Nuclear Vote Threatens Draper Lab

A proposed law in Cambridge, Massachusetts, would make it a crime to work on nuclear weapons within the city limits

An intense battle is shaping up in Cambridge, Massachusetts, over a referendum that could halt all work on nuclear weapons within the city limits. At stake is the continued operation of the Charles Stark Draper Laboratory, a major weapons facility that was once part of the Massachusetts Institute of Technology (MIT).

Although other communities in the United States have declared themselves to be nuclear-free zones, the Cambridge resolution would be the first to actually halt existing research and production of nuclear weapons. It will thus be carefully watched in other communities, such as Berkeley, California, where similar moves are being contemplated. And it raises broad constitutional issues concerning the right of local authorities to determine what is permissible in their jurisdictions.

The referendum, which will take place in November during elections for city council members, involves a proposal called the Nuclear-Free Cambridge Referendum Question. The work of Mobilization for Survival, the proposal would make it a criminal act to engage in research, development, testing, evaluation, production, maintenance, storage, or transportation of nuclear weapons in the city.

The proposal has already survived a complex series of procedural hurdles and legal challenges aimed at preventing it from even being placed on the November ballot. It now faces a major campaign mounted by a coalition of prominent Cambridge businessmen and academics from Harvard and MIT. Even if it passes, it is almost certain to be challenged in court on constitutional grounds. Yet, even with these formidable obstacles before it, the resolution is given at least a fair chance of becoming law.

The Draper lab would be the most obviously affected institution in the city. A contract research lab that became independent of MIT in 1972, it works primarily on inertial guidance systems for missiles and warheads. According to vice president for administration Joseph O'Connor, it has a budget of some $140 million a year and a staff of about 1800. Although strictly separate from MIT, some of its staff have joint appointments at the university and a few MIT graduate students work at the lab.

There is, however, concern that the resolution could be interpreted broadly to cover research work in other Cambridge facilities, including Harvard and MIT. In a legal brief filed during skirmishing over whether the resolution would be put on the November ballot, for example, MIT claimed that the proposed ban "could apply to research and writing in mathematics, physics, engineering and other sciences, as well as to studies conducted by professors of government, economics or other social sciences relating to nuclear weapons issues." The brief also maintained that the resolution could have a "chilling effect" on research because it would permit private citizens to bring suit against any research they believe falls within the ban. Supporters of the resolution counter that such fears are based on a misinterpretation of the language, which they believe is tightly drafted to apply only to work directly related to weapons.

Cambridge Historical Commission

Cambridge City Hall

Procedural gyrations over the proposal.

Although the public battle over the proposal is only now getting off the ground, an intense legal and procedural fight has been going on for some time. Mobilization for Survival by early July had collected enough signatures to satisfy all but one of the legal requirements for a proposition to be put to a citywide referendum. The remaining hurdle was for the city council to vote to place the proposition on the November ballot. At its August meeting, however, the council split 4 to 4 on the issue, with one member abstaining. The vote was interpreted to mean that the resolution would not be put on the ballot, thereby stopping the initiative in its tracks.

The ruling was appealed directly to the Massachusetts Supreme Court, however, and at that point Draper lab and MIT entered the fray by filing briefs challenging the constitutionality of the proposal. Draper lab contended that it would infringe the constitutional authority of the federal government to provide for the national defense, and MIT argued that it would infringe citizens' first amendment rights to freedom of expression and inquiry. In a letter to MIT faculty members at the time the brief was filed, MIT president Paul Gray called the proposed research ban a "dangerous precedent" that could "constitute an abridgment of fundamental rights and would pose for the university a threat to its own central commitment to free and open inquiry."

Meanwhile, the council member who abstained at the August meeting asked for another vote, and at a meeting on 19 September, the council finally agreed to put the proposal on the ballot. The case before the state supreme court has thus been rendered moot, although the constitutional arguments raised by Draper lab and MIT are certain to be resurrected if the measure is approved by the voters in November.

