

After A-Smasher News <sup>WSJ</sup>  
3-23-66

# Hopeful Stoughton To Wait on Plans

By STEVEN E. HOPKINS  
(Assistant State Editor)

STOUGHTON — The news Tuesday that Stoughton was included among the final six contenders for a \$375 million Atomic Energy Commission (AEC) atom smasher was received here with mixed emotions.

The search by the National Academy of Sciences was started with a list of 85 proposed sites. Stoughton residents were hoping their luck would continue but they aren't making any plans — yet.

"The Stoughton area is fortunate to have been included in the final selection," said Mayor Liniel Cooper, "and we hope we will be the winner in the final analysis."

"It's a little premature for city planning," he added, "but the city is in an ideal position to expand its facilities if the plant is located here."

The corporate population of Stoughton is about 6,500. Cooper predicted that the construction of the smasher here would be only the beginning of an economic and population growth.

"It's possible that the smasher would form a nucleus that would attract related industry to the Stoughton area," Cooper said. "I only hope our luck holds out."

Obed Norem, Stoughton superintendent of schools, said it was too early to determine the effect that locating the plant here would have on the school system.

"I would be most concerned about the construction period and the temporary impact children of families involved in construction would have on the school system," Norem said. "Our biggest problem would be in surviving the initial impact, but I believe we have the facilities to handle it."

"In any event, I think the location of the plant here would be wonderful for the general good of the area."

Walter Eggleston, a Stoughton

insuranceman and one of the city's most active promoters, expressed the hope that Stoughton would be the final choice and predicted that the plant and the people it would employ would be a great asset to the community. "We only hope there will be a few Norwegians among them," Eggleston said.

In nearby McFarland, Village President Oscar Sperle said, "We've got a real site for the atom smasher here. There's a lake (Kegonsa) close by and a limestone bed for all the property they'll require."

"There also is the University of Wisconsin here with its research people and engineers, and the Wisconsin men in our space program (James Lovell and Donald Slayton) are showing the world the kind of people we produce in the Midwest."

"There are a lot of empty houses in town and if we get the atom smasher it might help fill them up," said First ward Stoughton Ald. John Bostrom.

Another Stoughton alderman Palmer Jacobson, a service station operator, said, "I'm really looking forward to it. It's going to make this town a boom area. It won't be a small community any more if we get it."

Said Alvin Gjertson, a Dane County Board supervisor and a retired Stoughton auto dealer, "I've heard about it for so long and there's been so much flurry about it that my temperature has gone down a little."

"It'll be a great thing for certain people and not so hot for others. But we always like to improve things. Stoughton likes to grow as well as any other community."

# Congressmen Hail Stoughton Chances

By KENNETH SCHEIBEL  
(State Journal Washington Reporter)

WASHINGTON — Wisconsin's delegation to Congress Tuesday was jubilant with the publication of the announcement that Stoughton was among the six remaining sites for consideration for a \$375 million atom smasher.

"It is great news that Stoughton is still in the competition,"

said Sen. William Proxmire (D-Wis.). "It is most essential that the accelerator be located in the Midwest in view of the tragic brain-drain from our area."

Proxmire cited the concentration of government-financed facilities on both coasts as a major reason for the Midwest's loss of the Ph.D's it educates.

Said Sen. Gaylord Nelson (D-Wis.): "That is wonderful news and a great tribute to all the people who have worked so hard in making this presentation in behalf of Wisconsin."

"This keeps us in the running," said Rep. Vernon Thomson (R-Richland Center). "I'm glad to see that we're still in consideration when most others have been eliminated."

Rep. Robert Kastenmeier (D-Watertown) said he was "delighted by the announcement." He said the selection was a great tribute to the people who prepared and refined Wisconsin's application, but warned that a final site selection and a funding problem were two obstacles remaining in the way.

Rep. Melvin R. Laird (R-Marshfield) expressed elation but predicted "political tugging back and forth in the coming months, with President Johnson delaying a final decision until after the November elections."

He stressed the necessity for Midwestern unity and said, "An all-out effort must be made by Wisconsin to get Minnesota, Iowa, and North and South Dakota working together for the Wisconsin site."

MBER 13, 1966

## UW To Purchase MURA Facilities

The University of Wisconsin won state approval Monday to buy the Midwestern Universities Research Assn. (MURA) facilities near Stoughton.

MURA is scheduled to be disbanded next June after 11 years of atomic research. The Stoughton site remains one of six finalists in national competition for a \$375 million atomic accelerator.

"Even if the big accelerator doesn't come, we still want this property, these buildings, these people, because they're useful for university industry research," Fred Harvey Harrington, University president said.

The State Building Commission, by a unanimous vote, gave the university the authority to spend \$448,200 to acquire "the physical assets" of MURA.

## MURA Project Purchase Backed by UW Regents

MILWAUKEE — Purchase of the Midwestern Universities Research Assn. (MURA) land, buildings, and equipment was approved here Friday by the University of Wisconsin Board of Regents.

University Pres. Fred Harvey Harrington said the purchase became necessary when it was obvious that MURA would have to be dissolved when the atomic accelerator hoped for was not financed a year ago.

The land "could be useful to the university and the state if the accelerator doesn't come to Wisconsin," Harrington noted.

Purchase of the land would keep the site in the race for the accelerator, Harrington said, "and we don't want to lose the people there."

The MURA laboratory would become the University Physical Science Laboratory, Harrington said. Prof. Frederick Mills will continue to direct the laboratory and employment offers will be made to all other MURA personnel, Harrington explained.

The cost of the land, buildings, and equipment is \$448,200, Harrington said. The lab is located on 240 acres of land north of Stoughton.

*Read found their in Sunday's Journal.*

## State Board Endorses MURA Site Purchase

Journal Madison Bureau  
Madison, Wis. — The governor's board of economic development Friday gave a qualified endorsement to a proposal that the University of Wisconsin purchase the Midwestern Universities Research association facilities near Stoughton.

The board had recommended the purchase last January. Friday it said UW should purchase the site if it could operate it without any new tax funds.

MURA is disbanding and will discontinue its high energy physics research at the Stoughton site by July 1.

It would cost an estimated \$500,000 to acquire the 270 acre site and facilities and it would cost about \$1 million a year to operate it, the board said.

Much of the operation would be financed through grants.

The board recommended that if UW acquired the facility, it should consider diversifying operations with research that would more directly help Wisconsin industries.

It also suggested that consideration be given to reserving space for construction of research and development facilities by private industry.

H. B. Groh, president of the Wisconsin Telephone Co. and board chairman, said the site could be the nucleus of an industrial park. The Wisconsin

Alumni Research Foundation might want to participate in the project, he added.

## MURA Project Impact Is Noted

Journal Washington Bureau  
Washington, D. C.—President Kennedy's science adviser Friday told 15 midwest senators that the administration understands the importance of the proposed Wisconsin atom smasher project to the economy of the midwest.

In a letter to Senator Nelson (Dem., Wis.) Jerome Wiesner, promised a "sympathetic review" of the senators' contention that the 150 million dollar project planned for Stoughton would produce economic as well as scientific benefits.

The project was proposed by MURA, the Midwestern Universities Research association.

Wiesner is about to make a decision on whether to include funds for the project in the 1965 budget. He said, however, that the high intensity accelerator at Stoughton should not delay approval of a 250 million dollar high energy accelerator to be ready for construction in 1967.

That's what the midwest congressmen are worried about. The other accelerator would be built on the west coast, which is already draining scientific and engineering manpower away from the midwest.

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*Journal*

## MURA Man Hits Science Policy

Madison, Wis. — UPI — The technical director of the proposed atomic accelerator project at Stoughton has charged the federal government with a "deplorable deviation" in its scientific policy, one which he said had apparently killed the project.

Donald W. Kerst, physics professor at the University of Wisconsin made the charge in a letter to Science, a journal published by the American Association for the Advancement of Science.

"The fate that is apparently about to overtake the Midwest Universities Research Association (MURA)," Kerst wrote, "represents a deplorable deviation from a policy our government has hitherto followed with great success."

He said the government had had a "policy of encouraging and financing independent groups of scientists who have taken the initiative in scientific pioneering, rather than confining its support to its established institutions in the hope that these would foresee all possibilities and meet all needs."

Kerst referred to action of the atomic energy commission which on Jan. 20 rejected the proposed 150 million dollar accelerator. At that time it was disclosed that funds for the Stoughton project would not be included in President Johnson's fiscal year 1965 budget.

"The principle of backing the competent pioneers has not been applied to MURA," Kerst said. "While others throughout the world looked to MURA to carry a major share of the re-

sponsibility for the United States high energy program, constituted authority has wished several times in past years that MURA would go away."

Kerst said the budget "is being used to stop the enterprise. As a result the country may lose an energetic scientific enterprise and disperse a talented team. It will be a discouraging thing for enterprising scientists in the future and a dangerous thing for the progress of our country's science if this is allowed to happen."

## Scientists Inspect Site at Stoughton for Atom Smasher

A team of scientists Friday inspected a site at Stoughton which has been proposed for construction of a \$348 million atom smasher, to be the world's largest.

The visit by the scientists confirmed that the site proposed by the University of Wisconsin was on a list of 25 to 30 the Atomic Energy Commission (AEC) had selected from the 126 applications which poured in seeking to have the giant complex located in various parts of the nation.

The AEC had turned over the shortened list of proposed sites to the National Academy of Sciences, which is conducting the inspections. The academy is expected to report its findings back to the AEC, which is to send its choice to a joint congressional committee by Jan. 1.

Neither the AEC nor the academy has divulged the complete list of sites. An AEC spokesman in Washington said that the list sent to the academy is not final and that additions likely will be made.

The proposed Stoughton site, 6 miles south of Madison, contains 5,446 acres of farm land. It is west of Highway 51 near Lake Kegonsa.

## Keith Resigns MURA Position

Marshall W. Keith, 2221 Fox ave., an official of the Midwestern Universities Research Assn. (MURA), is resigning to become director of an agency of the University of Minnesota, it was announced Saturday.

Keith is now an associate director for administration and engineering of MURA and is treasurer of the MURA Corp., based in Stoughton. He has been with MURA since 1956.

Keith said his resignation is not an indication that MURA will not receive a \$280 million atomic energy complex from the federal government. MURA and many other organizations have for a long time been seeking the government grant.

Keith will head a new agency for the University of Minnesota, the Technical Utilization Program, whose purpose is to make the results of research projects carried out by the university available to industry.

The program is financed by a \$100,000 grant from the National Aeronautics and Space Administration and by funds from participating industries.

## AEC Team Views Stoughton Site

# UW's Physicists Help Bid for Atom Smasher

By DAVID BEDNAREK  
(State Journal Education Writer)

Wisconsin's strongest card in its bid to get the Atomic Energy Commission's proposed \$3 million atom smasher located here may be the University of Wisconsin's high energy physicists.

This internationally known group is one of the country's main users of the kind of facility proposed by the commission and has already scored impressive successes through the use of similar though smaller machines.

While the ultimate decision on the location of the accelerator will be based on political factors, the existence of a group such as the university's makes Wisconsin's case a strong one.

The state's case is also enhanced by the presence of the Midwestern University Research Assn.'s (MURA) accelerator builders.

Since the Atomic Energy Commission (AEC) announced plans to build the atom smasher, more than 100 communities offered sites for it.

The commission has narrowed the number of possibilities down to 85 sites in 43 states but only six or seven of these—including the one near Stoughton — are being considered seriously.

### Checking Site Today

A four-man survey team from the AEC is in Stoughton today looking over the proposed site.

The team arrived in Madison Tuesday night and will hold a press conference in Gov. Warren Knowles' office at 4 p.m. today before returning to Washington.

The Stoughton site, which the state has offered to buy for the

commission, consists of 5,466 acres along the west side of Highway 51, south of Madison, and near Lake Kegonsa.

A decision on the site is expected next year.

When made, it will mean to the community which gets the nod at least a \$300 million building program lasting seven or eight years, and annual operating costs of some \$60 million.

