

Spain Rejoins CERN After 14-Year Absence

Spain's application to rejoin CERN, Europe's high energy physics center near Geneva, was accepted unanimously at the 24 to 25 June meeting of the CERN Council, the laboratory's governing body. Spain will become the 13th CERN member state following ratification by the Spanish government of a convention setting forth details of rights and responsibilities.

Gaining a new member comes at a propitious moment for CERN, which is under a good deal of financial pressure as it starts a major new accelerator project, the \$500-million electron-positron collider, LEP. Ironically, Spain left CERN, after having been a member for 7 years, in 1968 when member states were being asked to increase their contributions to pay for the laboratory's current flagship accelerator, the 450-billion-electron-volt Super Proton Synchrotron.

Last February, Spain's minister of industry and energy, Ignacio Bayón Marín, visited CERN. During his brief stay, Bayón Marín presented CERN's Director General, Herwig Schopper, with a message from his government to the effect that Spain wished to rejoin the laboratory.

One of the trickier issues to iron out was the financial one. CERN member states pay contributions according to the size of their gross national products. Thus, Spain would be obliged to come up with about 7 percent of CERN's \$320-million annual budget, a substantial fraction of that nation's current research expenditures. The formula agreed upon was a transition period lasting until 1989 during which Spain will gradually increase its dues to the full 7 percent figure.

The Spanish money will not go directly to building LEP. About 40 percent will be used to reduce the contributions of the present member states. The remaining 60 percent will go to financing experiments. Financially strapped CERN has been planning to rely on member institutions of the experimental teams for most of the funding of the LEP detectors, so the extra money will be a big help.

In one way, Spain will not be rejoining the same CERN it left. In 1968, the laboratory was the European Organi-

zation for Nuclear Research. Now the name is being quietly changed to the European Laboratory for Particle Physics, in part to more accurately reflect the kind of research that it does and in part to avoid any suggestion of nuclear power or weapons activity.

—Arthur L. Robinson

The Case of the Sinking Boosters

The two solid rocket boosters (SRB's) that helped launch the space shuttle Columbia on its fourth test flight last month are 1000 meters beneath the Atlantic, and the National Aeronautics and Space Administration is still trying to understand why. Replacing them will cost \$36 million.

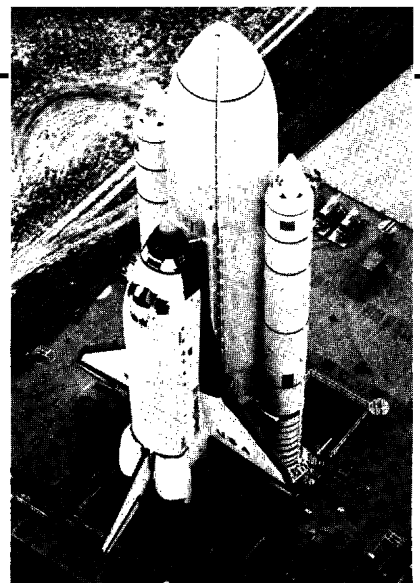
The SRB's are those gigantic white crayons on either side of the shuttle's external tank. They finish their job only 2 minutes after launch and are jettisoned, empty, to fall 45 kilometers into the ocean. They are supposed to drift down gently on parachutes so that they can be recovered and reused as many as 20 times. But this time things were not so gentle.

Preliminary radar data indicate that both boosters impacted at about 150 meters per second, says George B. Hardy, SRB manager at the Marshall Space Flight Center in Huntsville, Alabama. This is evidence that the parachutes did not open, since the main parachutes should have slowed the boosters to 15 meters per second.

The SRB's were glimpsed briefly from a C-130 aircraft, one floating horizontally in the "log" mode, the other floating vertically in the "pencil" mode. But by the time the recovery ships arrived the boosters were gone. The fact that they sank indicates damage to the casing joints, says Hardy. The casings are designed to trap air and aid flotation.

Each SRB carries three identical main parachutes, he adds. They were packaged just as they had been on previous flights, and their deployment had been checked before launch. The SRB's themselves were new. However, all three of the parachutes on one SRB were recycled from the first shuttle flight, as was one parachute on the other SRB.

To find out what went wrong, NASA



has appointed a study group headed by Thomas J. Lee, deputy director at Marshall. An attempt will be made to inspect the boosters with underwater cameras. It is still not clear whether the mishap will have any effect on the fifth shuttle launch, now scheduled for November.—M. Mitchell Waldrop

Federal Judge Dismisses "Creation Science" Suit

On 28 June a federal judge in Baton Rouge threw out a lawsuit aimed at forcing the teaching of "creation science" in Louisiana public schools. The suit, brought by the Louisiana attorney general and advocates of creationism, sought the enforcement of a "balanced treatment" bill passed by the Louisiana legislature in July 1981 and soon after signed into law (*Science*, 7 August, p. 628). Supporters of the bill in effect tried to preempt challenges by asking the court to declare that the measure does not infringe constitutional rights, but Judge Frank Polozola ruled that his court had no jurisdiction in the case.

