

West German students demonstrate against reforms

Hamburg

WEST German students are on the streets, demonstrating against plans, in states controlled by the Christian Democratic Party (CDU), to reform education in the Gymnasium (secondary) schools. CDU Kultusministers (in charge of Culture, Education and Church Affairs) in these states believe that the *Oberstufenreform* (reform of the upper schools) has failed, but in making their case they present the same facts that were used 15 years ago when all Kultusministers accepted a change from prescribed classes to a course system with a more or less free choice of subjects. At that time it was claimed that students entering university were inadequately educated in specialized subjects.

The upper school system was reformed to allow students to choose the subjects most appropriate for their university career, but many students reacted by choosing just the easiest courses. One reason for this is that the university entrance requirements for many subjects call for a good average school performance without specifying particular subjects. According to the heads of the universities, entering students are still poorly prepared in certain subjects. The

CDU Kultusministers now say that it is no longer acceptable that students can leave the gymnasium without having studied essential subjects, particularly German and mathematics, in their final three years. To remedy this lack of a comprehensive education, the Christian Democrats now want to reform the reform by requiring study of German, mathematics, a foreign language, one natural science and one fine arts subject, and sports.

Another crucial question is whether to include vocational education in the gymnasium curriculum, as is now done in the *Kolleg-Schulen* in Nordrhein-Westfalen (NRW). The CDU wants to eliminate such secondary schools altogether. However, the Social Democratic Party (SPD), which controls NRW, Saarland, Bremen and Hamburg, sees vocational schools as models for the future. More than 25,000 students have demonstrated in Hamburg during the past few weeks, and across the country more than 120,000 students have called strikes and even occupied their schools. Widespread opposition to what the students call *Abitur-Deform* has forced the Kultusministers to hold a special meeting on the subject during their next conference in June. **Jürgen Neffe**

Rocket failure identified

Washington

THE Atlas-Centaur rocket that had to be destroyed by ground controllers less than a minute after launch on 26 March (*Nature* 326, 428; 1987) should never have left the ground, according to the findings of the board investigating the accident.

NASA (National Aeronautics and Space Administration) investigators found that the rocket had been launched into "atmospheric conditions conducive to triggered lightning", in violation of safety rules. A single lightning strike was the most probable cause of the accident although it is still not known how the lightning reached the digital computer unit after striking the nose fairing. The surge of electricity changed a single word in the computer memory essential to control yaw of the rocket. The board will make recommendations to tighten the weather criteria used to decide whether a launch can go ahead.

Alun Anderson

Call for destruction of smallpox virus

London

A WORLD Health Organisation (WHO) committee is asking for remaining stocks of smallpox virus stored in Atlanta and Moscow to be destroyed later this year, and

countries that are still vaccinating their armed forces against the smallpox disease are being urged to stop.

"There is no scientific reason for keeping the virus stocks", said Professor Arie Zuckerman, the British government's chief adviser on vaccines. The genetic structure is available because the genus has been cloned, he explained. "It's a virulent virus, and there is always some risk it can escape."

Several countries, including the United States and the Soviet Union, still immunize their military recruits against the now-eradicated smallpox disease. "We are concerned at this military immunization", said Dr Z. Jezek, WHO's smallpox expert. "It is apparently due to their fear of biological warfare."

But medical sources said smallpox would be a useless tool of biological warfare because it does not spread easily and an effective vaccine can be applied quickly.

The vaccinia vaccine can carry the risk of side-effects, including brain damage. In addition, vaccinia can trigger the disease in someone who has been infected by the AIDS virus. **Kathy Johnston**

Erratum

Marc Aaronson, who died on 30 April (see *Nature* 327, 92; 1987) was born in 1950. □

Soviet payload comes down in Pacific Ocean

London

THE Soviet Union's 'new generation' space launch vehicle *Energiya* was tested last weekend with a payload of 100 tonnes. The rocket performed as planned, but the payload, described as a full-size-and-weight mock up of an orbital craft, failed to go into orbit and came down in the Pacific.

The *Energiya*, according to the Soviet press agency TASS is now "the most powerful rocket in the world". This claim seems justified; the maximum NASA (National Aeronautics and Space Administration) payload so far is the 30-tonne space shuttle. Following the policy of *glasnost*, the launch of *Energiya* was shown on Soviet television, but only the following day. Several recent Soviet launches have been shown live on television, but these were of *Proton* rockets, the work-horses of the space programme.

The *Energiya* will be used both for reusable and expendable spacecraft. It is only since Mr Mikhail Gorbachev came to power in 1985 that the space planners have admitted to working on reusable spacecraft, although Western Soviet-watchers were aware of a Soviet 'shuttle programme' several years earlier. In the pre-Gorbachev era, the Soviet publicists seized on the military involvement in the US-shuttle programme, and contrasted it with the Soviet *Salyut* programme, serviced by expendable *Soyuz* and *Progress* rockets, and which was, they stressed, entirely devoted to peaceful ends. Now, however, the Soviets have not only admitted to a 'reusable' programme, but have even implied that military experts were involved in the development of *Energiya*. Since, so far, there has been virtually no spin-off from Soviet military research to the civilian economy, this implies either that the *Energiya* rocket (and by implication, the Soviet reusable programme) has a military dimension, or else that the barrier between the military and civilian sectors is becoming less rigid. During his visit to Baikonur last week, Gorbachev was accompanied by the Minister of Defence.

The unscheduled splash-down of the *Energiya's* payload, although clearly a disappointment for all concerned, has been neatly turned by the Soviets into a moral, underscoring the current drive for greater efficiency and quality-control. "Check and weigh everything one more time!", Gorbachev reportedly told the *Energiya* team last week. Someone, it is implied, failed to heed his words.

Vera Rich