IN BRIEF

Concorde verdict

The US Secretary for Transportation's 16-month probationary clearance for Concorde, which immediately inspired the Environmental Defense Fund to apply to the District Court of Appeals for a review of the verdict, is still expected to receive Presidential support, despite hostile Congressional opposition. A decision on access from the airport authorities involved is now awaited: the Port Authority of New York and New Jersey, responsible for Kennedy airport, is reportedly anti-Concorde, but Washington's Dulles Airport is Federal controlled.

JET set?

Strong demands for a final decision on the siting of the Joint European Torus (JET) are likely when the EEC council of research ministers meets at the end of the month, and Britain looks like losing not only the battle to have the £70 millions fusion project sited at Culham but possibly the 40 scientists engaged on preliminary work there as well—with Britain apparently isolated in its opposition to the EEC Commission's recommendation that the project should go to Ispra in Italy, the United States is rumoured to have started moves to collect Culham talent for its own fusion research programme.

AGRs start

Years behind schedule, two of Britain's highly expensive 1,250 MW advanced gas-cooled reactors (AGRs), Hinkley Point B in Somerset and Hunterston B in Ayrshire, last week made their first contributions to the national energy supply. Hinkley, now with an estimated capital cost of about £159 millions, generated only a little electricity before being stopped, pending further tests, but both are expected to build up to full power over the next few months.

Mediterranean clean-up

Experts from Mediterranean states, meeting for two weeks in Barcelona under the auspices of the United Nations Environment Programme to discuss measures to clean up and prevent pollution of the Mediterranean, have received the text of a draft treaty embracing pollution from rivers and coastal establishments and exploitation of the sea bed, as well as dumping by ships and aircraft.

Indian oil

The Indian Government is to increase investment in oil exploration by a third to £200 millions as part of a bid to boost crude oil production. The target is self-sufficiency by the early 1980s, by which time the annual requirement is expected to be around 30 million tonnes. Though land-based wells at present produce less than a quarter of that figure, seismic surveys indicate potentially rich reserves in the offshore continental shelf. Optimistic interpretations even suggest that India could be an oil exporter within a decade.

DDT: bystander or participant?

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THE toxicity, stability and pervasiveness of polychlorinated biphenyls (PCBs) as uncontrolled contaminants are known from a series of investigations that started in 1966, but very little has been done about it. Poisoning occurred in Japan in 1968 from eating rice oil containing PCBs. Clinical effects reported included stillbirths, undersized infants, bone and joint deformities and neurological disorders. Wholesale poisoning of chickens took place when PCBs leaked into fishmeal during processing. The contaminated feed produced low hatchability, and many newly-hatched chicks died. PCBs are distributed widely in major waterways in the USA; their presence led the Food and Drug Administration to warn against eating Lake Michigan fish, and the US Fish and Wildlife Service to call recently for eliminating all sources of PCBs in the environment within three years.

Apparently PCBs have escaped bans because they do not kill insects. They are frequently compared with DDT, which they resemble somewhat in chemical structure, and they can be mistaken for DDT in chromatography, but the resemblance ends there. PCBs are far more stable and more toxic to vertebrate organisms than DDT, which is broken down by enzyme systems that do not change PCBs. PCBs were in North Atlantic surface water at about 20 parts per 10^{12} as compared with less than one part for DDT, even though the fallout of DDT was estimated as twice that of PCBs. The Environmental Protection Agency (EPA) is conducting a vendetta against DDT and other chlorinated hydrocarbon insecticides, but has soft-pedalled PCBs—perhaps because of pressure and influence on the EPA by the Environmental Defense Fund (EDF), whose head scientist engagingly revealed EDF's motivation as follows: "If the environmentalists win on DDT, they will achieve, and probably retain in other environmental issues, a level of authority they have never had before . . . In a sense, then, much more is at stake than DDT".

The toxic effects of PCBs and mercury on wild birds may have provided a convenient weapon for clobbering DDT. However, Scott and his collaborators at Cornell University simultaneously compared the effects of PCBs, DDT and methyl mercury on laying hens. Hatchability was reduced at 8 weeks from 92% in the controls to 50% with 10 p.p.m. of PCBs and to 2.4% with 20 p.p.m. DDT had no effect on egg production or hatchability at the highest level fed (100 p.p.m.), and increased the breaking strength of eggshells on a low-calcium diet. Methyl mercury, 10 p.p.m., adversely affected egg production, eggshell strength, fertility, and hatchability, and it increased morbidity and mortality. Adverse effects attributed to DDT, especially on eagles, have been reported in regions contaminated with mercury. The Cornell workers noted that many reports relating reproductive declines in wild birds to DDT and DDE were based on analyses that did not distinguish DDT from PCBs, and that some investigators had tried to reinterpret results in terms of PCBs.

DDT has never been recorded as having poisoned human beings through the food supply of by industrial exposure. Scott *et al.* say that "condemnation by correlation", in the case of DDT, "may have been downright dangerous to public health." In contrast to pesticides, whose transport and use are publicised, monitored and regulated, PCBs are unrestricted. They have been dumped out of discarded electrical capacitors and transformers, and put on roads to settle dust. The dust is now being stirred up again.