

INSIDE AAAS

edited by CYNTHIA LOLLAR

AAAS to Build New Headquarters: A Science Center in the Nation's Capital

As anyone knows who has rented shelter for a long time, buying a home is both financially prudent and a way to fulfill a dream. And so it is with the American Association for the Advancement of Science (AAAS), which plans to break ground in early 1994 at the site of its new permanent headquarters in the heart of the nation's capital.

"In 1998, AAAS will celebrate its 150th anniversary," says AAAS Executive Officer Richard S. Nicholson. "This building will symbolize our commitment to being a force for the advancement of science for another 150 years." Details of the plans for a new headquarters were discussed at the Council meeting during the 1993 Annual Meeting in Boston.

The Washington, DC-based association last owned its own building 8 years ago but outgrew that site on Massachusetts Avenue as its activities expanded to match the growing concerns of its members. The association sold the building and put the proceeds in reserve with the express purpose of one day purchasing another building.

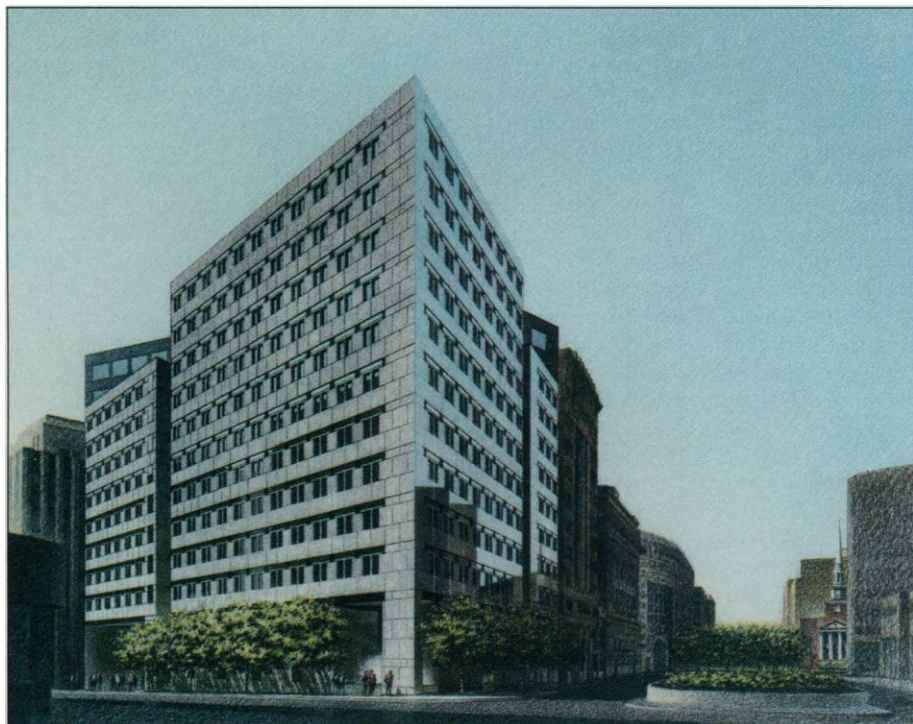
Since then, AAAS has leased office space at 1333 H Street. But ever-increasing rents coupled with a depressed real estate market prompted the AAAS Board of Directors last year to approve the search for property on which a new permanent home could be built.

Last October, the association purchased land at 1200 New York Avenue (two blocks from its current location) for \$16 million—\$3 million less than the

land's appraised value. AAAS paid for the land with the building funds placed earlier in reserve plus an \$8 million, 4% bank loan.

Because of the buyer's market in Washington, DC, "we are going to be able to build a marvel-

there is a unity in their methodology and in "the same wild flights of imagination in creating new theories and new knowledge.... I don't know how these intangibles could be expressed, but it is as important for the architect to know about them as it is to know about religion in designing a church."



