CONGRESS

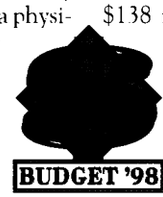
Panel Would Block LHC, Internet Funds

A House panel wants to defer U.S. plans to participate in Europe's Large Hadron Collider (LHC) and upgrade the Internet. These surprise moves are contained in a raft of bills introduced last week to authorize 1998 programs for most civilian, nonmedical research agencies. The bills, which were scheduled to be voted on this week by the House Science Committee, in general would provide a bit more breathing room for science. They are, however, just the first steps in a long congressional process for establishing budgets for 1998.

The committee intends to deny the Department of Energy (DOE) the $35 million it wants next year to help build the LHC. Representative James Sensenbrenner (R–WI), who chairs the panel and hopes to meet this week with CERN officials in Geneva, is said to be skeptical of the deal that DOE has struck with the Europeans. Along with panel member Representative Joe Barton (R–TX), he remains bitter about Europe's failure to back the ill-fated Superconducting Super Collider (*Science*, 14 March, p. 1555).

Lawmakers also worry that LHC funding will hurt U.S. facilities, such as the Stanford Linear Accelerator Center (SLAC) in California, which focuses on electron-positron collisions. While denying funds for the collider, the House measure would add $10 million to SLAC's $131 million budget. The boost follows a recent visit to SLAC by Representative Ken Calvert (R–CA), who believes that money for the LHC would be better spent on domestic programs.

DOE officials and many physicists oppose such a shift. "It would be a bad thing for the U.S. to abandon this piece of physics entirely to the Europeans," says James Strait, a physicist at the Fermi National Accelerator Laboratory in Batavia, Illinois, who works on the LHC. The House appropriations committee, which approves spending bills (see p. 343), and the Senate have yet to weigh in on the LHC contribution, and at this point there is no indication that they share the science panel's concerns.



Another committee target is a $100 million proposal to design a successor to today's Internet that would offer researchers faster and better connections (*Science*, 7 March, p. 1412). The panel wants the Administration to draw up a more detailed plan for the interagency program, announced during last fall's election campaign, and to discuss it at a hearing before authorizing any funding. "We would be happy to work with the committee," says White House aide Thomas Kalil, "and we hope that when we're done, they'll be as excited about the initiative as we are."

Despite these reservations, the committee is fairly generous to overall agency budgets. NASA's budget for 1998 would rise slightly to $13.8 billion, rather than falling as the president requested. But the controversial Mission to Planet Earth would be chopped to $1.1 billion, a decrease of $200 million, to pay for work on an advanced space vehicle. DOE would receive $15 million more than the Administration's $225 million request for fusion-energy sciences.

Elsewhere, the National Science Foundation would be authorized at $3.5 billion, $138 million more than it requested. The committee has proposed a 5.4% boost in its research account and full funding for its proposed $120 million South Pole Station renovation, topping the Administration's 3.4% boost in research and $25 million down payment on the new station. The Environmental Protection Agency's research shop would receive an increase of 9%, about equal to the Administration's request, to $557 million. The Advanced Technology Program within the Commerce Department would receive $189 million, short of its $275 million request and below this year's level.

Whether such increases actually materialize depends in large part on the outcome of negotiations between Congress and the White House on a balanced budget. Those talks will provide an overall framework for the appropriations committees to write the actual spending bills for each agency.

–Andrew Lawler

With reporting by Jocelyn Kaiser and Jeffrey Mervis.

NASA

Science May Gain in Station Melee

The first piece of the international space station was supposed to be heading into orbit this year, but instead, the program is on shakier ground than ever. NASA's decision last week to postpone the initial launch by a full year because Russia won't be able to produce a key piece of hardware on time is embarrassing. But a more serious political threat to the $30 billion project is the agency's announcement that it is ready to part company with Russia completely in building the station. Such a decision could cost U.S. taxpayers hundreds of millions of dollars—the cost of facilities that Russia had promised to build—and possibly the support of Congress, which could decide the project isn't worth the cost.

