### NEWS IN BRIEF

# US-Yugoslav interferon agreement

THE National Patent Development Corporation, a private company which is planning to build a pilot plant in New Brunswick, New Jersey, to produce interferon, last week announced that it had signed an agreement with the Yugoslav Academy of Science's Institute of Immunology for regular supplies of the protein.

Under the agreement, National Patent will receive 4.5 billion international reference units of the human leukocyte within the next six months. And within that period, an accord will be reached under which National Patent will be supplied with 10 billion units a month.

Meanwhile the *Boston Globe* reported last week that research workers at the Massachusetts Institute of Technology expect to announce shortly that they have developed a method for producing interferon at only five per cent of current production costs.

The process is said to be based on research carried out in MIT's Department of Nutrition and Food Science, which has shown that human cells can be grown on small beads of starch, and that such a process can be used in particular for cells producing interferon.

Although the efficacy of the technique has yet to be demonstrated, the process has already been licensed exclusively to Flow Laboratories of Virginia. The company is currently negotiating with the National Cancer Institute to supply 50 billion units of interferon using the MIT process, which is claimed to reduce the cost of a million units from \$50 to \$2.50.

### The CIA's toxic agents

BIOGEN — the European-based genetic engineering company largely owned by International Nickel and Schering Plough, which recently announced the successful synthesis of interferon — may have a less illustrious predecessor. According to information made public recently by the Church of Scientology, the Central Intelligence Agency developed a machine called Biogen in the late 1950s to manufacture toxic organisms for use in covert biological warfare.

The scientologists, who have been conducting an active campaign to discredit the activities of the CIA, say that the machine was used for 13 years, and may have produced hundreds of pounds of various biological agents and microorganisms, in particular those capable of causing undulant fever and tularemia.

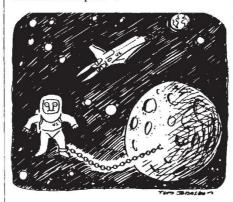
The scientologists also claim that the machine was kept in operation until 1972, three years after President Nixon had publicly renounced the use of biological weapons in warfare.

### Frosch approach to space delinquency

COMMANDERS of the National Aeronautics and Space Administration's space shuttle, now due for its first flight early next year, will have the authority "to use any reasonable and necessary means, including physical force if necessary," to maintain order on board his craft, NASA administrator Dr Robert Frosch agreed last week.

Dr Frosch approved a new rule that would give the commander of the space shuttle powers to arrest any member of the space crew — including space scientists on board — and charge him or her with a crime punishable by a \$5,000 fine, a year in prison or both.

Agency officials argue that such rules were not necessary on earlier space flights involving fewer crew members and more constrained surroundings. But the space shuttle will carry seven individuals, four of whom will be civilian scientists. And according to NASA General Counsel S Neil Hosenball, the new situation demands both a formal chain of command and regulations "concerning possible criminal behaviour in space".



As a precedent, Mr Hosenball quoted the case of a technician who had been killed on an ice island in the Arctic after going berserk and threatening other members of a research team tracing the movement of ice-flows. A manslaughter charge was reversed by the Alaska Court of Appeals, which ruled that it lacked jurisdiction over a crime committed on an island that spent virtually all its time floating in the Arctic Ocean.

#### Oil drills escape US export control

AFTER several weeks of intense debate, the Carter administration announced last week that it is planning to tighten controls on American exports of high technology products to the Soviet Union. According to a statement issued by the US Commerce Department, the new controls will cover areas such as computers and software, manufacturing technology, and "materials critical to the manufacture of high-

technology defense goods".

The new policy follows an extensive review of the government's attitude towards high technology exports, initiated in response to the Soviet Union's intervention in Afghanistan in December. In the area of computers, for example, administration officials stated that standards will be tightened to conform to those of 1976, when restrictions of computer exports to the USSR began to be released.

One exception to the ban will be on the export of oil drilling equipment to the Soviet Union. The administration had been advised that to cut off such exports, in a field where USSR technology is said to be many years behind that of the US, would only encourage the Soviet Union to seek oil supplies in other countries, and in particular to look towards Iran.

## Radiation protection on a budget

IF one man-Sievert of radiation were distributed uniformly over the British population, resultant cancers would be thinly distributed and there would be little public reaction. But if the radiation were concentrated in one town, there would be no more cancers (if response is linear to dose) but there would be an outcry because of their concentration.

Considerations such as these have led the UK National Radiation Protection Board to make estimates of the amounts that it would be cost-effective to spend to protect Britain from unit amounts of radiation dose — if it were uniformly or non-uniformly distributed. One man-Sievert uniformly spread in Britain is worth £100,000 of protection, estimates the report (though it could be a factor of five either way). But concentrated in a town of 10,000 people it would deserve protection of £40 million.

NRPB admits its figures 'have no absolute significance', but are intended to be the basis for consultation.

'The application of cost-benefit analysis to the radiological protection of the public' NRPB, Harwell, Didcot, Oxon OX11 0RQ

#### **HSE** gets Coalite report

THREE reports discussing the effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin (dioxin) on workers at the UK firm of Coalite and Chemical Products were handed over the the Health and Safety Executive (HSE) last week. Two weeks ago Nature reported Coalite's reluctance to make this information public (5 March, page 2). The report now in the HSE's possession discusses immunological, biochemical and chromosome studies of workers exposed to dioxin at Coalite between 1968-71. An HSE spokesperson is quoted as saying that the Executive is now "assessing and appraising" the reports.