AAAS Center for Science and Engineering. Architectural perspective of the future AAAS headquarters, viewed from the corner of 12th Street and New York Avenue in Washington, DC.

ous building for a lot less than what we would have paid 5 years ago," says AAAS Chief Financial Officer Carl Amthor, who is spearheading the new headquarters effort. "It's a smart financial move for the association."

It is also an effort that seems to have captured the heart of the building's architect, Henry N. Cobb of the renowned New York firm Pei Cobb Freed & Partners. Cobb says his design was inspired by the words of AAAS member Robert Wilson, a high energy physicist and member of the AAAS committee responsible for choosing an architect. In a memo, Wilson notes that despite the diversity of scientific disciplines,

For Cobb, this meant finding the common ground between architecture and science. "Science is speculative and so is the best art," he says. "You can't have good science, nor can you have good art, without rigorous method and a kind of openness to the unexpected and the unanticipated."

The new headquarters, which should be ready by the middle of 1995, is envisioned not just as a place for association business but as a publicly oriented science center in the nation's capital. Twelve stories and a concourse level will provide about 200,000 square feet of office and meeting space. The top seven floors will

be devoted to AAAS and will include two three-floor atria (to facilitate communication among departments on nearby floors) and a library. AAAS will lease floors three through five to other nonprofit science organizations, including, perhaps, several of the 300 AAAS affiliates. Already 10 groups have expressed serious interest, enough to lease 70% of the non-AAAS space when it becomes available in 1995.

The first floor will include a prominent exhibition area where traveling scientific exhibits from museums around the country could be displayed; a model scientific classroom or "teacher's lab" where educators can learn about the latest educational science technology and exchange ideas with colleagues and students; and a science store where visitors can purchase books and other publications as well as equipment, kits, and other educational materials.

On the second floor, the building's patrons will have access to a

180-seat multimedia auditorium and three formal conference rooms. There will also be a lounge specifically designated for AAAS members.

"I like the idea that if members come to Washington, there will be a place they can call their own," says Nicholson. "It will be comfortable, not grandiose; a place members can have a cup of coffee, read the latest journals, and use the fax." The new headquarters will also be one of the country's pioneer examples of "green" architecture (see sidebar). A showpiece, yes, but a modest one; and one that Nicholson, Amthor, and the AAAS Board of Directors say they are

PAUL STEVENS OLES

taking great pains to ensure will be financed in a prudent and strategic way.

In early 1993, the District of Columbia government authorized AAAS to issue tax-free revenue bonds for the construction of the new headquarters. More recently, NationsBank of DC agreed to provide the essential letter of credit backing the bonds. Amthor says he anticipates that bond sales and other financing strategies (including a capital campaign) will cover the estimated \$69 million cost of construction and interior finishes.

The association's current lease does not run out until 2005, and Amthor says that "judicious planning" requires that sub-

tenants be found to take over the rest of the lease before "one spadeful of dirt is turned at the new site." Fortunately, says Amthor, he is already in serious negotiation with several prospective subtenants, any one of which could relieve AAAS of at least 90% of its current lease commitment. Amthor expects to have subleases signed by the end of the year.

"This building must express the aspirations of AAAS, and at the same time be well received as a normal office building that AAAS could sell profitably if it wanted to move," says Cobb, the architect. So far, say AAAS officials, this dream is well on its way to reality.

An Interview with Architect Henry N. Cobb

Henry N. Cobb of the prestigious architectural firm Pei Cobb Freed & Partners has designed such buildings as the World Trade Center in Baltimore and the new U.S. Courthouse in Boston. Here Cobb talks about his aspirations for the new AAAS headquarters:

Q: How did you link your design to science?

A: What links this building to science is the fact that it is the product of a rigorous thought process, a design based on certain fundamental ideas to which the building remains faithful in all its detail. The key underlying idea is the notion of a diagonal line, which bisects the site and grew out of an analysis of the way in which people will move into and around the site.