Ironically, the delay could give life and microgravity scientists a chance to put experiments aboard as many as three additional space-shuttle missions. Researchers had been looking at a 3-year drought in science because of NASA's decision to postpone research until construction of the station was largely completed. The news has calmed researchers worried that a long hiatus would leave them ill prepared to conduct space-station experiments (*Science*, 14 March, p. 1558). Extra flights will at least "conserve the vitality of U.S. research" while preparing scientists for the station era, says Claude Canizares, an astrophysicist who chairs the National Research Council's Space Studies Board.

Winning over Congress may not be so easy, however. NASA officials told the House Science Committee last week that they are delaying the initial launch because the Russian government has failed to fund construction of the station's service module. Lawmakers are furious—at the Russian government for breaking its repeated funding pledges, at NASA for wanting more money to compensate for Russian-caused delays, and at the White House for letting the problem fester. Winning continued support for the station later this spring will be difficult, supporters and opponents agree, if NASA can no longer promise robust Russian participation, a fixed schedule, and level costs.

The current situation is a far cry from what the Clinton Administration envisioned in 1993, when the White House embraced Russia as a partner in a move estimated to shave $2 billion off the $19.4 billion budgeted to build the lab, beginning with a launch in 1997. "The program is falling apart around us because of the Russians," says Representative James Sensenbrenner (R–WI), who chairs the House Science Committee. Last week, the chair of the committee's space panel, Representative Dana Rohrabacher (R–CA), denounced Russian officials as "nincompoops" and "dunderheads." He said, "They will pay for their mistakes, not the people of the United States." One Russian official admits that funding has been a problem, but says that the issue should be resolved by the end of the month.

Sensenbrenner met Monday with Vice President Al Gore to discuss the controversy, but nothing was resolved. NASA will give Russia until next month to meet its commitment, space flight chief Wilbur Trafton told lawmakers.

Giving Russia the shove, however, may further delay the project. NASA managers

say they could manage this year if Congress does not object to the agency diverting $200 million from space-shuttle funding. But lawmakers at the hearing worried that such a move could endanger shuttle safety and violate the $2.1 billion annual cap on station costs.

At the same time, NASA moved last week to reassure scientists that they haven't been forgotten. "We're saying we're committed to the users," says Robert Parker, director of space operations utilization in the space-flight office. "And we believe we can accommodate the costs." NASA officials told *Science* that adding at least two and perhaps three new scientific shuttle missions between 1998 and 2001 will reduce the pain of the growing delays in doing science on the station. Those would be in addition to a reflight of the shuttle microgravity mission that was aborted last week because of technical problems.

Parker's space-flight office would pay for the flight, and NASA's life and microgravity sciences office—which initially sought four additional shuttle missions—would finance the research. Given its tight budget, the agency will emphasize reflying equipment and experiments, says Mark Uhran, a senior flight engineer in the sciences office. The goal is a dedicated flight for commercial products, microgravity research, and life sciences. NASA is now working on a new shuttle flight plan that includes a revised schedule for space-station construction.

–Andrew Lawler

With reporting by Andrey Allakhverdov in Moscow.

CREATIONISM SUIT

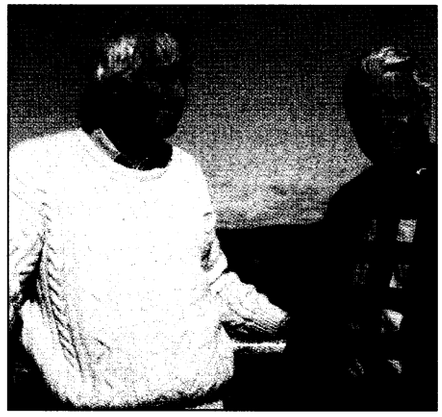
Australian Geologist Battles 'Ark' Claim

MELBOURNE—From the Scopes trial in 1925 to the present, U.S. courtrooms have periodically been the stage for battles between evolution and creationism. Typically, the arguments focus on the separation of church and state, and they revolve around what can be taught in classrooms. Now, Australians are getting into the act, but with a twist. Last week, in a federal civil court in Sydney, a geology professor went on the offensive against a creationist who has been promoting a geological site in Turkey as containing the remains of Noah's ark. The outcome of his fight—waged on commercial rather than constitutional grounds—could extend beyond the status of creation theory to other claims that most scientists believe have no basis in fact.