The smasher itself would employ about 2,300 scientists and scientists would visit it each year to perform experiments.

The importance of a nucleus of high energy physicists such as the university's to a project of this kind cannot be overemphasized.

William D. Walker, chairman of the physics department at the university, said it might take two or three years longer to complete this kind of facility if the staff of physicists has to be assembled from scratch.

He said the building of a cyclotron recently in Texas, without the aid of an already existing group of accelerator builders has been a real problem.

"There was no one around conversant with the problems of building a cyclotron and no one around to build it," he said.

Walker, who used to teach at Texas' Rice University, said there was not a single high energy physicist in all of Texas as far as he knows.

### Rate With Top

Although comparisons of university departments are difficult at best, Wisconsin's high energy physicists rate among the top.

The group here has four full professors, two associate professors, and two assistant professors, in addition to the 10 or so post-doctoral fellows, and 40 to 50 graduate students.

The Wisconsin group was among the first to discover compounds of fundamental particles. The university team demonstrated that the particles, once separated, can be put together in a certain way to bind and form new compounds.

The same group along with MURA engineers developed the hydrogen bubble chamber which was shipped to the Argonne National Laboratory near Chicago in 1963.

This apparatus has become one of the favorite tools of physicists around the country in their study of high energy particles.

### Others Follow UW Pattern

The university also developed the pattern of having high energy physicists operate at distances from accelerators.

Wisconsin physicists set up experiments here at the university and then move to the site of an accelerator for two or three months to conduct the experiment. Once done, they return to the university to analyze their data.

During the past 10 years, other universities have followed this pattern developed by Wisconsin.

Wisconsin's high energy physicists have also gained enough renown to get more than their share of invitations to international conferences.

Walker said four members of the department recently participated in the Oxford conference on high energy physics. Wisconsin was the best represented United States university at the meeting.

Washington Report

# Midwest High in Favor for Atom Smasher Site

By KENNETH SCHEIBEL

(State Journal Washington Reporter)

WASHINGTON—A reporter poking around at the Atomic Energy Commission (AEC) in connection with the proposed \$300 million atomic accelerator gets one strong impression about where it might be located.

At the moment, the Midwest is in high favor—if the signs are read correctly.

### Plenty of Politics

No one can foretell where the prize is to be located because there are many imponderable in the picture from a physical and practical standpoint.

(A list of proposed sites, recently narrowed to about 80 locations, still includes an area near Stoughton sponsored by the University of Wisconsin.)

There's also the question of the politics, and, despite disclaimers, there is plenty of "politicking" going on behind the scenes.

One also must accept the fact that the final decision will have to be cleared with President Johnson. He obviously will go over the whole thing with a fine-tooth comb.

### Dialogue's True

In spite of the many ramifications the men in high places who are grappling with this decision have let drop some of their own personal views. In the end, these may prove influential, if not decisive.

Listen in on the conversation between a visitor and a man in high councils in Washington. His name is fictitious, but not the dialogue.



PRESIDENT JOHNSON

... the final decision ...

"Dr. Blank, what have you concluded in your search for sites?" a visitor inquires.

"We are amazed at the amount of land available to us for the accelerator — especially near big cities!"

"What's so surprising about that?"

"Well, we didn't think there was much land like that left. But now we know there is."

"What is the significance of this?"

"It means that we can put the accelerator near a big city if we want to—and be sure there will be transportation, enough room for the site, and an excellent chance of having top universities nearby."

"It means a lot to have qualified scientists available to AEC?"

"It certainly does."

### His Own Favorite

"Will the hue and cry from some areas of the country who feel they have been short-changed on government contracts have anything to do with where the new atom smasher is put?"

"No, as far as AEC is concerned. We are going by our criteria."

"Well, speaking for yourself—what is your own favorite location at this point?"

"Well, I have one. The Chicago area—it's fine."

That was one man speaking for himself. Whether this influential official will prevail remains to be seen. But the Midwest ought not to write off its chances of copping the big prize this early in the game, as some hand-wringers already are doing.

The ballgame isn't over by any means.

# Synchrotron gets start soon

DUNN — Groundbreaking ceremonies for the "Aladdin" synchrotron radiation laboratory in the Town of Dunn will begin at 2 p.m. Saturday.

Named after the mythical magic lamp, the \$1.24-million Aladdin machine will produce powerful beams of ultraviolet light to be used for experiments by scientists from the University of Wisconsin-Madison and elsewhere.

It will be housed in a two-story building just south of the Physical Sciences Laboratory, 3725 Schneider

Road, rural Stoughton.

The Aladdin machine consists of a stainless steel pipe 4 inches wide and about the length of a football field. Emptied of air and bent into a square shape with round corners, the pipe will function like a race course for electrons traveling at speeds very close to the speed of light.

When nearby magnets force the electrons to turn a corner, they react by producing a beam of high-energy ultraviolet light.

The light, almost impossible to ob-

tain in any other way, will be directed through or onto numerous forms of matter like gasoline, wood or even household cooking oil. Scientists will then record the wavelengths and energy levels of the light to determine the molecular makeup of the masses.

Scientists and researchers from throughout the country will use the facility after it opens in January 1980.

A \$2.9-million grant from the National Science Foundation was used to finance part of the Aladdin project. Another \$540,000 was provided by the

Wisconsin Alumni Research Foundation and \$200,000 was provided by the state toward the project.

The 22,000-square-foot laboratory was designed by Martinsons/Zeck Inc. of Madison.

Once open, Aladdin will be the largest synchrotron radiation machine used for ultraviolet light research in the United States. A similar facility will open in about a year at the Brookhaven National Laboratory, New York.

# A-Smasher Cards Put on Table

By WILLIAM WITT  
(State Journal Staff Writer)

A massive report said to involve reams of material is scheduled to be presented Monday to the Atomic Energy Commission (AEC) in Wisconsin's bid for the proposed world's most powerful atom smasher.

Key provisions will be:

The cost estimate by the Wisconsin Power and Light Co. (WPL) to supply power to the Stoughton site for the 200 billion electron-volt (BEV) machine;

An airline shuttle service between the site and Chicago, location of the big Argonne National Laboratories atomic research complex;

And statutory provision, for condemnation by the state which would involve ownership of some 5,000 acres of farmland by 183 individuals who have been described as concerned lest they be forced into selling at lower-than-market price.

Harry F. Miedema, publisher of the Stoughton newspaper, last month during an onsite visit by the AEC said that the landowners were not 100 per cent willing to sell.

He told of a community meeting at which area farmers

voiced concern lest their farmland be taken through condemnation with only token payment.

He said, "The farmers questioned whether they will have \$100-an-acre farmland."

He assured the AEC, however, that "The people are anxious to cooperate."

The AEC has requested that remarks by Gov. Warren F. Knowles, who talked about condemnation procedures in the state in his presentation to the visiting team here, be forwarded with the compiled report due Monday.

## Pledges Support

Remarks made by University of Wisconsin Pres. Fred Harvey Harrington made at the same occasion, were also requested. Harrington pledged the support and cooperation of the university community with scientists at the proposed Stoughton site, where the Midwestern Universities Research Assn. (MURA) presently has an experimental atom smasher.

The AEC also requested information on site geology, topography, ground water, weather, auxiliary facilities, and civil rights.

Reports are being compiled which answer these and other

questions from the university central administration, and departments of physics, meteorology, and planning and construction for the Madison campus. Other departments probably are involved.

In addition to the WPL report on power rates and effect of running the long power line to the site, the State Highway Commission, Public Service Commission, and Industrial Commission are among agencies also submitting reports.

## Due Monday

The combined reports are scheduled to be hand carried by jet to Washington to arrive in time for presentation. The AEC had set a May 15 deadline for reports on revised specifications from all sites contending for the atom smasher, but the date falls on a Sunday, giving a day's grace.

Other contenders submitting reports are Denver, Colo.; Ann Arbor, Mich.; Brookhaven, N.Y.; Sacramento, Calif.; and Weston, Ill.

The original WPL power bid submitted about a year ago was cited by the AEC as warranting a second look with a view to lowering it. Lower power requirements in the latest specifications are expected to enable the WPL to submit a lower rate bid.

# Charades Seen in A-Smasher Choice

By ROY MCGHEE  
(United Press International)

WASHINGTON — An influential member of the Joint Congressional Atomic Energy committee said Tuesday the Atomic Energy Commission (AEC) was playing a game of charades in the political ticklish selection of a site for a \$300 million atom-smasher.

"The AEC and the National Academy of Sciences have no intention of picking the site," said the lawmaker, who asked that his identity not be revealed. "They will fiddle around until January, and then leave the actual selection up to the joint committee."

The announced procedure is that the National Academy will reduce a list of 85 possible sites to a half-dozen or so. The AEC will then make the final selection of location for the much sought project.

(One of the 85 sites still in the running is one near Stoughton, Wis., a site that is being pushed by University of Wisconsin and state officials.)

"They don't dare do it that way. That project hasn't even

been authorized yet," the lawmaker told United Press International.

The atom-smasher, a 200-billion-electron-volt accelerator, will be the chief component in a high-energy physics laboratory.

Competition is fierce for the project because, in addition to the millions of dollars it will take to build, it will employ an estimated 2,000 high-salaried scientists and technicians.

The project must first be authorized for construction, however, by the Atomic Energy committee. After authorization, it will be eligible for congressional appropriations for funding.

"The AEC will send over a list of about six sites and pretend publicly these are the best and that scientifically they are about

equal. At the same time, I predict the commissioners will whisper to us that they really prefer Berkeley, Calif.," the lawmaker said.

He said he thought the San Francisco bay area site would be the choice of the commission, despite one of the basic AEC requirements that the area have an earthquake-free history.

The San Francisco area was one of three in California left on the trimmed-down list of 85 sites. The original list contained more than 200 locations.

A California site would also have strong backing in the joint committee. Rep. Chet Holifield, (D-Calif.) is the panel's current chairman and will be next year.

But UPI's informant predicted the AEC's final list will also include a site in Washington state, since Sen. Henry M. Jackson (D-Wash.) is a member; a Tennessee site because Sen. Albert Gore (D-Tenn.) is a member;

a Midwest site because Reps. Melvin Price (D-Ill.) and John B. Anderson (R-Ill.) are members; a Colorado site because Rep. Wayne N. Aspinall (D-Colo.) is a member, and a Southern site because Sen. Richard B. Russell (D-Ga.) is a member.

"It undoubtedly also will include a Texas site," he said. "In addition to the influence at 1600 Pennsylvania ave. (the White House), you've got the chairman of the appropriations committee to think about." Rep. George H. Mahon (D-Tex.) holds that post, and his home town of Lubbock is still in the running.

Procedures used by the AEC in selecting the site have come in for extensive criticism from Capitol Hill.

"They've been trying to be all things to all men, to make everybody happy. They will throw the final selection to the committee. And man, what a fight that's going to stir up," the lawmaker said.

# Budget Request Made for MURA Accelerator

Journal Washington Bureau

Washington, D. C. — A 150 million dollar request to construct a high intensity accelerator at Stoughton, Wis., has been made by the atomic energy commission to the bureau of the budget, Representative Laird (Rep., Wis.) disclosed Tuesday.

However, the move does not signify final approval of the accelerator, proposed for construction by the Midwest Universities Research association (MURA).

The MURA project has been included in the AEC budget request for the fiscal year 1965, which is now being considered by the budget bureau.

The bureau could eliminate the project from the budget or it could be knocked out at a later stage.

Laird said he believed that the decision on the MURA project still had not been made at the White House level.

"When the AEC makes its requests to the budget bureau, it's just like sending a letter to Santa Claus," Laird said. "It's their shopping list for 1965."

The GOP congressman said he did not think that the MURA project had "the full all-out backing" of Jerome Weisner, President Kennedy's science adviser, or Glenn T. Seaborg, AEC chairman. Budget bureau approval would indicate White House approval.

If the budget bureau does approve the MURA project funds, it is likely that it will authorize 45 million dollars for fiscal 1965, Laird said, and then in later years approve the rest of the money needed.