Opposing the suit had been an array of defendants, including the state's department of education and lawyers from the American Civil Liberties Union (*Science*, 30 April, p. 499). According to ACLU lawyer Susan Sturm, the suit was dismissed because it did not involve federal law. "The first amendment issues, the separation of church and state, arise only out of a defense," she said. "The plaintiffs were just seeking the right to enforce a state statute."

Sturm says a separate federal suit

that challenges the constitutionality of the law, brought by the ACLU and others, is still moving forward, albeit at a snail's pace. "The ACLU case has been on hold, pending the outcome of the creationist case," she said. "Our expectation now is that it will move forward." If the law is judged to be unconstitutional, as was the case with a creationist law in Arkansas, similar legislative moves by creationists are likely to come to a halt.

—William J. Broad

Gorsuch Strikes Back at EPA Critics

Anne Gorsuch, the administrator of the Environmental Protection Agency (EPA), recently added her name to the long list of officials who blame their troubles with the public on reporting by the news media. In a speech to the National Press Club on 29 June, Gorsuch said that "reading press accounts of my motives and performance . . . has been like viewing my reflection in a fun-house mirror."

She said that "the operating theory seems to be that Anne Gorsuch is out to destroy the agency, and in the process to threaten our natural resources. . . . Let me propose to you a countertheory. Anne Gorsuch is personally and professionally committed to protecting the environment; to do this she must make EPA more efficient."

Gorsuch said that she has cut the agency's budget by only 17 percent since 1981, not 50 percent as some critics (whom she declined to name) have maintained. The size of EPA's staff has shrunk only 19 percent in the same period, she said. "We are doing it principally through attrition," not wholesale firings, she explained.

"As for the brain drain, I invite you to gauge for yourself the quality of our current staff," Gorsuch said. Many of her top appointees are attorneys, former lobbyists, or former spokesmen for corporations regulated by EPA. For example, Rita Lavelle, the EPA assistant administrator for solid wastes, has an undergraduate minor in chemistry and came to EPA from a public relations job with a company cited by EPA for violating its hazardous waste rules. One prospective ap-

pointee, James Sanderson, recently withdrew from consideration for the agency's third highest post after becoming embroiled in conflict-of-interest charges. "We have lost some good people, just as the agency has moved people in and out over its entire history, but we have replaced employees in key positions with others of equal excellence," Gorsuch said.

One rumor that Gorsuch sought to squelch is that "EPA is no longer concerned with enforcement." Not true, she said. The enforcement staff has declined only 15 percent. And a precipitous drop in the number of enforcement cases is caused not by disinterest, but rather by a desire to put more time into case preparation,



Anne Gorsuch

"so that when cases go to [the Department of] Justice for prosecution, they will hold up in court."

Gorsuch was asked to reconcile a stated interest in improving the agency's scientific research with sharp reductions in research funds and the termination of studies on some new forms of pollution. "Those people who feel that quality of research is a function of ever-expanding federal budgets—those people I can't communicate with. Our emphasis is on quality, not on the amount of money we can spend."

Gorsuch was also asked about charges that she improperly advised representatives of a small fuel refiner, the Thriftway Company of New Mexico, to increase the amount of lead in their gasoline without fear of EPA sanctions. "It was not the case, it would not be the case, and still isn't the case regardless of the allegations" that she broke the law during her meeting with Thriftway, Gorsuch said. "Therefore I had no consideration of resigning" in the wake of public reports about it.

—R. Jeffrey Smith

Agencies in Dispute over Cancer Policy

A dispute over the regulation of carcinogens in general and formaldehyde in particular is brewing between senior officials in two federal agencies concerned with occupational safety and health.

The dispute, which has so far taken the form of an exchange of increasingly blunt letters, centers on the question of whether regulatory action should be taken only when there is direct evidence that a substance is carcinogenic to humans.

Mark Cowan, deputy assistant secretary of the Occupational Safety and Health Administration (OSHA), recently stated that such evidence is required before OSHA takes regulatory action (*Science*, 2 July, p. 35). That opinion has now been challenged by J. Donald Millar, director of the National Institute of Occupational Safety and Health, who told Cowan in a letter dated 15 June that such a policy "is bad news indeed for those who are interested in preventing work-related cancer."

OSHA's refusal so far to regulate exposure to formaldehyde lies at the heart of this exchange between Millar and Cowan. Formaldehyde, in the opinion of many scientists, represents the clearest example of a potential human carcinogen that should be regulated but has not been by the Environmental Protection Agency or OSHA under the Reagan Administration. Earlier this year, Millar pointed out that the World Health Organization's International Agency for Research in Cancer had judged formaldehyde to be a potential human carcinogen, and in his latest letter he argued that this means the chemical "must be regarded as if it were a human carcinogen." Millar described Cowan's interpretation of the cancer agency's guidelines as "too narrow."

If OSHA indeed requires "evidence of cancer in humans" before taking regulatory action, it is particularly "bad news" for the estimated 1.6 million workers "potentially at risk from exposure to formaldehyde," Millar argued. A spokesman for Cowan said a reply would be sent to Millar shortly.

—Marjorie Sun