Q: What constraints did you face in designing the building?

A: In terms of cost and facilities, this building must serve AAAS programs and members, and not be a bombastic, prideful expression of self-importance. It must express the aspirations of

AAAS and at the same time be well received as a normal office building that AAAS could sell profitably if it wanted to move. These two requirements are completely contradictory. But I have learned that the most interesting and moving works are often the products of conflicting demands. I find this an appealing challenge.

Q: Did the building's location in Washington, DC, influence you?

A: Washington, DC, is the only city in the United States with a mandated building height over the whole downtown. This has produced a kind of civility, but it also has led developers to fill every square inch with a kind of uniform office space.

After people realized how boring this was, they began to produce a false monumentality that is totally anathema to an institution like AAAS that is devoted to science. Because science is about truth, it is not about pretense. I have tried to give this building a distinctive identity without resorting to false monumentality.

What's Good for the Planet Is Good for the Budget

In the best-selling book, he wrote a year before becoming vice president of the United States, Al Gore said that people have become "co-architects" of nature, with the power to both harm and heal the planet. Certainly the designers of the association's new headquarters have taken this observation to heart. The building will not only be more energy-efficient, and therefore more cost-efficient, than previous AAAS headquarters, but will also stand as one of the country's finest examples of the latest in "green" architecture.

Take, for example, the amount of natural light that will be available on the inside. The architects designed

Two 10-story incisions will cut vertically into the building, creating more windowed offices than is possible with a traditionally designed building.

two 10-story incisions that will cut vertically into the building, creating more windowed offices than is possible with a traditionally designed building and providing light for two three-story atria. Also, each office will have ribbons of glass running above the windows along the outside wall. The light from this will sweep across the upper portion of the office, passing through special glazing there into the building's interior. Sensors inside the building will monitor how much natural light is coming in and turn artificial lights on and off as needed.

"As a result," says AAAS Chief Financial Officer Carl Amthor, "our [artificial] lighting requirements will be about 1 watt per square foot as opposed to the more standard 4 watts per square foot."

The heating and cooling system will also be environment friendly—a gas-fired absorption system will use water as a coolant rather than CFC, HCFC, or HFC refrigerants. All carpeting, furniture, and other office materials will consist of nontoxic contents, and only nontoxic adhesives will be applied throughout.

The ventilation system, aided by windows that open to the air outside, will provide 100% fresh air to the building. The air-change rate will be 25 cubic feet per minute; the standard rate is 15 cubic feet per minute. In addition, staffers may regulate the temperature in their own offices thanks to individual thermostats.

Contrary to conventional wisdom about the cost of green technology, "this building is being built for essentially the same budget as a typical office building," says the architect, Henry Cobb. "This is a hard-nosed commercial building, an investment. AAAS is not throwing away money on a monument."

What is more, AAAS Executive Officer Richard S. Nicholson says that the energy savings, besides going easier on the planet, will allow AAAS to cut back significantly on that part of the operating budget each year. Green, it seems, is the color of money, too.

Highlights of the 1994 AAAS Annual Meeting

How effective are environmental accords? Is it ethical to conduct research into the biological underpinnings of sexual orientation? What was the universe like in the first moments of its birth?

To those who attend the AAAS Annual Meeting, the chance to hear the latest research into these and a wide range of other scientific issues is what makes the meeting distinctive and worthwhile. At the same time, choosing from so many topics can be a dizzying challenge.

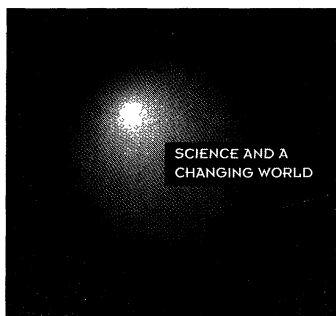
In an effort to provide some focus to the meeting, while preserving its multidisciplinary nature, the 130 sessions and 19 topical lectures at the 1994 AAAS Annual Meeting in San Francisco (18–23 February) will fall into 13 concurrent tracks. Among these are health care reform and medical advances; frontiers in engineering and physical science technology; and science education reform.