A panel of scientists that originally recommended the MURA project estimated its cost at 148 million dollars. The AEC estimate now is 150 million dollars. Laird said the total cost could ultimately reach 170 million dollars.

The MURA accelerator would produce an almost continuous stream of atomic particles at an energy of 12.5 billion electron volts (Bev) for research purposes. Existing machines reach or surpass this energy level, but accelerate so few particles at a time that finding a rare atomic event might take a lifetime.

## Cocktail Party for Kastenmeier Is Questioned

Protests of political pressure against backers of Rep. Robert Kastenmeier (D-Watertown) were received Saturday and Sunday by The Wisconsin State Journal.

The complaints came from employes and associates of Midwest Universities Research Assn. (MURA) near Stoughton. They received invitations to a cocktail party for Kastenmeier and his wife and were asked to contribute \$5. The persons told The State Journal they questioned the "propriety" of the invitations.

The hand-written invitations said: "Come and meet Dorothy and Bob Kastenmeier 4:30-7 p.m. Cocktails, Contribution: \$5. 1816 Vilas ave. They were signed "Mary Louise Symon."

Mrs. Symon is the wife of Keith R. Symon, a University of Wisconsin physics professor and is listed as a visiting professor at MURA. There are about 96 persons on the MURA staff.

MURA is a non-profit corporation formed by 15 universities for the purpose of undertaking research projects requiring more staff and space than any one school can provide.

Funds for a \$150 million atom smasher at the site of MURA failed to be included in the federal budget recently.

## MURA Fund Is Doubled by House

(State Journal Washington Bureau)

WASHINGTON — The House Thursday authorized doubling of funds requested by the Administration for the Midwest Universities Research Assn. (MURA).

By a 339 to 3 vote, the House approved the 1965 Atomic Energy Commission (AEC) authorization bill including the MURA provision.

Rep. Robert Kastenmeier (D-Watertown) said the House vote "virtually assures that MURA will have the additional funds for its research and accelerator design studies."

### Asked \$500,000

The Administration originally had requested \$500,000 for MURA. But Kastenmeier and Sen. William Proxmire (D-Wis.) asked the joint Atomic Energy committee to boost the authorization to \$1 million. The House backed up the committee's recommendation.

"The significance of Thursday's House action is that MURA scientists will be on nearly equal footing with the other major laboratories in working toward the next big accelerator construction program, slated for the late 1960s or early 1970s," Kastenmeier said.

He noted that the joint Atomic Energy committee cut back funds for similar works at other laboratories by \$1.2 million.

### Get Fair Share

Kastenmeier said that if the Senate concurs with the House action MURA scientists will get "a fair share" of the 1965 accelerator design budget. He said the AEC estimates will have more than \$27,000 per scientist for its work.

The headquarters of MURA are at Stoughton, Wis.

He said this was not a generous allocation of funds "but this is not a year of federal generosity for nuclear research."

# MURA's Director May Resign Post

Bernard Waldman, 5702 Anchorage ave., director of the Midwestern Universities Research Assn. (MURA), is considering resigning, he said Monday night.

But Waldman emphasized that "at this point nothing is definite." Should Waldman resign, his ac-

tion might be a sign of the expected breakup of the MURA research team, once termed the best known atom smasher designers in the world.

MURA's efforts to develop a high energy research center at Stoughton were frustrated for the third time in 10 years late last year

when President Johnson eliminated funds from the Atomic Energy Commission's (AEC) budget, which would have provided \$155 million for the project.

The MURA project will be moved to Argonne, Ill., national laboratory soon, Waldman said. He said that the AEC has provided funds for physicists to carry on their work for the next year



WALDMAN

and suggested that most of the physicists will stay for that time.

"But after that, who knows? We've said for a long time that if we don't get any encouragement, we're going to break up."

Waldman said he doesn't think there is any chance that the project will ever get an accelerator of its own.

"It's a difficult problem for us. There's no goal to hold the staff together. But a large number of our people are going to stay for the year."

Waldman has been on leave from the University of Notre Dame for four years. MURA's staff is composed of personnel from 15 Midwestern universities, including Wisconsin.

The funds for the project had reportedly been included in President Kennedy's budget, but were cut in the economy movement that the Johnson Administration brought to the White House.

# UW Granted Role in AEC Chicago Lab

From page 1, column 4

tory subcontract. MURA directors, who met in Chicago Monday, approved the Argonne proposal but declared that the organization at Stoughton would continue its activities indefinitely.

The Argonne laboratory has in the past paid some attention to the recommendations of an advisory group of 33 schools and research institutions called Associated Midwestern Universities. All the MURA schools belong.

There has been feeling among physicists, however, that the University of Chicago maintained a stranglehold on Argonne programs and policies. The new organization would break Chicago's grip.

There are unsolved problems in the new tripartite contract proposal. A key one is, who hires staff? Chicago and the AEC are said to favor leaving all personnel under Chicago's control. The other schools are said to favor allowing the new

university group to control the scientific staff.

The Williams committee left the personnel question open, to be worked out in contract negotiations.

"We are trying to pour oil on troubled waters, rather than continue the present strained relationship," one spokesman said.

Formation of the new university group will begin soon. Prospective members hope to be ready to take over their Argonne laboratory function when a new fiscal year begins July 1.

# UW Granted a Share of Control at Argonne

By HARRY S. PEASE  
Of The Journal Staff

Midwestern universities, including the University of Wisconsin, gained a major share Wednesday in control of the atomic energy commission's huge Argonne national laboratory near Chicago.

The commission, meeting in Washington, approved in principle a proposal that policies and programs of the laboratory be set by a corporation to be formed by about 15 schools in the area.

The AEC itself, as the funding agency, will be a major participant in policy planning.

The University of Chicago, which now administers the laboratory under an AEC contract, will continue as operator, but its policy making role will be subordinated to the new university group.

## Study Group Named

The new plan grew out of the losing battle fought by the Midwestern Universities Research association (MURA) two years ago for a giant atom smasher near Stoughton.

At the time he turned down MURA's proposal, President Johnson appointed a committee of scientists and university administrators to study the role midwestern schools should have in high energy physics research at government facilities.

It was this committee, led by John W. Williams, which proposed the revision in control of Argonne. Williams, a University of Minnesota physics professor, is a former research director of AEC and atomic energy commission member.

About 15 schools are to be

members of the new Argonne group. MURA has 15 major university members. If the memberships are not identical, they are bound to have a wide overlap.

## "Streamlining" Seen

The new arrangement would clear the way for some future "administrative streamlining" in which MURA's high energy physics research could be included with Argonne's without reopening the wounds of the accelerator controversy.

MURA's high energy physics research is now carried on in part under an Argonne labora-

Turn to page 14, column 5

*McWhorter*  
Journal

# New Hope for MURA Seen by Lawmakers

## Committee Will Ask \$500,000 More for Staff, Kastenmeier, Proxmire Say

Journal Washington Bureau  
Washington, D. C. — New hope for the atomic accelerator plan of the Midwest Universities Research association was reported here Thursday by Senator Proxmire and Representative Kastenmeier, Wisconsin Democrats.

They announced that they had been assured that an increase in funds from \$500,000 to \$1,000,000—which they hope will be enough to keep the MURA staff going for another year—would be recommended by the joint congressional committee on atomic energy.

It had been believed that the \$500,000 recommended by the

budget bureau for fiscal 1965 was for closing down the 10 year old MURA staff operation at Stoughton, Wis.

The joint committee will be working on the atomic energy committee budget into next month. Kastenmeier said that the increase for MURA had the support of Glenn T. Seaborg, AEC chairman.

### Funds Denied

MURA, composed of representatives of 15 midwestern universities, failed to get funds to start construction of a 150 million dollar atomic accelerator at Stoughton because of budgetary restrictions imposed by President Johnson and divided opinion in the scientific community.

MURA's annual operating budget has been near two million dollars. Proxmire said he had been told by Bernard Waldman, MURA director, that \$500,000 would not be enough to keep the staff together.

Kastenmeier said he continued to see some hope in the fact that the Stoughton site still had not been ruled out, although MURA agreed in January to work with the Argonne national laboratories, Lemont, Ill., in developing another type of accelerator.

### "Stave Off Disaster"

Proxmire said the committee decision would "stave off imminent disaster for the great scientific MURA team."

"The action of the joint committee is no smashing victory for MURA," Proxmire said. "It does, however, keep our hopes alive. We may now be able to win the survival of this top group of midwest scientists as a team."

## MIDWEST MUST 'GET TOUGH'

### Laird Acts on MURA Project

A "get tough" effort headed by Rep. Melvin Laird (R-Marshfield) has put the Johnson Administration on notice that the Midwest will not take the loss of the MURA atom smasher project at Stoughton without counteraction.

Laird, ranking Republican on the House Appropriations committee's health sub-group, said it is time for the Midwest to get tough on the Administration's requests for special coastal projects. Laird said that it was necessary to dramatize that the Midwest is getting blanked while 84 per cent of all federal research money is going to the East and West coasts, including Texas.

Laird has used his influence on the Appropriations committee to roadblock several special requests by the Johnson Administration, including an environmental health research center at Beltsville, Md. Laird's subcommittee also turned back a water pollution control laboratory scheduled for Boston.

Four of the five subcommittee members are from the Midwest, and they are using their position effectively. Laird's tough action is necessary because the Administration says it is aware of the Midwest's problem but apparently will not change its ways. Recent released testimony on the Beltsville project illustrates the point.

Laird demanded that Secretary of Health, Education, and Welfare Anthony Celebrezze justify the contin-

ued location of research projects in the East to the detriment of the Midwest. He couldn't do it to Laird's satisfaction.

The Wisconsin congressman told Celebrezze that the University of Wisconsin turned out more students with doctorate degrees than any other university in the U.S., but that they weren't putting their talents to use in Wisconsin or the Midwest.

"If you look at the record of the flow of those Ph.D.'s, you will see where they are going. This is our problem.

"They are being attracted, 78 per cent of them, into federally financed research. A very thorough study has been made of this, and that research work is in the coastal states," Laird said.

He told Celebrezze that there are more Wisconsin graduates working in civil service in Washington than any other university.

"We don't need any more encouragement," Laird said. "We are turning them out at a rapid rate, so much so that we need places in the Midwest for them to continue in their advanced research work. You do not understand that point," he said.

"I understand it perfectly well," the Administration spokesman said.

If the Administration "understands it perfectly well" but does nothing, it's time for the Midwest to put its foot down on coastal projects. Laird's action is the only thing that is really understood in Washington.



## States Continue To Vie for Prize

# A-Smasher Race Still Wide Open

By FRANK CAREY  
(Associated Press Science Writer)

WASHINGTON — It's still a wide-open race for almost every state to land what one governor terms "the scientific prize of the century," a proposed \$348-million atom-smasher machine.

And as the government announced only a modest carving down of original site proposals, the frenetic contestants vie for a device whose construction hasn't as yet been authorized by Congress, to say nothing of appropriating the millions it will cost.

But officials of the Atomic Energy Commission (AEC) indicated they hope to include an initial request for construction funds in the budget for fiscal year 1967—and to make a final site selection by next February.

The AEC, after months of study, announced it has selected 85 proposals for further evaluation from among an original 126—

the latter representing more than 200 sites in all states except Alaska, Hawaii, Delaware, Vermont, and New Hampshire. New Hampshire teamed up with Maine on a joint proposal for locating the big machine at a site in Maine near the New Hampshire border.

The reduced list still includes locations in 43 states, and thus the months ahead loom as cliff-hangers for survivors in the quest for what Gov. Roger D. Branigin of Indiana has termed the "scientific prize of the century."

A Republican congressman, Rep. Craig Hosmer of California, termed the AEC's site selection methods so badly bungled it should start all over and a commission official denied a report published in Houston, Tex., that only 30 or 35 sites were actually being considered.

(One of the sites is Stoughton, Wis. It is sponsored by the University of Wisconsin.)

The proposed device — whose acquisition would mean a rich payoff in payrolls and prestige for the community landing it — is technically known as a 200-billion electron-volt "proton accelerator."

