

Yugoslavia

Serbian centenary "postponed"

SERBIA'S Academy of Sciences and Arts, embroiled in a fierce political row with the authorities, has postponed the celebration of its centenary, due next week, until May. This decision follows fierce criticism by party and government leaders of an outspoken memorandum on the continuing social, economic and political crisis in Yugoslavia prepared by an academy group headed by Dr Antonije Isakovic, a vice-president of the academy. Under pressure, the academy has stopped work on the project.

Both the memorandum and the academy's decision to postpone its celebrations have been criticized. The Belgrade daily *Politika* on 23 October described the decision to postpone the celebrations as a kind of blackmail, and said that neither a handful of academics nor the president of the academy has the right to alter the date of the celebrations, which was "fixed by the history of its existence". *Politika* seems to have forgotten that, in 1974, the Soviet Academy of Sciences found it necessary to postpone the celebration of its 250th anniversary for a year.

The disputed memorandum deals with all aspects of Yugoslav life and presents a grim picture of bureaucracy, arbitrary decision-making, corruption, nepotism and a disregard for the law by those in positions of authority. Its advocacy of constitutional reform and the genuine participation of the public at large in decision-making has been attacked by the party

theorists as anti-socialist, a betrayal of the legacy of Tito and evidence of a wish to break up the Yugoslav federation.

On education, though, the memorandum seems more concerned with keeping Yugoslavia together than with dismembering it. It castigates as divisive the present set-up in which each of the six republics and two autonomous provinces that constitute the federation has its own educational system (and academy of sciences). The memorandum says that countries without unified educational systems cannot expect to remain unified.

The memorandum also attacks a number of the educational concepts beloved of the party theorists, including that of "job-oriented" education, the result of which has been the over-production of ill-trained "specialists" unable to play a part in the social and economic life of Yugoslavia. It also says that the party campaign against elitism has meant a levelling down of standards and that the requirement that all persons employed in education should be "morally and politically suitable" has made the universities hot-beds of "careerism and conformity".

The Isakovic group also attacks the much-praised reform of the universities which hived off research into separate institutes, saying that the result has been the destruction of the laboratory base of the universities and the compartmentalization of science. The memorandum concludes that the universities therefore cannot play

their essential part in the "technology-computer revolution". It advocates a thorough reorganization of scientific institutions in the interests of modernization, efficiency, greater financial investment and freer creativity.

Vera Rich

X-ray astronomy

British-Soviet collaboration

A JOINT British-Soviet X-ray astronomy satellite may be launched in the early 1990s. Five British X-ray astronomy groups are now working out proposals for experiments to be submitted to the Soviet side at the end of December. If all goes well, the Soviet acceptance is likely to come by the middle of next year. The project, generated by a visit of a delegation from the British National Space Centre to the Soviet Institute of Space Research at the beginning of October, is viewed by both sides as an important development. Dr Roald Sagdeev, director of the institute, said the meeting showed that Soviet and British scientists have good prospects for cooperation in space, especially in astrophysics, radioastronomy and the study of materials in space.

Until now, there has been relatively little direct cooperation between the two countries in space. The most significant project, so far, has been the British involvement in Roentgen, a module of four large X-ray telescopes to be mounted on the Soviet Mir orbital station next year.

But it was not the Soviet Union that initially proposed that Britain should take part but the Dutch, who wished to work in the hard X-ray/low-energy gamma-ray range using a coded-mask telescope, the principle of which was pioneered at the University of Birmingham. The first such telescope was flown on the Skylark rocket in 1976, and an improved version aboard Spacelab-2 in 1985. Professor Peter Willmore from Birmingham, who is now coordinating the proposals for the satellite, is reluctant to say too much about possible experiments. But the final proposal, he said, would be for a cluster of telescopes, using a variety of techniques to cover various energy bands.

The satellite, if all goes well, will be financed by each country paying for its own experiments and the Soviet Union covering the cost of the satellite and the launch. The project would therefore follow the normal financial pattern of Soviet collaborative projects, and has nothing in common with the purely commercial proposals, made by the Soviet Union in the wake of the Challenger disaster, that the Soviet Proton rocket could be used to launch satellites for foreign customers.

Vera Rich

Ups and downs of French science budget

THE French research budget for 1987, up on the budget for 1986 as corrected after the present government came to power in April, but down compared with that planned for 1986 by the previous government, seemed to cause more excitement in the French National Assembly last week than any other aspect of next year's planned spending.

Leading socialist Jean-Pierre Chevènement was reportedly in fine form. His grand edifice of a ministry for research, technology and industry has been gradually dismantled, first by his own government (which trimmed off industry) and then by the present incumbents (technology has now gone, and the rump has been attached to the ministry of education). The ex-minister was exacting his revenge. He told the present science minister, Alain Devaquet, who is proud of his achievement in protecting the research councils and winning a modest rise in budgets against considerable internal opposition, that his budget was "faked and inflated". It was a "conjuring trick ... unworthy" of a sym-

pathetic man like Devaquet.

The new minister rose to defend himself. The use of a single quantity, finance, was not the way to handle such a complex matter as French science, he said. Nevertheless, the national budget in government and industrial research and development would be up 8.5 per cent (on actual 1986 spending) to FF127,000 million (around £13,000 million), Devaquet claimed. A particularly big increase in defence research spending in the 1987 budget would offset decreases in support for industrial research in other areas. Criticized for this by socialists, Devaquet stoutly defended defence research: "I don't share the disdain of certain speakers for military research . . . It has done a great deal for many important industries."

However, André Giraud, the defence minister, will now have a research budget of FF30.8 million. Devaquet's budget for basic science is FF21 million. "So who is now the minister of research?" Chevènement taunted. Well, not M. Chevènement, anyhow . . . Robert Walgate