The case pits Ian Plimer, a professor of geology at Melbourne University, and David Fasold, a retired sailor from San Diego, against Allen Roberts, a pastoral elder of a creationist church in Sydney and founder of Ark Search Inc. Plimer argues that Roberts has violated the country's fair-trade laws by conducting a fund-raising and lecture tour based on claims that the site, in the Ararat mountains, has a Biblical significance. Fasold contends that Roberts violated copyright law by incorporating Fasold's drawings of the site into publications without obtaining his permission. (Fasold has since repudiated his belief that the site contains the remains of the ark.)

Plimer, who is seeking to stop Roberts's presentations as well as to obtain an unspecified financial award, says a victory would make it clear that questionable scientific claims can be prosecuted under the fair-trade laws. That could extend the significance of the case well beyond Roberts's conduct and creation theory. "The crystal healers will be next," Plimer says. Neil Francey, a Sydney consumer lawyer who says the court traditionally takes a broad view of trade practices, believes the issue would then be whether such claims are fact or opinion. Roberts declined comment, but a source close to his team rejects Plimer's claim and says the case "will be tried on narrow legal issues rather than the hype that has been put out."

In another twist, a mainline creationist group has distanced itself from Roberts and has condemned his approach as unscientific. "We are not on trial—we have debunked the claims of Roberts in our own literature," says Carl Wieland, chief executive officer of the Creation Science Foundation, a Queensland-based organization. "Our geologist identified [the ark site] with certainty as something else." But Plimer says a favorable ruling should be equally applicable to Wieland's group.



REGINA MAJA SAINISCH

Biblical battle. Plimer *(left)* and Fasold hope to strike a blow against junk science.

The buildup to the case began in 1992, when Plimer attended a couple of lectures given by Roberts on the Akyayla site in Turkey. The site, exposed during an earthquake in the late 1940s, is geologically described as ophiolite, a slice of ancient ocean floor thrust up when Africa and Europe collided. Plimer challenged Roberts's claims to have detected traces of metal, animal hair, and coprolites (fossilized animal dung) and was thrown out of one meeting, triggering a running feud that includes a pending defamation suit brought by Roberts after Plimer denounced him on a radio program.

Enter one-time fundamentalist David Fasold. Fasold, a former merchant marine officer specializing in marine salvage, became convinced that the site held the relic of Noah's ark. In 1985, he prepared a drawing as part of a report to the Turkish government that also appeared in his 1988 book, *The Ark of Noah*. Fasold contacted Plimer in 1992 after learning that Roberts was using his drawings without acknowledgment. "I want no part of these people," he says. "The lawsuit is about creationists turning my research into an evangelical tool and making big money."

In opening arguments last week, Plimer's lawyer, Steven Walmsley, said that Roberts had infringed on fair-trade laws by using his lectures to raise funds to support his research on the Akyayla site. Walmsley said that Roberts made false claims of having carried out research with other archaeologists and that he misrepresented findings about the site and his qualifications to conduct research. Walmsley also argued that Roberts breached copyright laws by putting Fasold's sketch of the ark site into a brochure.

Roberts's defense attorney, Alex Radojev, told the court that the sketches were drawn independently and were based on several sources. He also said Roberts's company could not be sued for deceptive practices because it was formed after the lectures were given.

Plimer says he hopes the trial also will draw attention to creationism in education. While some states, like New South Wales, have directives excluding it from the science curriculum, others have endorsed creationist teaching. A recent study of the growth of fundamentalism estimates that 8% of nongovernment schools, with 60,000 students, are Bible-based and teach creation theory.

Whether the verdict influences Australian science education, it already has had a major impact on Plimer's personal finances. He has spent $310,000 on the case, largely from the sale of his home, and says that a defeat would leave him bankrupt. According to Australian law, the loser pays court costs.

The trial is due to run for 2 weeks, but a ruling from Judge Ronald Sackville is not expected for several weeks.

–Elizabeth Finkel

Elizabeth Finkel is a science writer in Melbourne.