It would be the world's largest and most powerful atom-smashing machine. To be shaped like a giant merry-go-round, nearly a mile in diameter, it will require eight years to build and cost about \$60 million a year to run. Approximately 2,300 scientists and other technicians will be needed to run it, and about 1,000 more are expected to visit it yearly to perform experiments.

The monstrous machine is seen as science's most powerful weapon for exploring the fundamental secrets of nature. That's a quest which proponents of atom-smashing machines say might eventually have a rich practical payoff, from developing new sources of

energy to making new advances in medicine and even in weather control.

The AEC announced it has referred the list of 85 proposals to a special site-selection committee of the National Academy of Sciences, headed by Dr. Amenuel R. Fiore of New York.

It will be the committee's job to pare the list to some three or four from which the AEC—presumably with White House concurrence—will make a final selection.

For weeks, AEC spokesmen had been saying the commission expected to carve the original list down to about 30. But one said Wednesday that the furnishing of supplementary information by various contestants left the commission with 85 proposals that met the AEC's basic criteria for site selection.

The AEC said the academy committee already has started

sending site-inspection groups to visit some of the proposed locations.

It was disclosed the AEC has turned over the entire 126 original proposals to the committee. But a high commission official told a reporter that, as regards the 41 proposals not included in the AEC's priority list, "It's not likely that any further information would be forthcoming that would help them get back in for consideration."

# Atom-Smasher Sites Trimmed; Stoughton Remains in Running

WASHINGTON (UPI) — The Atomic Energy Commission (AEC) made the first tentative cuts in the list of sites for a proposed \$300 million atom smasher Tuesday — and the Stoughton, Wis., site remained in the running.

The AEC, treading gently in the politically sensitive selection, struck 41 sites from the list of 126 it received in 46 states.

One of the 85 remaining, the UPI learned, was the one near Stoughton, Wis., proposed by the University of Wisconsin.

(The site has the backing of Gov. Warren Knowles and the Legislature. University Pres. Fred Harvey Harrington has personally entered into the fight for it.

(The site is 6 miles south of Madison, west of Highway 51 near Lake Kegonsa.)

Earlier in the day it was announced that the Midwestern congressional bloc had been revived

as representatives of nine Midwest states joined forces to press for the location of the atom smasher in their area.

The 85 sites remaining were sent to the National Academy of Sciences for further pruning—to a half dozen or less. The final selection presumably will then be made by the commission.

The winnowed list actually went to the academy Monday. The commission was not scheduled to make a public announcement of its action, however, until 1 p.m. today.

Competition is fierce for the project, since it will employ more than 2,000 high-salaried scientific and technological personnel.

The machine itself is a 200-billion volt electron accelerator, more than a mile in diameter. It will be designed to break atoms to bits.

The commission said the accelerator will be the most powerful in

the world. It estimated it will take eight years to build and \$60 million a year to operate.

The commission has stamped one of its tightest secrecy classifications on activities concerning the selection of the site for the accelerator. AEC spokesmen say they have been getting more calls from congressmen on the subject than any in years.

The AEC has denied any White House pressure, however, even though it received proposals from nine Texas communities.

The intensity of the competition for the project is a matter of deepening concern to the Joint Atomic Energy committee, according to Rep. John B. Anderson (R-Ill.), a member.

He said he and other members have suggested their committee take positive action to assure that the selection of the site be based wholly on a scientific basis, removed from any political considerations.

Feb. 64

# MURA Lab May Move Physicist Speaks

Nobody knows yet what will happen to the Midwestern Universities Research association (MURA), Francis T. Cole, head of MURA's physics department, said here Thursday.

The association's proposal to build a huge atom smasher at Stoughton was finally rejected by the federal government a month ago.

Cole told an Allis-Chalmers Manufacturing Co. science-engineering forum:

"There is some hope that MURA will in some way merge with the Argonne laboratory and that the midwest will present a united front in high energy physics."

The Argonne national laboratory, owned by the atomic energy commission and operated by the University of Chicago, is about 20 miles southwest of Chicago.

"It does seem definite that the present MURA laboratory at Stoughton will not continue indefinitely," Cole said.

A scientific study committee headed by John Williams, University of Minnesota physicist, is expected to make recommendations next month.

Cole's comments on the future of MURA were made in answer to a question. In his talk he described the history of atomic accelerators and made some guesses about their future.

The largest machines now operating reach energies near 30 billion electron volts. Energies 100 times as great could be reached with present knowledge, but such a machine would probably cost three billion dollars, Cole said.

He said that smaller accelerators would be more and more useful for medical treatment and for industrial tests and inspections.

# Decision on Smasher May Bring Reactions

## Chance of Prejudice Possible if Device at Stoughton Is Denied, Proxmire Says

Journal Washington Bureau  
Washington, D. C. — Failure to approve the Wisconsin atom smasher project might prejudice approval of other accelerators on the east and west coasts, Senator Proxmire (Dem., Wis.) told Jerome B. Wiesner, President Kennedy's science adviser in a letter Friday.

Pointing out that he is a new member of the senate appropriations committee, Proxmire said it was hard for him to understand why a panel of scientists believed that approval of the Wisconsin accelerator might compromise later approval of east or west coast accelerators.

### Opposite Reaction

"My reaction would be exactly the opposite," he said, "The failure to approve an accelerator for the midwest would seriously compromise the prospect for approving a 250 million dollar accelerator on the east or west coast a few years from now.

"I say this, not with any notion that there might be some kind of political retaliation. I say this from the standpoint of realism. The fact is that the midwest has only one accelerator . . . at the Argonne laboratory in Chicago."

The panel of scientists, called the Ramsey committee, has

given conditional approval to the 148 million dollar project designed by the Midwestern University's Research association (MURA) for construction at Stoughton, Wis.

### Decision Soon

Wiesner, who will soon make a decision on whether to include funds for the MURA project in the fiscal 1965 budget, has said that the high intensity accelerator should not delay approval of an accelerator which would be ready for construction in 1967 in the west.

Proxmire said that he "quietly toured" the Stoughton site last Saturday. Senator Nelson (Dem., Wis.) made a publicized tour of the site several weeks ago at the invitation of MURA officials.

# MURA Hope Given Lift by Thomson

By KENNETH SCHEIBEL  
(State Journal Washington Bureau)

WASHINGTON — Rep. Vernon W. Thomson (R-Wis.) Thursday sparked renewed interest in a proposed atom smasher for the midwest, preferably one for the Midwestern Universities Research Assn. (MURA) in Wisconsin.

And the Richland Center congressman apparently had the implied promise of President Johnson for fair consideration of the quest.

Thomson took advantage of a chat with Mr. Johnson at a White House reception Tuesday night to make his plea.

"I told the President Midwesterners have been overlooked and neglected in the distribution of the governments tremendous research and development funds," Thomson said.

## Atom Smasher

Triggering Thomson's move was an announcement by the Atomic Energy Commission that it wants to construct a 200 billion electro-volt atom smasher.

"I asked if MURA could be given an opportunity to submit a proposal to build this tremendous new machine and operate it before making decision on its location."

Thomson quoted Mr. Johnson as saying, "Yes, MURA can have that opportunity." Johnson told the Republican congressman he was free to report the assurance.

Thomson disclosed that he has written President Fred Harvey Harrington of the University of Wisconsin to transmit "an urgent request" to MURA to start preparation of a proposal.

He told Harrington that the new AEC atom smasher, scheduled for completion in 1972, will be the primary tool in nuclear research for at least a decade.

## Recalls Plan.

"It is therefore extremely urgent that we succeed in acquiring this research facility," Thomson said.

Thomson told The State Journal, "The President was familiar with the previous MURA plan for an atom smasher, he seemed to recall it very easily."

One of Mr. Johnson's first moves as president in January, 1964, was to turn down the MURA bid for an atom - smasher at Stoughton in the interests of economy. There had been indications that the late President John F. Kennedy had favored it.

Thomson noted that last year the federal government spent 80 per cent of a \$14 billion research and development budget on the East and West coasts. He said it is "vital to the welfare of the entire midwest that we succeed in obtaining a fair share of the government's research program."

Thomson said he is certain that all member of Wisconsin's delegation to Congress will cooperate with other Midwestern congressional delegations in making a proposal for an atom smasher.

Monday, January 16, 1964

## Johnson Sets MURA Talk

### Will See Scientists Close to Project for 'Smasher' Decision

Journal Washington Bureau  
Washington, D. C.—President Johnson has summoned three men closely connected with the Midwestern Universities Research association (MURA) for talks about the group's plan for a 150 million dollar atom smasher at Stoughton.

He is expected to see Ber-

nard Waldman, MURA director; Elvis Stahr, president of the University of Indiana and former secretary of the army; and E. L. Goldwasser, a University of Illinois physicist and member of a special presidential advisory committee on high energy physics, at 10:15 a.m. Friday.

The president has agreed to see Senators Nelson (Dem., Wis.) and Humphrey (Dem., Minn.) and Ralph Hunt, a University of Wisconsin political scientist and former aide, 15 minutes later.

#### Seeks Information

Johnson apparently has determined to dig into the facts about the proposed proton accelerator and decide once and for all whether to include in his budget request for 1965 some construction funds for the machine.

On Tuesday he conferred with Glenn T. Seaborg, atomic energy commission chairman, and Jerome Wiesner, scientific adviser to President Kennedy.

After his discussion with them, the president said he wanted to talk to representatives of MURA and the extra meeting Friday was set up.

#### Asks Four Million

MURA has asked for about \$4,500,000 to be spent in the year which begins July 1, and for authority to obligate another six millions. Actual expenditures would cover architect-engineering fees and test borings on the Stoughton site.

Before the machine is finished, possibly in 1972, annual construction outlays may reach 40 millions.

how the program should be modified if it were to be re-enacted.

This fits the theory that most federal grants in aid are supposed to be stimulative in the first place, to induce some state and local action; they are not supposed to be permanent subsidies. The bill is not a miracle worker, but at least it offers some assurance of more systematic attention to whether and when programs become dispensable.

## Fight for MURA Goes On

A vigorous campaign is now under way by midwestern educators, businessmen and political leaders to salvage the nuclear accelerator project of the Midwest Universities Research association (MURA) at Stoughton, Wis.

President Johnson has indicated that the MURA machine is out so far as this year's executive budget is concerned. Nonetheless, project supporters are hanging on, hoping at least for a supplemental appropriation later this year to begin construction on the \$150 million project.

This persistence stems from concern about the midwest's relative lackluster performance in the growing research and development industry and the belief that a nuclear accelerator would help change this situation.

Senator Nelson (Dem., Wis.) put the MURA argument this way in a recent letter to a Chicago newspaper:

"Prof. E. L. Goldwasser of the University of Illinois has warned that if the MURA project is not started in the coming year, the MURA organization, which has been designing accelerators for a decade only to be frustrated in achieving its main goal, may fall apart. Furthermore, the longer it is delayed the more likely it is that the east and west coast machines will move ahead in priority and that the midwestern machine will never be built. Prof. Goldwasser believes that the midwest would then be irreparably damaged by the departure for the coasts of many of our top nuclear scientists."

# Atom Smasher Project for State Called Dead

## Construction Funds Not Included in Ad- ministration Budget, Says N. Y. Times

Funds for the construction of a 150 million dollar atomic accelerator at Stoughton, Wis., will not be included in the administration's budget soon to be presented to congress, the New York Times said Wednesday.

The Times said the effect of the administration's decision would be to bury the project rather than postpone it. The newspaper attributed the disclosure to Washington officials.

"The atomic energy commission's budget has been whittled down to several hundred million dollars below what the commission wanted and in the process the MURA (Midwestern Universities Research association) project was reportedly eliminated," the Times said.

"Highly placed officials in the White House are expecting some political repercussions from the decision. But they are pointing out that the MURA accelerator could not compare in priority with some other projects, such as underground

testing, which have had to absorb budgetary reductions," the Times story added.