According to Draper lab's O'Connor, opponents of the proposal are not at present contemplating further legal action to keep it off the ballot. But a major public relations campaign is getting off the ground, partly at Draper lab's initiative. A group calling itself Citizens Against Research Bans has been formed with a figurehead committee consisting of prominent members of the Cambridge business and academic community lending it considerable political muscle. Chaired by Harvard history professor Ernest May, it includes former MIT president Jerome Wiesner; John Dunlop, a former Secretary of Labor who is now a professor at Harvard; and MIT professors George Rathjens, Samuel Ting, and

Robert Seamans. Draper lab is said to have made a substantial initial contribution to the group.

According to Richard Claussen, a spokesman for the group, the campaign will emphasize the possible impact on high-technology industry in Cambridge if the measure were to become law. Claussen says the group is raising funds and hopes to conduct an intensive grassroots campaign. As for television and radio advertising, Claussen says that depends in part on how much money can be raised.

For its part, Mobilization for Survival intends to knock on virtually every door in Cambridge before the election, and it will use radio for most of its media campaign.

To become law, the resolution must be approved by at least one-third of the registered voters in Cambridge. Because only about half the voters generally turn out in a city election, this means that passage will require some two-thirds of the votes cast. Supporters of the resolution point out that 2 years ago, a nonbinding resolution declaring Cambridge a nuclear-free zone was approved by about 75 percent of those who voted. But this time the stakes are much higher because the resolution would actually shut down ongoing work, and the opposition will be fierce.

The outcome of the Cambridge battle will be watched closely elsewhere. According to Nuclear Free America, an organization based in Baltimore that acts as a clearinghouse for information on such initiatives, some 30 communities in the United States are in the process of collecting signatures or launching other legislative actions to declare their communities free from nuclear weapons. One such initiative is taking place in Berkeley, California.

According to John Stockwell, who is organizing the Berkeley drive, a petition seeking to place a proposal on the ballot in the city in November 1984 is now being circulated. Although modeled on the Cambridge resolution, its effect is less clear because there are no weapons facilities in the Berkeley city limits. The University of California does, however, provide administrative support for the Lawrence Livermore Lab and the Los Alamos National Lab from its offices on the Berkeley campus. According to Stockwell, the initiative would be aimed in part at severing the links between the university and the weapons labs.

—COLIN NORMAN

The DNA Double Helix Turns 30

A celebration in Boston brought Watson and Crick together in a rare joint appearance

The discovery of the structure of the DNA double helix 30 years ago was marked in Boston last month by a rare appearance on the same stage of James D. Watson and Francis Crick, whose terse 1953 paper in *Nature* so coyly alluded to the possible biological significance of it all. With Watson still on the trail of things genetic while Crick has turned his attention to the mysteries of the brain, the Boston meeting was not so much a celebration as a congenial, rather traditional gathering of the most successful members of the molecular biology club.

Much of the time it was not unlike any other gathering of scientists who will themselves to sit uncomfortably for long periods in dimly lighted halls to watch slides and listen to the convoluted argot of their colleagues. Only occasionally did the participants deviate from this formula for some livelier reminiscing, wisecracking, and self-criticism.

The first of the year's double helix commemorations, which was held in Cambridge, England, where Watson and Crick developed their hypothesis, was notable mostly for Crick's absence and for Watson's characteristically cutting reflections on the genesis of modern genetics. In Boston Watson reflected, "This may be the last opportunity to see Francis and I as we were," noting that a planned film version of their scientific wizardry of 30 years ago would likely replace real memories (or rather, what's left of them) with cinematic myths. He speculates that such a film might feature Roger Moore, who sometimes plays James Bond, as Crick; Dudley Moore as Watson; and Watson as Linus Pauling, who was their major competitor in figuring out DNA's structure. A highly respected scientist in the audience suggested, not quite privately, that Woody Allen might be better suited than British comedian Moore to play the role of the young Jim Watson.

In much the same jovial vein, the organizers of the Boston meeting boasted at getting Crick and Watson together in the same room. That geographic success notwithstanding, little of the intellectual gulf between them seemed to be bridged by having them side by side. Watson still is an enthusiastic lobbyist for molecular biology, particularly genetics. Crick, by contrast, has left that subject behind and set his mind to studying the brain, discussions of which clearly animated him during the meeting. Powerful though the tools of molecular

A. C. Barrington Brown, from *The Double Helix*

Watson, Crick, and the structure that started a new discipline.