In addition, says AAAS Meetings and Membership Director Michael Spinella, "the environmental sciences track is particularly strong this year. It provides timely information and it is one of a number of areas where our interdisciplinary nature helps make the meeting unique."

Flexibility in the 1994 Annual Meeting program is important as well. "We want the meeting to be a place where you can learn about late-breaking scientific issues," says Spinella. For example, a session on the future of particle physics was added after Congress killed funding for the Superconducting Super Collider project last month.

While the meeting ultimately provides a forum for scientists to share their latest research with colleagues, it also serves as a vehicle for communicating science to the public. Scientists may discover a new approach to breast cancer research during a session in the track "Advances in Medicine," while faculty and students

can find out how to use technology to facilitate science and engineering education during a session in the track "Communicat-



ing Science."

Evening lectures, including the President's Lecture on 20 February, will be free and open to the

public, and all lectures and sessions will be accessible to people with disabilities.

Other features of the 1994 meeting:

Seminars. Four one- to three-day seminars are open to anyone for an additional fee. Topics include mapping and modeling the brain; evolution and extinction; eating and health; and extracellular cues that regulate cell behavior.

Public Science Day. The day-long event on 18 February will place hundreds of local K-12 students in the area's universities, museums, laboratories, and industries for hands-on science activities.

Employment Exchange. This service offers a chance for scien-

tific job candidates and employers to meet. The exchange will be open from Sunday, 20 February, through Wednesday, 23 February. To enroll or for more information, contact Jacquelyn Roberts at 202-326-6737. Enrollment in the Employment Exchange is free to AAAS members.

Field trips. For an extra fee, attendees can sign up for trips to Muir Woods, the Stanford Linear Accelerator, the Exploratorium, and places of geological interest in the Bay Area.

The deadline for advanced registration is 24 January 1994. If you have not received your preliminary program or need more information, contact the AAAS Meetings Office at 202-326-6450.

AAAS Electronic Network Supports Persecuted Scientists

A traumatologist in Peru—sentenced to life in prison for operating on two alleged guerrillas—now has scientists from around the world asking after his welfare thanks to a new computer network launched by the AAAS Science and Human Rights Program on 1 November.

More than 200 scientists have joined the AAAS Human Rights Action Network, which provides information on human rights abuses involving scientists, engineers, health professionals, and teachers and students in scientific fields. Cuban science professors and Mexican environmentalists dismissed from their jobs for political activity are among the many persecuted subjects publicized on the network.

Members of the network are asked to join a letter-writing and information distribution campaign directed to U.S. and international officials who are in a position to help persecuted scientists. There is no charge to subscribe to the network, which is accessible through Internet.

"Reports from former detainees, their families, and international human rights monitoring groups confirm that letter-writing has an important impact," says Audrey Chapman, director of

the AAAS Science and Human Rights Program. "It puts governments on notice that their actions are being scrutinized by the rest of the world."

Joseph Birman, chair of the American Physical Society's Committee on the International Freedom of Scientists, agrees.

"This network will permit us to quickly follow up on human rights abuses and help us save lives," he says.

The AAAS network coordinates with other similar international appeals, including Amnesty International, so that responses to specific cases are simultaneously encouraged by a variety of organizations.

You can join the new network by sending the message "SUBSCRIBE AAASHRAN [first name,

last name]" to the electronic mail address "LISTSERVE@GWUVM.GWU.EDU." Subscribers will receive background information about persecuted individuals, names and addresses of U.S. and international officials with jurisdiction over each case, specific facts and concerns to cite in the correspondence, and sample letters of inquiry and appeal.

For more information about the AAAS network, contact Morton Sklar of the Science and Human Rights Program at 202-326-6799.

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