Last month it was learned that President Kennedy had indicated, before his death, to Senator Humphrey (Dem., Minn.) that he would support some "seed money" for the project. The Times story did not mention seed money.

The seed money term usually means that the government will supply funds to keep a research and development team together, but that no production funds will be provided.

MURA has been supported this way for nearly a decade.

A delegation of midwestern politicians and university officials was told last month by President Johnson that the MURA project was not high on his priority list.

The delegation had hoped that initial funds would be provided in the fiscal 1964 budget to increase the MURA staff from 100 to 200 and start architectural and engineering plans for the construction of the project.



Astronauts White, Left, Grissom, Center, and Chaffee Will Man Apollo Space Flight

—AP Wirephoto

## Committee's Choices Expected

# A-Smasher Finalists Due Today

WASHINGTON (AP) — The government reportedly is ready to announce today the finalists in the hot competition for the site of the proposed \$375 million atom smasher machine, the world's largest.

Several congressional sources said they look for an announcement today — barring a last min-

ute change in plans.

The announcement, if made, probably will contain the names of five to 10 cities still in the running for the huge machine.

(A site near Stoughton, Wis., backed by the state and the University of Wisconsin, is believed still in the running.)

The number of eligible cities

was pared to 85 last year and turned over to a special committee of the National Academy of Science.

The committee has been working to narrow the list. If its recommendations are revealed today, they will be turned over to the Atomic Energy Commission (AEC) which will then pick the

ultimate winner.

The proposed \$375 million machine would be a 200 billion electron volt (Bev) accelerator — the world's most powerful device in the atom-smasher field and the costliest single scientific installation ever built. Its construction, however, has yet to be approved by Congress.

The machine would be designed to explore the fundamental secrets of matter for peaceful uses. It would be shaped like a giant merry-go-round or race track nearly a mile in diameter.

Scientists contend it might eventually yield a rich practical payoff in new knowledge — in a range from helping develop new sources of energy to making new advances in medicine and even weather control.

It would take about eight years to build, cost about \$60 million a year to run, and employ about 2,300 scientists and technicians.

Another 1,000 scientists would be expected to visit it annually for research projects.

The AEC has indicated it may take several months more before selecting the final winner.

3-2-77

# Illinois A-Smasher Goes Full Tilt

Batavia, Ill. —AP— The world's most powerful atom smasher came of age Wednesday, beginning to operate at what officials called the highest energy ever achieved by a manmade machine.

Officials said it reached its designed energy level at 3:08 p.m., boosting a stream of protons along a four mile circular track at energies of 200 billion electron volts (BEV).

Scientists and technicians

cheered and applauded in the control room of National Accelerator Laboratory 40 miles west of Chicago. Scientists from the Institute for Nuclear Research in Dubna, USSR, were on hand.

Previously, the world's highest energy smasher was a 76 BEV facility at Serpukhov, Russia.

The Weston smasher, near Batavia, for which ground breaking ceremonies were held 39 months ago on a 6,800 acre tract of prairie land, is expected to give scientists their most detailed look so far at the inner structure of the atom, the basic building block of the universe.

"This is expected to provide startling insights into the immensely powerful forces which bind together the diverse parts of the nucleus and govern their interactions," said Robert R. Wilson, director of the laboratory.

"Of particular interest to experimenters are suspected spe-

cies of particles — as yet undetected — which may prove to be truly elementary particles of matter, basic building blocks of all the presently known subnuclear particles which have occupied the forefront of physics in the last decade."

Before its construction began, communities throughout the country waged vigorous competition to be selected as the site.

The entire complex of auxiliary and other equipment here is not yet completed, but the Nixon administration is seeking \$43 million for that purpose in its fiscal 1972 budget.

A spokesman said the machine had actually operated at

lower energy levels previous to Wednesday, but this marked the first time it had reached 200 BEV.

Madison

Lake Kegonsa

Cooling Pond

Injection Bldg. No. 1

Intersection Bldg.

Experimental Bldg. No. 2

Experimental Bldg. No. 1

Injection Bldg. No. 2

Spiral Magnets

Administration Lab & Shop Bldg.

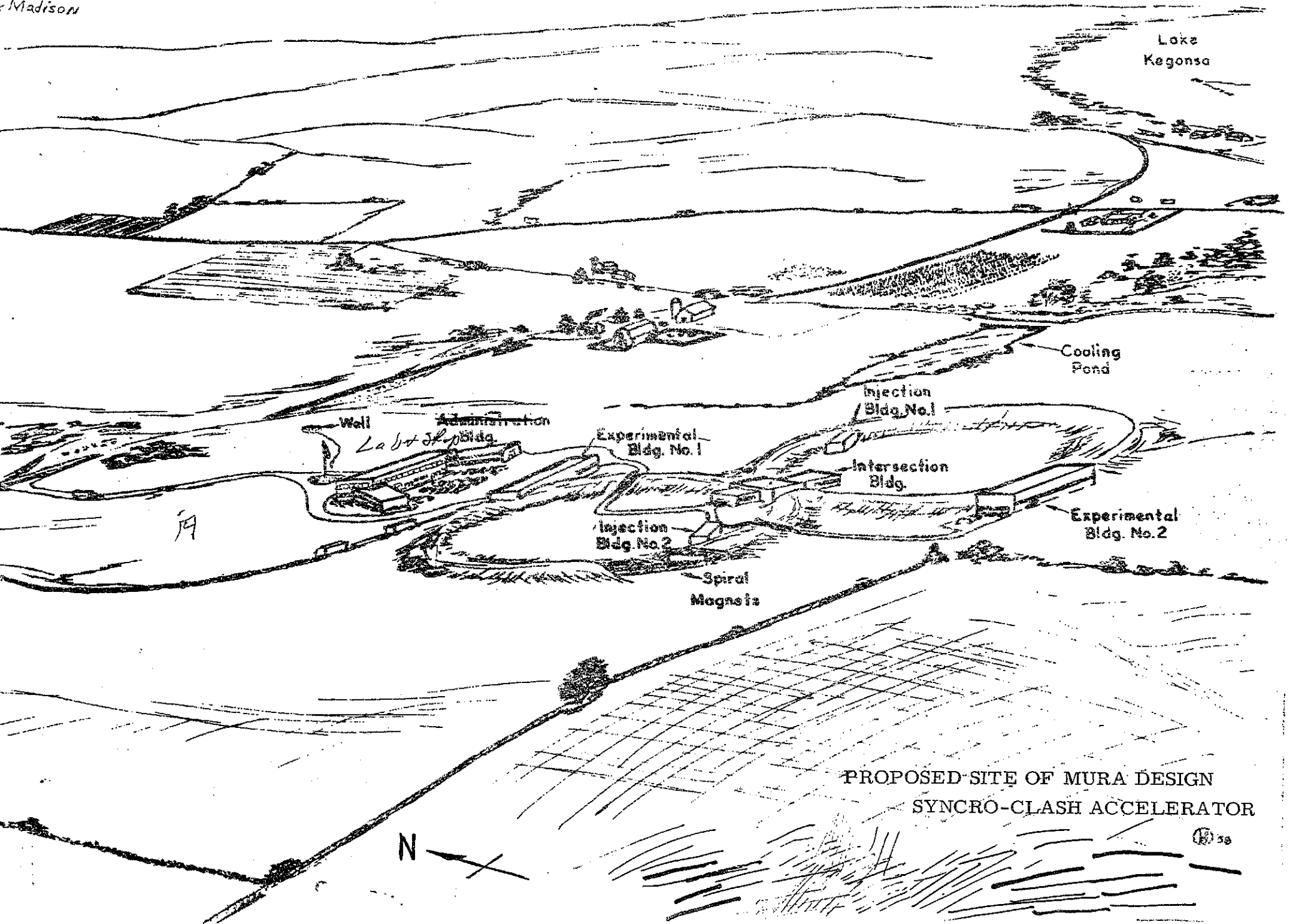
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PROPOSED SITE OF MURA DESIGN  
SYNCHRO-CRASH ACCELERATOR



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# Robert R. Wilson, Physicist Who Led Fermilab, Dies at 85

By JAMES GLANZ

Dr. Robert R. Wilson, a physicist who built the world's most powerful particle smashers in a setting that he insisted be surrounded by restored prairies and enriched by striking architecture and objects of art, died on Sunday at his home in Ithaca, N.Y. He was 85.

With a career that began in the 1930's, Dr. Wilson became one of the most important figures in the history of the development of particle accelerators, which smash subatomic particles together at high energy for the study of their interactions and composition.

Though he was involved in numerous breakthroughs in physics research and accelerator design, perhaps his crowning achievement came when he led the design and construction of the Fermi National Accelerator Laboratory in what was then farmland west of Chicago.

Fermilab, as it is known, began operating in 1972 as the most powerful accelerator in the world. And because of the futuristic technologies then embraced by Dr. Wilson, the laboratory has been able to increase its energy over the years and is expected to remain the world's most powerful until 2006, when it will be superseded by the Large Hadron Collider, an accelerator under construction at the CERN laboratory in Geneva.

Besides his scientific achievements, Dr. Wilson was known for the environment he created at the Fermilab site, with hundreds of acres of restored prairie, a herd of bison, fishing holes, abstract sculpture and a central building modeled, in spirit at least, on the Beauvais Cathedral in France.

"When he created Fermilab, it certainly had a style," said Dr. Leon M. Lederman, the Nobel Prize-winning particle physicist who succeeded Dr. Wilson as director of the laboratory. "He was a showman in that sense; he took chances."

Energy Secretary Bill Richardson said Dr. Wilson had had "an unerring sense of what is important to the science of high-energy physics and



Charles Harrington/Cornell University, 1984

Dr. Robert R. Wilson

*Who says a particle smasher can't live in a beautiful house on a prairie?*

its importance to the nation."

Robert Rathbun Wilson was born on March 4, 1914, in Frontier, Wyo. Though he tinkered with pumps and vacuum tubes as a boy, he apparently took plenty of time to enjoy the outdoors.

"He always had big, wild tales about being a cowboy in Wyoming," said Dr. Dale Corson, a particle physicist and former president of Cornell University, who had known Dr. Wilson since the 1930's. "Most of them

turned out to be true."

Dr. Wilson received a bachelor's degree from the University of California at Berkeley in 1936 and remained there for graduate school. His scientific style became clear early on, said Dr. Corson, who was also a student there at the time.

Dr. Corson said Ernest O. Lawrence, the legendary inventor of the particle accelerator called the cyclotron, assigned a problem in a Berkeley physics course that no student but Robert Wilson managed to solve. The problem involved finding the strength of the electric fields inside the cyclotron. While most of the students tried to perform difficult calculations to find the fields, Dr. Wilson quickly built a simplified model of a cyclotron in a physics laboratory and measured the electric fields.

"That was his hallmark: a completely ingenious way of solving the problem," Dr. Corson said. "And that carried right up to the Fermilab machine."

Dr. Wilson went on to do research on the cyclotron with Lawrence before joining the Manhattan Project to develop the atomic bomb. He had stints at Los Alamos National Laboratory and Harvard before becoming the director of the Laboratory of Nuclear Studies at Cornell in 1947.

While at Cornell, he did experiments on the structure of protons that were later explained by the theory that they are constituted of smaller particles called quarks, Dr. Lederman said.

In 1967, Dr. Wilson took a leave of absence from Cornell to become the founding director of Fermilab, where he left his mark as a brilliant designer of the powerful magnets necessary to confine the fast particles as they whirled around a giant ring.

He created the natural, architectural and artistic amenities in part to attract good scientists to the Illinois cornfields and in part because of an innate sense of aesthetics, said Dr. Boyce McDaniel, a longtime friend who is a retired Cornell physicist.

Dr. Wilson's design of the tunnel through which the particles raced at Fermilab included plenty of space to allow for technical improvements.

That space came in handy when superconducting magnets, a powerful innovation that Dr. Wilson pushed to develop, were later installed, allowing the lab to boost its energy.

