Soviet space research

Salyut era ends

Despite news of last Friday's docking of the unmanned Kosmos-1267 probe with the now-empty Salyut-6 space station, the Soviet media are now celebrating the end of the Salyut-6/Soyuz programme and Mr Brezhnev has outlined the next stage of the Soviet space effort, permanent orbital stations served by relays of crews.

Mr Brezhnev was speaking at an Order of Lenin investiture ceremony for cosmonauts Kovalenok and Savinykh, just returned from Salyut-6. The projected permanent space station, which, following Tsiolkovskii, Soviet space planners see as a necessary precursor to manned flights to the Moon and planets, will, said Mr Brezhnev, involve "more complicated tasks" — an indication that that will

probably be a considerable delay before such a station is fully operational. However, the docking of the two unmanned vehicles Kosmos-1267 and Salyut-6 is clearly a step towards working out efficient ways of constructing large orbiting complexes.

The achievements with Salyut-6 have been considerable: 28 cosmonauts visited the station including participants from the Comecon partners, there were 34 manned and unmanned dockings, and about 900 separate biological and medical experiments. Some cosmonauts have remained in zero gravity conditions for as long as six months, and the responses of man to prolonged weightlessness will have been well studied.

Before pressing on with new orbital stations though, there is some unfinished business for Salyut planners. Both France and India have been promised berths for their own cosmonauts on Salyut-type craft, and the Soviet news agency Tass has already reported details of the proposed Franco-Soviet medical programme which is to include a new French *krvotok* (Russian for "blood-flow") device which only needs to be pressed against a cosmonaut's neck to allow the associated computer to record all the necessary details about cerebral blood flow.

Vera Rich

Telescope gets director

Professor Riccardo Giacconi, associate director of the Harvard-Smithsonian Center for Astrophysics, has been appointed the first director of the Space Telescope Institute to be established at Johns Hopkins University in Baltimore, Maryland. The appointment, which takes effect on 1 September, was announced last week by the Association of Universities for Research in Astronomy (AURA), which earlier this year won from the National Aeronautics and Space Administration the contract to manage the new institute.

Professor Giacconi has been an X-ray astronomer since he joined American Science and Engineering in 1958. Over the past few years, at the Harvard-Smithsonian Center for Astrophysics, he has been the scientific and administrative leader for the highly successful Einstein X-ray astronomy satellite. The new institute should be built and staffed by 1982; the launch of the space telescope is scheduled for 1985.

European participation in the project will ensure at least 15 per cent of observing time for European astronomers who may also be represented at the same sort of level among the institute's staff. The European counterpart of the Johns Hopkins institute, the proposed European Co-ordination Facility, is now likely to be sited at Garching, near Munich. That at least is the recommendation put forward by a European Space Agency panel set up to investigate the proposed sites. Alternatives under consideration are the Institute of Space Astrophysics at Frascati, the Royal Observatory at Edinburgh and a joint proposal from the Observatoire de Paris and the Institut d'Astrophysique in Paris. The final decision is expected this week.

Philip Campbell

Endangered species

Belgium joins up

Brussels

The Belgian parliament has now voted to bring Belgium into line with nearly all the other members of the European Community by ratifying the Washington Convention concerning trade in endangered species.

Effectively, this means that at every entry point into the Community, customs officials are now required to ensure that any imports of flora or fauna, or their products, are not listed in the Washington Convention.

The only two EEC countries still to ratify the convention are Luxembourg and the Netherlands. The Netherlands has its own strict legislation and like Luxembourg was only waiting for the other members of the Benelux Union to ratify. The European Commission is trying to have a decision adopted that will allow the Community to speak with one voice.

Legislation is all very well, but there are fears that even now that the last gap has been plugged the demand in Europe for fur skins, alligator handbags, leopard tooth jewellery and the like will ensure a continuation of the trade, for Europe is the biggest market for these products.

Belgium is well known as the European centre of the trade in endangered species. And although imports of animal and reptile skins in 1980 showed a decline for the first time in eight years, they were still worth 234 million Belgian francs (£4

million) according to official figures. Experts at the Belgian section of the World Wildlife Fund think that this is a gross underestimate and that the market value of these skins is likely to be more than ten times as high.

Belgium became the centre for the international trade because, over the past eight years, it has provided the easiest means by which goods could be brought into and distributed around Europe free of further customs controls. The new ruling will, however, require that documentation be presented proving that the animal or animal product in question is required for scientific purposes or for a zoo.

This in itself would be difficult to implement, but the real problem is that most customs officials will not have the knowledge or the motivation to tell, say, an endangered species of canary from an unprotected species and 30,000 vegetable species which it divides into three groups — species in danger of immediate extinction, those threatened with extinction and species in danger in a certain country. Specimens in the first list must be accompanied by both an import and an export permit while those in the second list merely require an export permit.

The first list has become considerably longer since the convention was signed in 1973, and at the Delhi meeting of the 68 member states this year a new proposal was made. Instead of listing those species in danger, the reverse should be done. "Reverse listing" would mean that animal and plant traders would have to prove that their goods are a species listed as safe.

Jasper Becker

UK nuclear power

Marshalling forces

Britain's floundering plans to build a series of pressurized water nuclear reactors are to get a thorough shake-up — with the appointment of Dr Walter Marshall, currently chairman of the United Kingdom Atomic Energy Authority, as coordinator of the programme. The appointment will be formalized this week.

Key technical decisions are falling behind schedule, and although there is no present pressure on electricity supplies the government is said to be worried that the forthcoming pressurized water reactor (PWR) inquiry will fall too close to the next general election, complicating the central economic and social issues with the vexed politics of nuclear power.

Dr Marshall's role will be to ensure that the necessary decisions are taken when they need to be taken, drawing together the confusing interests and bureaucracy of the National Nuclear Corporation (NNC, which will construct the plants), the Nuclear Installations Inspectorate (NII, concerned with safety), and the customers, the Central Electricity Generating Board (CEGB).

The situation has been greatly confused