APS Born While Washington Was Busy with Other Matters

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No disrespect for the importance of the event, but the slice of Washington concerned with science was engaged with other matters, bizarre and normal, when APS was born in 1988.

In evident disarray, the Reagan Administration was winding to a close. Long-running rumors about astrology consultation in White House decisionmaking were confirmed when an exasperated presidential chief of staff ousted the resident horoscope specialist, who served as an aide to First Lady Nancy Reagan. As later revealed, it was her astrologer who selected the time for a major Soviet-American armscontrol agreement, the propitious moment being 2 p.m., December 8, 1987. Friends of the Reagans helpfully explained that astrology was well accepted in Hollywood. Scientists tuned to the political grapevine writhed in disbelief.

Both ends of Pennsylvania Avenue gave them reason to fret and whisper about the startling presence of occult interests in high places. The Chairman of the Senate Foreign Relations Committee, Claiborne Pell (D-Rhode Island), advocated the inclusion of "psychotronics" and other "psi" techniques in America's Cold War arsenal. Seeking converts, he staged a closed-door demonstration of spoon bending for some 25 high-ranking government officials. With the sinking Soviet Union opening to the west under Mikhail Gorbachev's Glasnost policy, psi enthusiasts on both sides of the old Iron Curtain gleefully embraced. An aide to Pell returned from the USSR with reports of parapsychology techniques for increasing agricultural yield.

With the next inauguration day on the horizon, the staff of the White House Office of Science and Technology was depleted by moves to new jobs, leaving a hole at the crucial link of science and government.

But that was all behind the scenes.

Out in the open, in the booming pursuit of scientific pork, the most intensely coveted prize was the all-time biggest scientific apparatus ever conceived, the Superconducting Super Collider (SSC), the colossal dream machine of high-energy physics. To be located in a tunnel 54 miles in circumference, with an initially stated total cost of \$4.4 billion, the SSC easily won a go-ahead from Ronald Reagan, the patron-president of high-tech mega projects. Star Wars, the Space Station, the MX intercontinental missile, the now-forgotten hypersonic "Orient Express" airliner, the fast-breeder nuclear reactor, and revival of the shelved B-1 bomber project — all were enthusiastically endorsed by Reagan. With other fields of science fearful of the SSC's impact on academic research budgets, the administration soothingly announced that half the costs would be borne by foreign governments eager for a place on the frontier of research.

Nonetheless, the united front of the sciences in Washington fell apart as various disciplines openly or covertly warned Congress that the proposed colossus might impoverish their research. Amid such clamor and conniving, APS slipped into the world virtually unnoticed. With 36 states in the running, the SSC sweepstake showered new riches on Washington's lobbying industry. Not atypically, Arizona engaged a premium lobbying shop — at \$290,000 for six months. Texas won the site competition, and tunnel digging began. But, alas, the SSC price tag rose to at least \$12 billion, foreign money never arrived, and in 1993, with \$2 billion already expended, a deficit-cutting Congress declined further financing, leaving Texas with 14 miles of empty tunnel. Among the unheeded suggestions for alternative use: mushroom farming.

The APS birth year was also notable for the National Science Foundation's continuing dire predictions of a looming PhD "shortfall," resulting from low birthrates in the 1960s and 1970s, with consequent dangers for science, industrial competitiveness, good health, and national prosperity. Press reports soon followed of a coming shortage of 700,000 scientists. When cooler analysts questioned the demographic forecast, the Foundation explained that "shortfall" is different from "shortage," the former being merely an arithmetical drop from past levels, whereas the latter reflected an absence of qualified people to fill jobs. The Foundation subsequently dropped out of workforce projections, conceding, in effect, that the distant future was unknowable.

For Senator William Proxmire (D-Wisconsin), 1988 was his final year in public office and the culmination of his signature Golden Fleece Awards. With an eye for easily ridiculed science project titles, the Senator opened the Fleece series in 1975 with an award to NSF for a study titled "Why People Fall in Love." And he concluded with a joint NSF-NIH project titled "Sexual Behavior of Japanese Quail Under Carefully Controlled Laboratory Conditions." Scientists quaked at the Senator's derision, as he chaired the appropriations subcommittee for NSF. But increasingly recognized as a crank by Senate colleagues — most of them seeking increased NSF money for constituents back home — Proxmire excelled at acidic quips but failed to wield the budget knife. (For more information on the Golden Fleece Awards and psychology, see "All That's Gold Does Not Glitter" in the June 2006 *Observer* and "Scientists Provide a Civics Lesson for Politicians" in the December 2006 *Observer*.)

Amid burgeoning concern over scientific misconduct, psychology drew prominent notice in 1988 when an influential academic researcher pleaded guilty in federal court to fabricating data on the effects of behavior-control drugs on severely retarded, institutionalized children. Rather than the customary knuckle rap for such offenses, a relatively stiff sentence ensued: two years' imprisonment; suspension from his position, except for 60 days of work-release in a half-way house; 250 hours of community service; and restitution of \$11,300 in salary from a grant awarded by the National Institute of Mental

Health (NIMH). The well-publicized case contributed to serious efforts to establish today's federal regulations for handling misconduct accusations, though some scientific mandarins insisted misconduct was close to non-existent. ("99.999 percent of [published scientific] reports are true," *Science* Editor Daniel Koshland wrote in 1987). In the Congress and in the press, NIMH received a well-deserved black eye for its timidity in resolving the case, which had lingered on since 1983. The whistle-blower who brought the case to NIMH's attention was subsequently denied renewal of his long-standing NIMH grant — just the breaks in the peer-review system, NIMH insisted.

In 1988, grantees and patient groups loudly deplored the administration's budget plans for NIH. Critically important research was losing ground to inflation. Award rates for worthy applicants had sunk to alarmingly low levels, while funds remained woefully sparse for young researchers seeking their first grant. Sound familiar? ?