His dislike of bureaucracy was legendary and fit with his sometimes contrarian nature, said Dr. Michael Witherell, Fermilab's current director, who has a handwritten note from Dr. Wilson that reads in part: "An all too common failing of large institu-

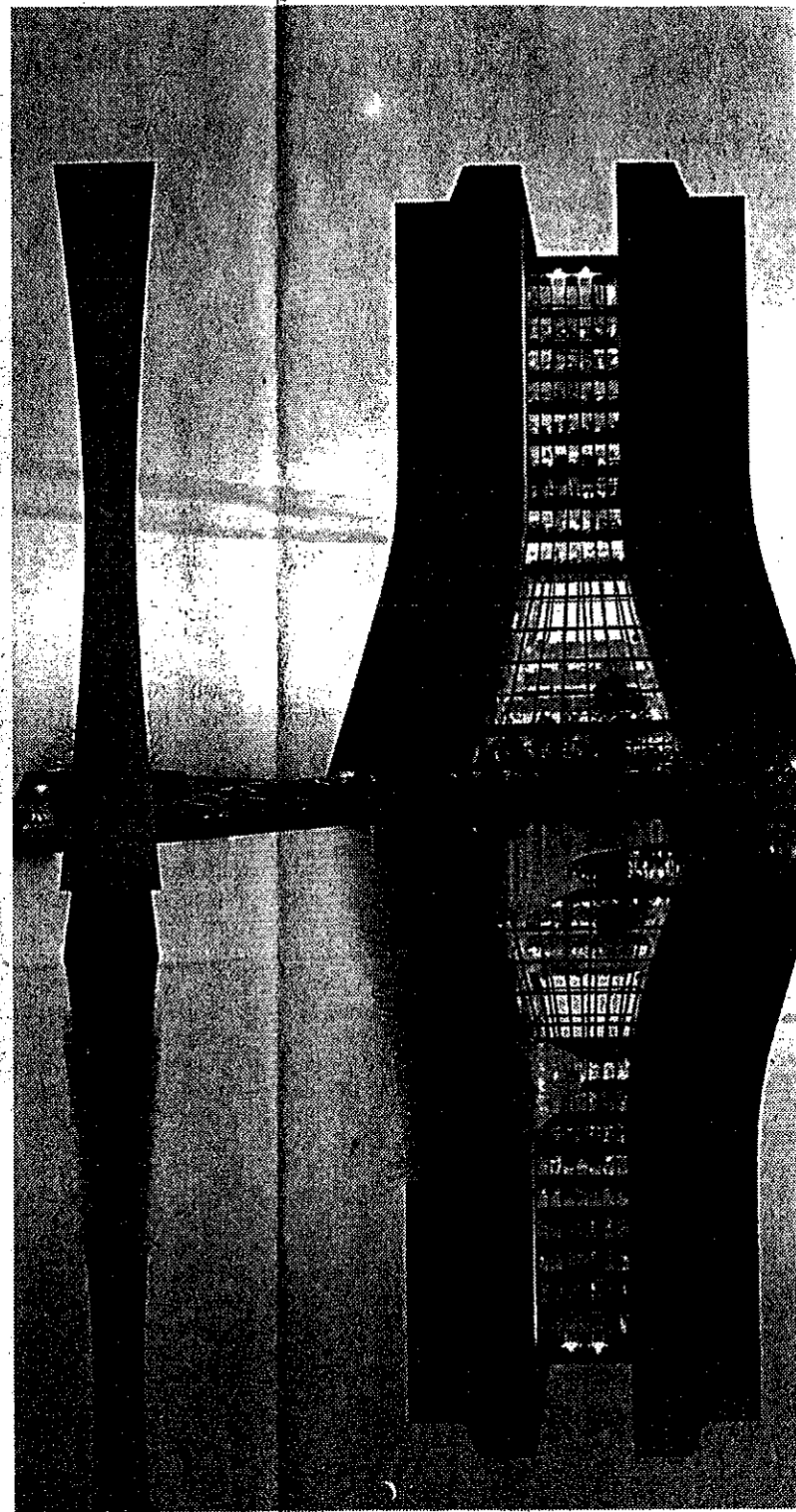
*A scientist with an eye for art, architecture and subatomic accelerators.*

tions is to fall into the bureaucratic morass — complicated procedures, red tape and all that. That's terrible."

Dr. Wilson is survived by his wife, Jane; three sons, Daniel, of Indianapolis, Jonathan, of Columbus, Ind., and Rand, of Boston; a sister, Mary Jane Greenhill of Palos Verdes Estates, Calif.; and four grandchildren.

Dr. Wilson was known for completing huge projects ahead of schedule and below budget, but he resigned as director of Fermilab in 1978 because he did not believe that the government was financing it generously enough. He also once lectured a joint committee of Congress on why basic science was crucial even when it did not lead to instant practical benefits.

At the hearings, in 1969, Dr. Wilson's feistiness was most on display in an exchange with Senator John O. Pastore of Rhode Island. When Senator Pastore pressed Dr. Wilson on whether the knowledge gained at Fermilab would enhance national defense, Dr. Wilson said, "It has nothing to do with defending our country, except to make it worth defending."



Fermilab

Fermilab and its surroundings, including the sculpture at left, were largely the creation of Dr. Robert R. Wilson, its first director.

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Museum of Fine Arts, Boston

# Fermilab Struggles To Keep Its Edge

By MALCOLM W. BROWNE

BATAVIA, Ill. — Sprawling across 6,800 acres of Illinois prairie, the Fermi National Accelerator Laboratory has for three decades played a pivotal role in the quest to understand the ultimate nature of matter.

Fermilab still houses the most powerful particle accelerator in the world, four miles around and capable of accelerating protons and antiprotons to energies of a trillion volts and then smashing them together, but the laboratory is showing signs of age. The cutting edge of high-energy physics is moving to Europe, and Fermilab's next decade could prove to be the laboratory's last hurrah.

Chunks of concrete have fallen from the walls of Fermilab's 15-story administration building into the atrium it encloses, and pipes have burst, treating workers to unwelcome showers. The High Rise, as the building is known, was designed for a 20-year lifetime but it is now more than 30 years old, and fixing the structure and its plumbing will take two years and cost \$20 million.

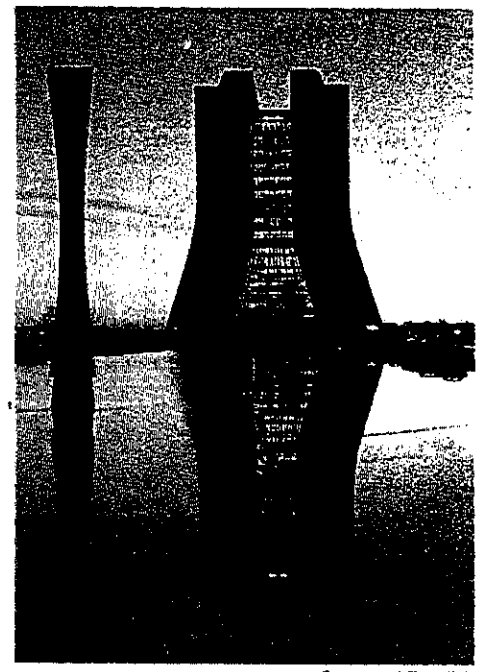
The scientific reservation, where Fermilab's naturalists recreated a pre-Columbian habitat for wild prairie plants and established a sanctuary for prairie bison and other animals, is now hedged in by the sprawling suburbs of Chicago. Industrial buildings and housing developments have sprung up around the laboratory site, and its new director, Dr. Michael Witherell, had to act fast to block a major highway that would have run right through the site.

When Dr. Robert R. Wilson became Fermilab's founding director in 1967, one of his objectives was to create the most beautiful laboratory he could, and his artistic touches still impress visitors.

The High Rise itself was modeled after the Beauvais Cathedral in France, and like the cathedral, its double towers dominated the surrounding countryside.

Dr. Wilson insisted that even the most mundane laboratory accessories — large capacitor banks, transformers and power lines — should be shaped as abstract sculptures and placed to best artistic effect. Typical of his artistic initiatives is one of the

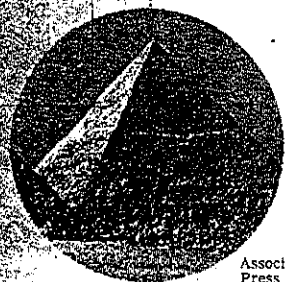
Continued on Page 4



Courtesy of Fermilab

Wilson Hall, Fermilab's headquarters, at sunset. The sculpture at left is one of several on the laboratory grounds.

CAIRO



Associated Press

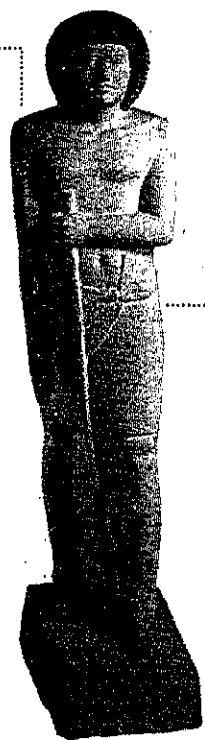
## ▲ ▲ PYRAMID BUILDERS

Excavations of laborers' tombs revealed storehouses and bakeries; samples were taken to pinpoint the pyramids' age more closely.

## ▲ ▲ ABYDOS

Excavations and study near Abydos turned up artifacts that reveal the lifestyle of nonroyal elite (mayors), a possible new starting date for the early dynastic period and evidence that written language made its first appearance in Egypt, not Mesopotamia.

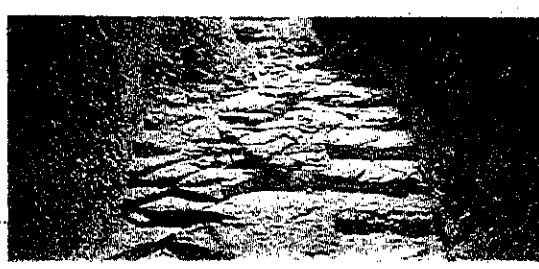
ARNA



## ▲ SAQQARA

The statue of Sepa (left) is one of the earliest known examples of nonroyal statuary, and it illustrates the figurative focus of Old Kingdom art (2649 - 2150 B.C.). The period is the focus of a current exhibition at the Metropolitan Museum of Art.

The Metropolitan Museum of Art



man and  
ep. West

# Lab Struggles to Keep Edge

Continued From First Science Page

larger sculptures adorning the site, a three-legged representation of the concept of broken symmetry, which is a mysterious characteristic of certain particle transformations. Broken symmetry is thought to explain why more matter than antimatter was created by the Big Bang, thereby leaving a surplus of matter sufficient to create the universe.

Dr. Wilson and his successor, Dr. Leon M. Lederman, co-winner of the 1988 Nobel Prize in Physics, realized that top scientists from Europe and elsewhere needed special intellectual inducements to work in the rural setting of Fermilab, and these two directors started a series of art shows, concerts, plays and lectures to attract smart, educated people.

All these attractions are still in place, but far more important to Fermilab's staff and users is the neck-and-neck scientific race the laboratory is running against CERN, the European Laboratory for Particle Physics.

In the 21st century the focus of high-energy particle physics is expected to shift to Europe's CERN laboratory near Geneva, where a coalition of nations, including the United States, is building the Large Hadron Collider, a machine that will seize the title as the world's most powerful particle accelerator, capable of accelerating a proton to an energy of seven trillion electronvolts: seven times the energy imparted by Fermilab's Tevatron.

Before the Large Hadron Collider is completed, however, Fermilab still has a chance to cop two more great physics prizes: the detection of a Higgs field, a universal field believed to endow all particles with mass, and one or more supersymmetric particles, which are hypothetical entities that might allow physicists to integrate the force of gravity with the other three forces of nature.

In 1985, Fermilab completed a monster accelerator called the Tevatron, in which opposing beams of protons and antiprotons are brought into collision at a combined energy of nearly two trillion electronvolts.

