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 Mariné, visited CERN. During his brief stay, Bayón Mariné 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 Organization 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.

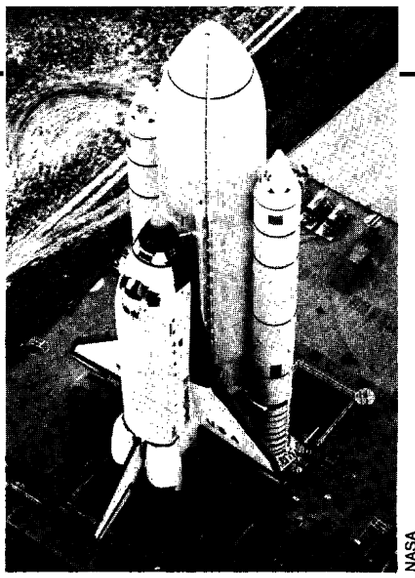
The SRB's are those gigantic white crayons on either side of the shuttle's external tank. They finish their job only 2 minutes after launch and are jettisoned, empty, to fall 45 kilometers into the ocean. They are supposed to drift down gently on parachutes so that they can be recovered and reused as 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***



NASA

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

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