

# NEWS IN BRIEF

## Fusion research boost at Karlsruhe

GERMANY'S nuclear research centre at Karlsruhe, which has for a long period concentrated on fast breeder reactors, has begun to turn its attention to fusion. In its 1980-3 budget Karlsruhe has allowed a 61.5% increase in fusion spending, taking it from 22.6 million DM in 1980 to 36.5 million DM in 1983.

The centre will concentrate on the technology of complete fusion reactors rather than on basic plasma physics, says a report in *Wissenschaft, Wirtschaft, Politik*. It will also construct a superconducting coil for a torus to be built at Oak Ridge National Laboratory in the US, and make some "exploratory studies" of deuterium-tritium inertial confinement.

The greatest effort at Karlsruhe will still be on the fast breeder, but the programme will increase only by 3.5%. The total Karlsruhe budget will increase by 16% from 336 million DM in 1980 to 388 million DM in 1983.

Superconducting technology, on the other hand, will be cut by 5.4%. The main sufferer will be high current superconductivity.

## May launch for two Ariane satellites

THE second test flight of the Ariane launcher to place two satellites in orbit will take place between 20-30 May from Kourou, French Guiana, the European Space Agency and the French Centre National d'Etudes Spatiales announced last week. The actual three-hour launch will occur between 1130-1430 hours GMT.

Preparations for the launch, begun on 2 April, are going ahead on schedule following the arrival of the L02 launcher at Kourou. The first, second and third stages of the launcher were erected on 4 April, 8 April and 14 April respectively. The equipment bay was placed in position on 15 April.

The plan of operations has been streamlined compared to the first flight test, L01, thereby reducing the preparation time by about a month. The satellites to be placed in orbit are Firewheel, a scientific satellite designed by the Max Planck Institute, and Oscar 9, a satellite designed by the German Branch of the Radio Amateur Satellite Corporation.

## Space shuttle engine test successful

THE National Aeronautics and Space Administration's space shuttle, plagued by a succession of technical problems, received some good news last week when it was reported that the shuttle's engines had

been successfully tested at full power for six minutes. In a static firing test carried out at NASA's National Space Technology Laboratories at Bay St Louis, in Mississippi, the engine operated for a total of 10 minutes and ten seconds — including the first sustained operation at its full 109% of rated power — and met all the test objectives.

Meanwhile the agency is asking private industry to perform a study of thermal protection systems which might be developed as an alternative to the present ceramic tiles which have been giving the shuttle programme severe difficulties and have caused the delay of the first flight to late next year at earliest. The purpose is to find whether any recent technological advances in reusable surface insulation might provide an acceptable alternative. The industry study will evaluate metallic and reinforced carbon compounds.

## French commission approves Plogoff reactor

THE three commissioners charged with conducting the nuclear power inquiry in Plogoff recommended last week that the government go ahead with its plans to construct twin nuclear power stations on the scenic Brittany coastline of Cap Sizun. The commissioners based their decision on the observations of 121 people who visited the government's exhibits staged in "town hall annexes" set up after the mayors of the four affected communes, Plogoff, Primelin, Goulien, and Cleden-Cap-Sizun



had refused the government access to their town halls.

The "town hall annexes" had been the subject of militant protest during the 6-week exhibit from 31 January to 14 March, and had to be surrounded by mobile police forces who engaged in battles with the daily demonstrations of up to 20,000 people that were called "la messe" (the Mass) by the protestors. Only 212 of the estimated 60,000 people in the region visited the mobile vans.

French environmental groups attacked the decision, calling the public inquiry a

"grotesque hypocrisy". M. Philippe Marchand, deputy from Charente-Maritime and Socialist Party spokesman for energy criticised the commission for "ignoring the fact that almost the entire population is opposed to the project and that a number of scientists have denounced the insufficiency and quasi-falsification of the impact studies".

A group of 20 political organizations, trade unions and ecological groups in Finistère, seat of the regional prefecture, denounced "the police over-reaction" during the inquiry and have called for the resignation of the chief of police of Quimper and the dissolution of the prefecture's riot police as "a permanent menace against the right to demonstrate". The French Council of State will take its decision on the reactors after a delay of up to eight months.

## Energy conservation cut back

ENERGY conservation spending at the UK Department of the Environment, which is responsible for building regulations, will be £31.1 million for 1980-81, according to a ministerial statement in the House of Commons. This is to be compared with an allocation of £67.6 million in 1979-80, of which £51.6 million was spent. There is no longer a specific allocation for the insulation of housing built by local authorities, said the minister, and grants for assistance with private home insulation have been reduced "to reflect the pattern of demand". According to Gerald Leach's *A low Energy Strategy for the UK*, around 50% of end-use energy is used for low grade heat. A large part of this is used to heat buildings.

## British PWR application imminent

A "letter of intent" to build a Westinghouse pressurized water reactor will be issued shortly, the chairman of Britain's Central Electricity Generating Board, Mr Glyn England, said last week. The letter will release "an avalanche" of technical information from Westinghouse, said Mr England. Detailed design of the reactor would then go on within the National Nuclear Corporation, in close consultation with the CEBG and the Nuclear Installations Inspectorate (which will report on safety). A firm application for consent to build would then go to the government at the end of 1981, followed shortly after by the NII safety report. The CEBG hope that the promised public inquiry on the PWR would be held by the spring of 1982, and that if the results are favourable, construction could begin at the end of that year.