The most conspicuous achievement of the Tevatron in its 14 years of operation was the discovery in

1995 of the "top quark," which filled in the last blank space for six quarks allotted by a table of fundamental particles known as the Standard Model. (The other quarks are named "up," "down," "charm," "strange," and "bottom" or "beauty." Only the "up" and "down" quarks, which are components of protons and neutrons, have occurred in nature since the Big Bang.)

Using the mighty Tevatron and its two huge detectors, scientists probed the puzzling nature of the ultraheavy top quark, shed light on particle symmetry violations and elucidated other mysteries of physics. But the Tevatron failed to detect either the Higgs field (as well as its associated particle, the Higgs boson) or a supersymmetric particle (known as sparticle).

The quest for supersymmetric particles has become one of the main aims of high-energy physics.

Theories of supersymmetry assume that for every known particle and antiparticle there is a corresponding supersymmetric particle. If this were to prove true, physicists could take a giant step toward the long sought "theory of everything," which would incorporate quantum gravity with the other three forces of nature, all of which can be expressed in quantum-mechanical terms: the electromagnetic force and the strong and weak nuclear forces. A quantum-mechanical version of the theory of gravity has yet to be devised.

To seek major physics breakthroughs, physicists at Fermilab could not count on increasing the energy of the Tevatron by a large amount. Instead, they greatly increased the "luminosity" of the machine — the numbers of protons and antiprotons packed into opposing beams. The higher concentration of colliding particles would make collision events much more frequent, increasing the chances of detecting events revealing the Higgs field, supersymmetry or other new phenomena.

To do this, Fermilab has built a new ring-shaped accelerator two miles in circumference called a "main injector." Built over seven years at a cost of \$260 million, the main injector was recently completed and is functioning independently of the Tevatron. The Tevatron itself

cost about \$259 million.

Starting in the spring of 2001, the main injector will begin feeding torrents of protons and antiprotons into the giant Tevatron ring, and great discoveries will quickly ensue, physicists hope.

The laboratory team was so successful in designing and building the main injector that for no extra cost they added a storage ring in the tunnel for recycling antiprotons.

A key part of this Tevatron's capability was the development of a factory to make antiprotons by bombarding a nickel target with protons. (The leader of the program was Dr. John Peoples Jr., who succeeded Dr. Lederman as Fermilab's director.) A new step incorporated in the latest Tevatron upgrade will be a system for conserving antiprotons.

Antiprotons are generally wasted after use in colliding beams; when they are allowed to come in contact with ordinary matter, they are instantly annihilated, transformed into high-energy gamma rays. By saving antiprotons in the new storage ring for reuse, Fermilab will also save money; the cost of a single discarded batch of antiprotons has been estimated at \$63,000, and many batches are used in an experimental run.

To improve the prospects for important discoveries still further, Fermilab's scientific users are completely rebuilding the two gigantic detectors that serve the accelerator. Each of these detectors surrounds a spot where proton and antiproton beams are brought into collision. The two detectors, known as Collider Detector Fermilab and D-Zero, use a variety of detection systems to identify and measure the showers of particles and debris created by collisions, all of them far more sensitive than the systems used to achieve previous discoveries, including the finding of the top quark.

The new main injector will also be used to send a beam of neutrinos through the earth 453 miles to a detector in an iron mine in Sudan, Minn. Physicists will look for transformations of neutrinos from one type to another as they speed through the earth.

"So Fermilab's useful life is far from over," Dr. Witherell said. "We just need some cooperation by nature and a little luck."

## Unraveling Autism

Autism undermines a range of information between specific brain areas, showing where and when the

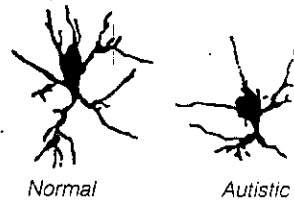
**THE LIMBIC SYSTEM** — A ring of structures connected by pathways of neurons

### Normal function

It is believed to play a role in emotional response. It may also be a component of complex learning, or knowledge acquired by analysis and not repetition.

### Abnormalities in autistic people

Neurons are smaller and more densely packed. There are fewer branches, and the branches are shorter, resembling immature



### What the abnormalities suggest

Autistic people are usually good at repeating, but they stumble on complex learning, thought, and problem-solving. The failure of the limbic system to mature properly may contribute to these

## Theorie

Continued From First Science Page

body's guess. Studies of developing animal brains have found that growth factors and proteins guide fetal brain cells into proper connections. Other factors act as switches, turning yet other genes on and off at particular points in development.

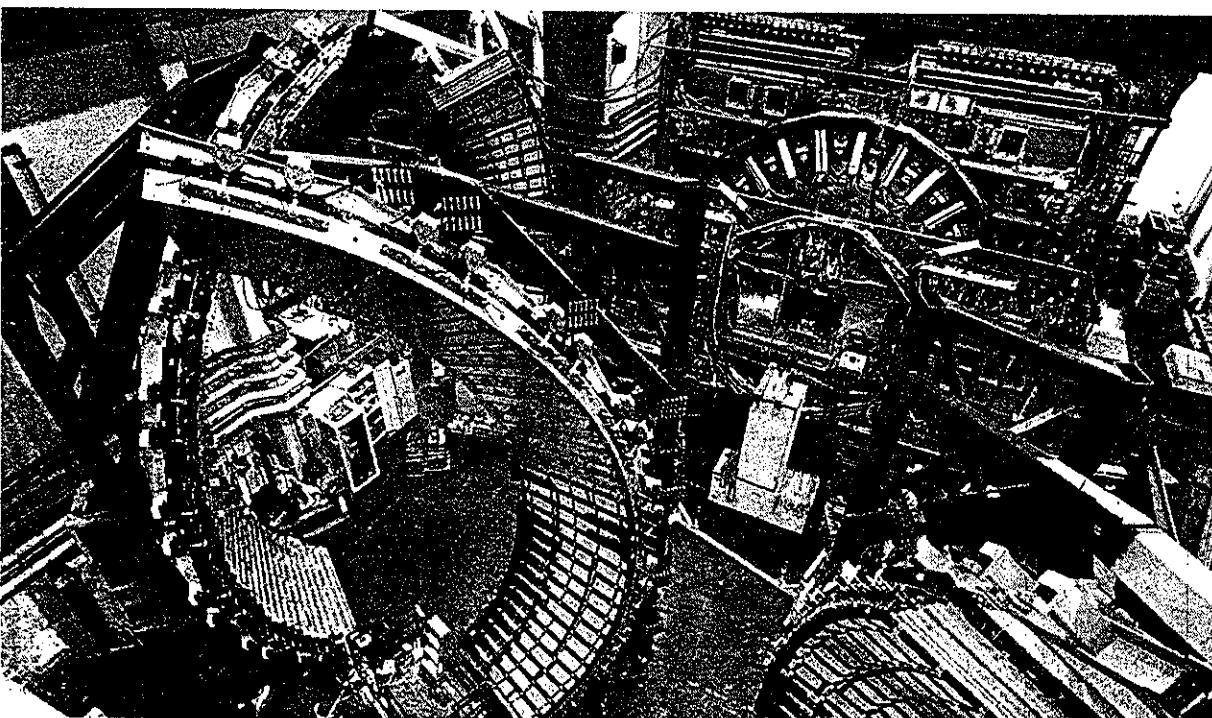
Some genes suppress cell activity while others ramp it up, so the correct balance of chemicals involved in transmitting brain signals. After birth, different genes begin to prune connections while others cause cells to die off in a dynamic dance of growth and pruning.

But the growth and elaboration of the nervous system is a continuous process and if something goes seriously wrong early on, all subsequent development may be disturbed. The question is, how early and how often?

Dr. Patricia M. Rodier, an embryologist at the University of Rochester School of Medicine, believes the brain glitch in autism occurs between Days 20 and 24 of gestation before a woman knows she is pregnant. She has evidence that genes involved in laying down basic brain structures, called homeobox genes, are mutated in autism.

Dr. Margaret L. Bauman, an embryologist at Harvard Medical School, believes that the defect may occur before the middle of the second trimester of pregnancy. She bases her theory on her extensive knowledge of how and when certain circuits are wired. Some cells can be "miswired" only if the defect occurs mid-fetal development, she said.

But Dr. Eric Courchesne, a pediatric neurologist at the University of California, San Diego, believes



Courtesy of Fermilab

A collider detector at Fermilab acts as a giant camera, capturing collisions between protons and antiprotons.

# Wisconsin State Journal

**WEATHER:** Mostly Sunny, Rather Windy, Mild Today. Highs Mid 40s. Lows Upper 20s.

AGES, THREE SECTIONS  
No. 113 125th Year

MADISON, TUESDAY, JANUARY 21, 1964

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★ ★ ★

MORNING FINAL

7c

# MURA'S SMASHER REJECTED BY AEC

Continued

#### Centered at Argonne

"The work of the Midwestern scientists will be centered at Argonne following a reasonable transition period. Part of the plan involves collaboration between the Midwest group and scientists at the Brookhaven National Laboratory, Hudson, Long Island, N.Y., who are already engaged in design studies for an accelerator in the 600-1,000 Bev. range.

"In addition to these studies, the AEC is supporting design work at the Lawrence Radiation Laboratory, Berkeley, Calif., on an accelerator which would have an approximate energy of 200 Bev.

"No design has been made for the construction of either of these large national accelerators nor has site location been selected.

#### Seek Place for MURA

"The AEC is looking toward future improvements of the Zero Gradient Synchrotron (ZGS) recently completed at Argonne. Also, leaders of MURA, Associated Midwest Universities, Argonne, and the University of Chicago are exploring ways whereby Midwest universities would be able to participate more directly in the use and management of the ZGS. It is anticipated that these actions will increase further the usefulness of this accelerator to the scientific community.

"Research work by MURA has been supported by the AEC for about 10 years. The reorientation follows a decision not to construct a 10-12.5 Bev. high intensity accelerator which had been proposed by the MURA group."

#### Vital Role Stressed

In a joint statement, Proxmire and Kastenmeier said, "We will urge each one of the members of the appropriations committees in our respective houses to include funds for the Stoughton reactor in the budget for the coming year."

The two lawmakers said, "The construction of this accelerator is vital to education and industry in the Midwest."

They said, "We have been assured that \$1.5 million to \$2 million has been earmarked in the budget to keep the great team of MURA scientists who have been working at Stoughton, at work."

"Of course this will be a very tough uphill odds-against fight but as long as there is the slightest possibility of securing congressional action, we will fight for it."

#### To Stay for Year

Proxmire said the MURA staff will "stay at least a year." But he said, "It's going to be more difficult—harder to keep them together."

A spokesman for the AEC said, "This puts the emphasis on the higher energy accelerators. Maybe they will work. Maybe not."

But he conceded, "This kind of puts a cloud over the future of MURA."

Nelson called the decision "abruptly dumping" the MURA project "a tragic mistake in judgment in the highest councils of our national government."

"The MURA machine, which was enthusiastically endorsed by the Ramsey panel of the President's Advisory committee, might have meant a great breakthrough in the field of high energy physics which could have had an historic impact on our nation's scientific development," Nelson said.

Nelson said the AEC says now that the MURA team may play a key role in developing a far bigger high energy accelerator and MURA scientists are now assured the Midwest will be given fair consideration for a machine which may cost close to \$1 billion.

"The Midwest can do little but cling to this hope," he said. "But the MURA organization, one of the greatest collections of scientific talent anywhere in the world, can no longer be held together by hope alone."

#### Harrington Hails Delegation's Try

University of Wisconsin Pres. Fred Harvey Harrington praised the work of the Midwestern congressional delegation Monday after the Atomic Energy Commission (AEC) announced continued support of Midwestern Universities Research Association (MURA) design and development work at Stoughton.

"A week ago," Pres. Harrington reported, "it appeared that the outstanding scientific team assembled by midwestern universities to design the MURA accelerator would have to disband. While no funds have been provided to begin construction of that important midwest scientific asset, the potential for such a development now has been kept alive."

"We regret the failure of the federal government to provide funds necessary to start the 12.5 Bev. high intensity accelerator at this time," Pres. Harrington said, "but we have not given up hope for the future."

