

## Briefings

edited by MARK H. CRAWFORD

### LEP Comes from Behind

LEP—Europe's Large Electron Positron Collider—isn't an also-ran anymore: in the international race to unlock the secrets of the Z particle, thought to be a key to the unification of forces, the huge new collider in Geneva is moving up fast on its competitors at Stanford's Linear Collider and Chicago's Fermilab, propelled by sheer muscle power.

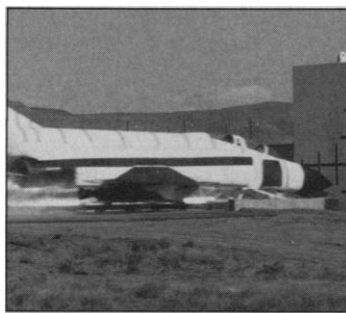
On 14 August, when LEP physicists fired up the 27-kilometer ring for a "pilot physics run"—their first attempt to guide counterrotating beams of electrons and positrons through all 5388 magnets and 128 accelerating cavities—the first Z appeared in the detectors in only 16 minutes. By 18 August they had produced 49, but they've got a way to go to catch up: their U.S. rivals have been churning out Zs for months.

Still the chase is off for a few more weeks because LEP had to be shut down again for further adjustments. Start-up of routine operation is scheduled for 11 September, and from then on, LEP, the most powerful Z factory in operation, should beat the other laboratories' Z rates by an order of magnitude.

### How to Stop Tearing Your Hair Out

When many people, especially women, say they feel "like tearing their hair out," they aren't waxing metaphorical.

*The New England Journal of Medicine* reported in its 24 August issue that millions of women suffer from an obsessive-compulsive disorder called trichotillomania. Most don't go bald, but a lot of bathroom drains can get clogged up, presumably. Now there's help: a



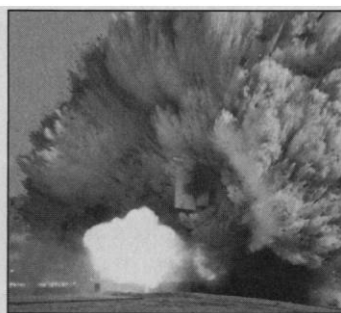
### One Giant Crash for Mankind

No, researchers at Sandia National Laboratories in New Mexico didn't run this F-4 Phantom jet into a 1-million pound concrete wall to determine the extent of damage to the bumpers—or whether the



pilot would survive. Their aim was to determine how reinforced containment buildings that house nuclear power reactors will fare if struck by a plane.

Actually, this was a cooperative project with the Japanese. The Muto Institute of Structural Mechanics of Tokyo wanted to confirm mathematical mod-



els generated by a computer. So they gave Sandia \$3.2 million to fit a surplus F-4 with instruments and strap it to a rail-guided rocket-sled at Sandia's test facility near Albuquerque.

After slamming into a 12-foot-thick concrete wall at 480 miles per hour, little was left of the plane, but the data produced by the crash survived.

Sandia Lab Photo

drug called Clomipramine shows promise in treating the disorder. Susan E. Swedo, a researcher at the National Institute of Mental Health, has done limited testing of the drug on 13 women. Ten of the participants showed a reduction in their hair pulling and three quit entirely. The Food and Drug Administration has yet to approve the drug for routine use.

### Chinese Science Students Wooed

Everyone wants them, except perhaps the leaders in Beijing. Singapore, Australia, and Canada are all trying to beef up their high-tech industries by luring science students from the People's Republic of China who are studying in the United States and elsewhere.

Just after the violent crack-down at Tiananmen Square in June, Canada offered permanent residency to some 10,000 Chinese students studying there. Singapore is now extending an invitation to Chinese students around the world.

But the U.S. government has not followed suit despite urgent lobbying on behalf of the 40,000 Chinese studying in this country. Although Presi-

dent Bush has ordered that student visas be extended until next June, the granting of longer temporary or permanent visas to Chinese students is regarded as discriminatory against other ethnic groups.

Some Chinese students in the United States are already responding to Singapore's solicitation, which was zapped to them on an electronic bulletin board set up by students during the spring demonstrations. A physics graduate student at the University of Maryland has sent his résumé to the Los Angeles office of the Singapore Economic Development Board: he's been told that a Singapore company will help finance the completion of his schooling if he promises to come after graduation.

### Psychiatrists Get Treatment Manual

A task force of the American Psychiatric Association has recently produced a weighty new manual, the first of its kind, to serve as a guide for the treatment of mental disorders. The 4000-page, four-volume opus is designed as a companion to psychiatry's diagnostic bible, the DSM III-R.

The undertaking was 7 years in the making under the direction of T. Byram Karasu of the Albert Einstein College of Medicine. A distillation of knowledge about what works for what disorders, the treatment standards represent the consensus of 28 committees and 400 consultants.

The work has drawn criticism from those who regard psychotherapy as still more of an art than a science and who fear the guide will dampen innovation and discourage the exercise of discretion by individual therapists.

The treatment manual's editor, Karasu, also appears to have bruised some egos at the American Psychological Association. Russ Newman, an association executive, is quoted in its newspaper, the *APA Monitor*, as being particularly annoyed with a comment by Karasu that "non-physician therapists, who can't prescribe medication, tend to improvise therapeutic acrobatics that may not be appropriate." Most psychologists are not physicians.

The four-volume set, *Treatments of Psychiatric Disorders*, is available for \$250 from the American Psychiatric Press, 1400 K Street, NW, Washington, D.C. 20005.