets could be made from spare parts say UK geophysicists

A GROUP of UK geophysicists has come up with an idea which, in the early 1980s, could help soften the blow on auroral physics of the Science Research Council's (SRC) cutback in 'big science'. It has suggested that component parts left over from the SRC's abandoned Skylark rocket programme could be used to build as many as twelve extra Skylark rockets.

The decision to abandon the Skylark rocket programme was taken in 1975-6 as part of the SRC's plan to economise on 'big science'. Since then the British Aircraft Corporation, the rockets' manufacturer, has been slowly winding down production. Only one rocket now remains to be launched from Woomera, Australia, next May. During the 21 years of the programme, more than 250 Skylark rockets have been successfully launched.

The UK rocket programme now depends on two small rockets, the 7.5 inch-diameter Petrel rocket capable of launching 14 kg to a height of 200 km and the 10 inch diameter Fulmar rocket capable of launching 50 kg to more than 250 km. These are used for studying the lower and mid-ionosphere.

The 17 inch-diameter Skylark rocket is capable of carrying about 150 kg to altitudes as high as 750 km. It is the only UK sounding rocket developed so far which is capable of investigating the structure of the upper ionosphere and the origin of auroral particles. Although a Fulmar might have the ability to fly high enough, it does not have the capacity to carry the instrumentation needed to measure energetic incoming particles and electric fields.

The geophysicists claim that twelve Skylarks of varying size could be assembled, furnished with payloads and launched at no extra cost to the SRC's planned rocket programme over the next ten years if they were launched in fours at three-year intervals. This would mean launching fewer Petrels and Fulmars; but the value of the Skylark is such that it is thought there will be little opposition. Just how much support the idea could gain is what the group of geophysicists is trying to find out at the moment. By late next Spring it hopes to have sufficient knowledge of the interest and the kinds of experiments which could be flown to put forward a concrete proposal to the SRC for funding. **Judy Redfearn**