

## USSR

● The return of the Salyut 5 crew without having set a new endurance record has aroused speculation abroad as to whether a premature return was necessitated by the psychological stresses of the voyage. This is doubtless due to the fact that it is the first time that the Soviet press has been so explicit about the monitoring of the cosmonauts, which, it appears, involved the analysis of all routine communications with ground control to detect signs of stress.

Cosmonauts Volynov and Zhlobov wanted to be kept up-to-date with world news and sporting events as well as enjoy the on-board entertainments of taped music and a set of photographic slides. In the early part of the flight it was noted that "every detail about the progress of the Olympic Games gave them additional reserves of energy", and during the flight certain innovations were introduced—routine transmission from base were given a background of soft music and special emphasis was placed on "warmth and lively human interest in the concerns of the crew" shown by the communicators.

The official reports, however, do not suggest that the stresses developed were inadmissibly great; the new measures suggest an experiment in remote-control psychotherapy rather than a psychological emergency. Soviet space psychologists have long been concerned with the problems of in-flight sensory deprivation (including the lack of wide human contacts). Over the years this has led to a number of diverse selection procedures for would-be cosmonauts, ranging from the idea that candidates who report monochrome dreams are preferable to those who dream in colour, to the recent pronouncement that no more women will be accepted as cosmonaut-pilots, although they will still be eligible to serve aboard space-craft as "experts"—doctors, astronomers or stewardesses.

● A recent decree of the Central Committee of the Communist Party and the Council of Ministers of the USSR focused on "urgent measures for ensuring for the national economy fuel, electrical and thermal power, and the economic use of fuel and energy reserves". Addressed to all strata of society from the Councils of Ministers of the Union Republics down to the managers of individual enterprises, it called not only for all possible savings but also for the increased use of "peat, shale, briquettes and timber". It was somewhat reminiscent of a speech by Academician Vladimir A. Kirillin, Chairman of the State Committee for Science and

Technology, during his visit to Britain in 1974. This extolled Soviet advances in the technology of fast breeder nuclear reactors, and also stressed that in the immediate future the Soviet power industry envisaged a considerable expansion of open-cast mining for low-grade coal.

The new emphasis on saving and on the use of low-grade fuels may be associated with recent hints of setbacks in the nuclear power plans. Writing in *Pravda*, Academician Nikolai A. Dollezhal (the chief



designer of the reactor for the first Soviet nuclear power station) indicates that there are still considerable engineering problems involved in the construction of nuclear stations, that the manpower involved in installing the equipment is some 2-3 times greater than for thermal stations, and that the efficiency of nuclear stations is generally less than that for thermal.

Moreover, he says, "there are grounds for assuming that in the not too distant future we shall be close to exhausting the 'ecological capacity' of the region of present siting of nuclear power stations." The new economy drive is aimed at ensuring the "unconditional" fulfilment of the five year plan; consequently neither industrial production nor fuel exports will be affected by the measures.

● '*Melioratsiya*', the ten-year-old land-improvement scheme involving drainage and irrigation projects and the general management of soil resources, has received a fresh emphasis. Following the disclosure of new plans over the past few months, *Pravda* has identified the scheme as "a most important task of the whole party, the whole Soviet nation".

This latest move to boost agricultural production includes the resurrection of far-reaching plans to divert northward flowing Siberian rivers south into central Asia and Kazakhstan. In the shorter term, the new measures include calls for substantial increases in the yields of cereal and other crops from "improved lands".

The renewed importance accorded

to *melioratsiya* places involved workers high in the industrial hierarchy: incentives range from a special "feast day" for all concerned, to the title "Master of Irrigation" (First or Second Class) for outstanding individual contributions.

During the recent *Biosfera-76* exhibition in Minsk it was revealed more than 2 million hectares of marshland have already been drained in the Byelorussian SSR; and the past five years have seen an increase in the crop-yield of the reclaimed lands. Nevertheless, erosion is causing losses of up to 20% in crop production, and it is now proposed that some 75% of the peaty soils should be put under grass, leaving only 25% for cereal crops. With the continuing loss of productive soil to industry, and the extensive pollution of water resources also causing serious concern, the indications are that the new plans for *melioratsiya* will require considerable efforts if targets are to be met.

● The Soviet Union has agreed to cease whaling within the next two years, according to a recent statement attributed to Mr Nikolai Makarov, Chargé d'Affaires at the Soviet Embassy in Ottawa. This is a reversal of a long-standing Soviet policy, which maintained that a whaling moratorium would be positively harmful, since it would put an end to research on the biology of whales.

According to a spokesman of the USSR Ministry of Fisheries shortly before the 1974 Session of the International Whaling Commission, the established seasonal quota is insignificant, and there is "no biological necessity" to stop whaling completely since the USSR (which, together with Japan, takes 90% of the world's catch) "consistently and accurately observes all the provisions of the Whaling Convention, while attaching specially great importance to the development and implementation of effective measures to protect the whales".

At the 1976 session in June, the Soviet Union strenuously opposed the proposal to set quotas by "yield by weight", rather than by the "maximum sustainable yield" introduced in 1961. The USSR disapproved of the change, to be applied in the first instance to sperm whales only, arguing that the Commission had already done much in the past two years to maintain sperm whale stocks.

The reversal of policy is more than a cause for satisfaction among conservationists; hitherto, it is said, sperm whale oil has played an important role in the manufacture of Soviet tanks and missiles. Vera Rich