# Ugo Fano Is Dead at 88; Physicist Linked to Fermi

By JAMES GLANZ

Dr. Ugo Fano, an atomic theorist who was a pioneer in the study of radiation's effects on matter, including living tissue, died on Tuesday in Chicago, where he was an emeritus professor of physics at the University of Chicago. He was 88.

Far from inclined to study mathematical theories for their own sake, Dr. Fano delighted in poring over puzzling or anomalous experimental data and then finding clear explanations using the fundamental equations governing the behavior of matter and radiation.

As part of the founding generation of modern atomic physics, Dr. Fano, who was born in Italy, began making major contributions to the field even before he fled Italy's Fascist government in 1939 and immigrated to the United States. His intuitive, cut-to-the-chase style of research was closely modeled on that of his more famous countryman Dr. Enrico Fermi, who won a Nobel Prize in Physics in 1938 and also became a professor at the University of Chicago.

Dr. Fano worked as a postdoctoral assistant to Fermi at the University of Rome in the 1930's, later studied broadly similar areas of physics and even received the Fermi Award, among the most prestigious scientific prizes given by the United States government, in 1995.

And just so no one overlooked his long identification with the greatest of Italian physicists, Dr. Fano liked to tell a story about hiking in the mountains with his father as a boy in

**An atomic theorist  
who focused on  
radiation's effects  
on matter.**

1924. They were overtaken by a group of scientists, who exchanged a few words with his father. As the scientists moved on, his father pointed to one of them and said: "That man is expected to go far in life. His name is Fermi."

Dr. Lewis M. Branscomb, an emeritus professor at the John F. Kennedy School of Government at Harvard, who was originally a physicist, said Dr. Fano was "one of that great generation of very intuitive Italian theoretical physicists."

"He loved to take on challenges in any area of science that had physics and mathematics at its root," Dr. Branscomb said.

Ugo Fano was born in Turin, Italy, on July 28, 1912. His father, Gino Fano, was a mathematician at the

University of Turin, and he kept the young Ugo apprised of the great discoveries in physics and mathematics that were taking place around the world. In a memoir, Ugo Fano said he recalled being introduced to Niels Bohr's new atomic theory at the dinner table when he was 12.

After receiving a doctorate in mathematics at Turin in 1934, Dr. Fano began working with Fermi, who quickly helped the fledgling scientist get his career started. Early on, Dr. Fano proposed the barest outlines of a theory to explain new experimental data showing an asymmetry, or irregularity, in the way certain atoms absorb radiation. But he was unsure whether the idea had any merit.

One morning Fermi appeared at his door, saying enigmatically, "Fano, you were right." Fermi showed him how to flesh out the idea, and after Dr. Fano published the theory it became so successful that the asymmetry is now known as a Fano profile. He later discovered that Fermi had worked out the entire theory after that first conversation, but had declined to upstage his colleague by taking credit for it.

But Dr. Fano quickly learned how to apply that insight on his own. After a stint with another great of 20th century physics, the German scientist Werner Heisenberg, Dr. Fano returned briefly to Rome before fleeing the country and beginning his research career in the United States.

Moving through a series of research institutes here, he performed early studies of how X-rays and ultraviolet radiation damage biological cells, how atoms absorb radiation energy and how powerful light sources called synchrotrons can be used to probe the atomic structures of materials.

Dr. Mitio Inokuti, a physicist at Argonne National Laboratory who was a co-editor of a special issue of the journal *Physics Essays* in honor of Dr. Fano, said that he "inherited a special style and tradition of doing physics" that let him see the essence of a problem. The issue, edited with Dr. A. R. P. Rau of Louisiana State University, is to appear this spring.

Dr. Anthony F. Starace, a physicist at the University of Nebraska and a former student of Dr. Fano, said Dr. Fano's style put him in an especially opportune position. "He came at a time when atomic physics was going in new directions," Dr. Starace said.

"One had lots of complex data," he said. "His way of looking at things enabled people to extract that information."

Dr. Fano is survived by his wife, Camilla; two daughters, Mary Giacomoni of Chicago and Virginia Ghattas of Wellesley, Mass.; four grandchildren, and a brother, Dr. Robert Fano of Concord, Mass.



Associated Press

Ugo Fano

Dr. Branscomb, a former I.B.M. chief scientist and director of the National Bureau of Standards (now called the National Institute of Standards and Technology) said that Dr. Fano's lightning-fast insight into problems could occasionally cause discomfort.

As a senior scientist at the bureau in the mid-1950's, Dr. Fano was to review all proposed calculations on an early computer there, since few people knew how to use it properly, causing it to sit idle for long stretches. Checking on the status of their proposals, Dr. Branscomb said, scientists not infrequently discovered that Dr. Fano had become interested in the problem and solved it with pencil and paper.

Use of the computer fell even further, Dr. Branscomb said.

This indenture, Made this 28th day of June A. D., 1967, between Midwestern Universities Research Association, a Corporation duly organized and existing under and by virtue of the laws of the State of Illinois, located at Urbana, Illinois, party of the first part, and The Regents of the University of Wisconsin, a Corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, located at Madison Wisconsin, party of the second part.

Witnesseth That the said party of the first part, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration Dollars, to it paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has given, granted, bargained, sold, remised, released and quit-claimed, and by these presents does give, grant, bargain, sell, remise, release and quit-claim unto the said party of the second part, and to its successors and assigns forever, the following described real estate, situated in the County of DANE State of Wisconsin, to-wit: The East One Half of the Northeast One Quarter (E $\frac{1}{2}$  of the NE $\frac{1}{4}$ ) of Section Twenty-Seven (27), Town Six (6) North, Range Ten (10) East; and the Southeast One Quarter (SE $\frac{1}{4}$ ) of Section Twenty-Two (22), Town Six (6) North, Range Ten (10) East; all in the Township of Dunn.

Subject to existing highways, easements and restrictions of record and applicable zoning laws and ordinances. Subject to and together with existing lease for a term of one year terminating February 29, 1968 given by party of the first part to Rodger H. Nelson, which said lease for the same consideration is hereby assigned and transferred to the party of the second part;

Provided that these presents and each and every part thereof are executed, delivered and accepted upon and subject to a condition subsequent, to wit: In the event the party of the second part, its successors or assigns do not pay to the party of the first part, its successors or assigns the sum of Four Hundred Forty-Eight Thousand Two Hundred Dollars (\$448,200.00) on or before October 1, 1967, without interest, then this instrument of conveyance shall be null and void and of no effect and the title to the above described premises shall then forthwith revert to and vest in the party of the first part, its successors or assigns and the party of the first part shall then be entitled to re-enter and repossess the said described real estate without hindrance or delay.

When the foregoing condition subsequent is fulfilled the conveyance hereby made shall become and be absolute and as evidence thereof the party of the first part, its successors or assigns shall thereupon make, execute and deliver to the party of the second part, its successors or assigns a quit-claim deed in like form as this instrument conveying all its right, title and interest in and to said described real estate to the party of the second part, its successors or assigns to the intent that such quit-claim deed shall take effect and this conveyance shall be absolute as of the date hereof.

Real estate taxes assessed and levied against said premises for the year 1967 and rents shall be prorated as of July 1, 1967. No waste shall be committed on said premises prior to fulfillment of said conditions subsequent.

We have and in hold the same, together with all and singular the appurtenances and privileges thereunto belonging or in any wise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the said party of the first part, either in law or equity, either in possession or expectancy of, to the only proper use, benefit and behoof of said party of the second part, its successors and assigns FOREVER.

In Witness Whereof, the said Midwestern Universities Research Association party of the first part, has caused these presents to be signed by Laurence R. Lunden, its President, and countersigned by William S. Kerr, its Secretary, at Urbana, Illinois and its corporate seal to be hereto affixed, this 28th day of June, A. D., 1967.

SIGNED AND SEALED IN PRESENCE OF

Midwestern Universities Research Association Corporate Name

Laurence R. Lunden President

Countersigned: William S. Kerr Secretary

William S. Kerr

STATE OF Illinois WISCONSIN } ss. Cook County,

Personally came before me, this 28th day of June, A. D., 1967, Laurence R. Lunden, President, and William S. Kerr, Secretary

of the above named Corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Received for Record this 7th day of July, A. D., 1967, at 2:25 o'clock P.M. (SEAL)

Harold K. Hill Register of Deeds  
By: Bertha S. Dunn Deputy Register of Deeds

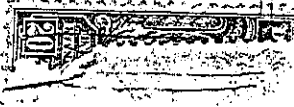
Kathryn Chapman Foucht Notary Public, Cook County, Illinois  
My commission expires Dec. 7<sup>th</sup> A. D., 1970

This instrument was drafted by George F. Lange, Attorney #VOL 837 PAGE 15

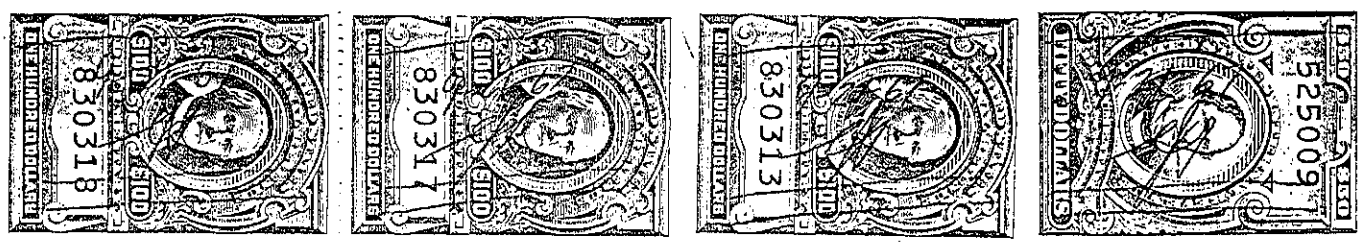
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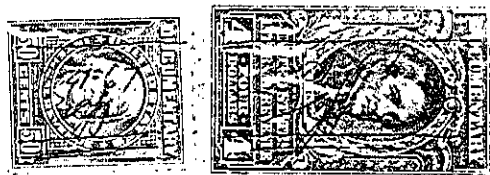
The East One Half of the Northeast One Quarter (E $\frac{1}{2}$  of the NE $\frac{1}{4}$ ) of Section Twenty-Seven (27), Town Six (6) North, Range Ten (10) East; and the Southeast One Quarter (SE $\frac{1}{4}$ ) of Section (22) Twenty-Two, Town Six (6) North, Range Ten (10) East; all in the Township of Dunn.



Subject to existing highways, easements and restrictions of record and applicable zoning laws and ordinances. Subject to and together with existing lease for a term of one year terminating February 29, 1968 given by party of the first part to Rodger H. Nelson, which said lease for the same consideration is hereby assigned and transferred to the party of the second part.



This quit-claim deed is given as evidence of the fulfillment of the condition subsequent contained in quit-claim deed dated June 28, 1967 and recorded in the office of the Register of Deeds for Dane County, Wisconsin in Volume 837 of Deeds on Page 15, as document No. 1189028 and the conveyance made by said quit-claim deed is made absolute and this instrument of conveyance takes effect as of the date of the quit-claim deed above described, being June 28th, 1967.



We have and in hold the same, together with all and singular the appurtenances and privileges thereunto belonging or in any wise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the said party of the first part, either in law or equity, either in possession or expectancy of, to the only proper use, benefit and behoof of said party of the second part, its successors and assigns FOREVER.

In Witness Whereof, the said Midwestern Universities Research Association party of the first part, has caused these presents to be signed by Laurence R. Lunden its President, and countersigned by William S. Kerr its Secretary, at Illinois and its corporate seal to be hereto affixed, this 28th day of June, A. D., 1967.

SIGNED AND SEALED IN PRESENCE OF

Midwestern Universities Research Association Corporate Name

Harold E. Wittig  
Harold E. Wittig  
Robert T. Johnson  
Robert T. Johnson  
Illinois

Laurence R. Lunden President  
Countersigned: William S. Kerr Secretary

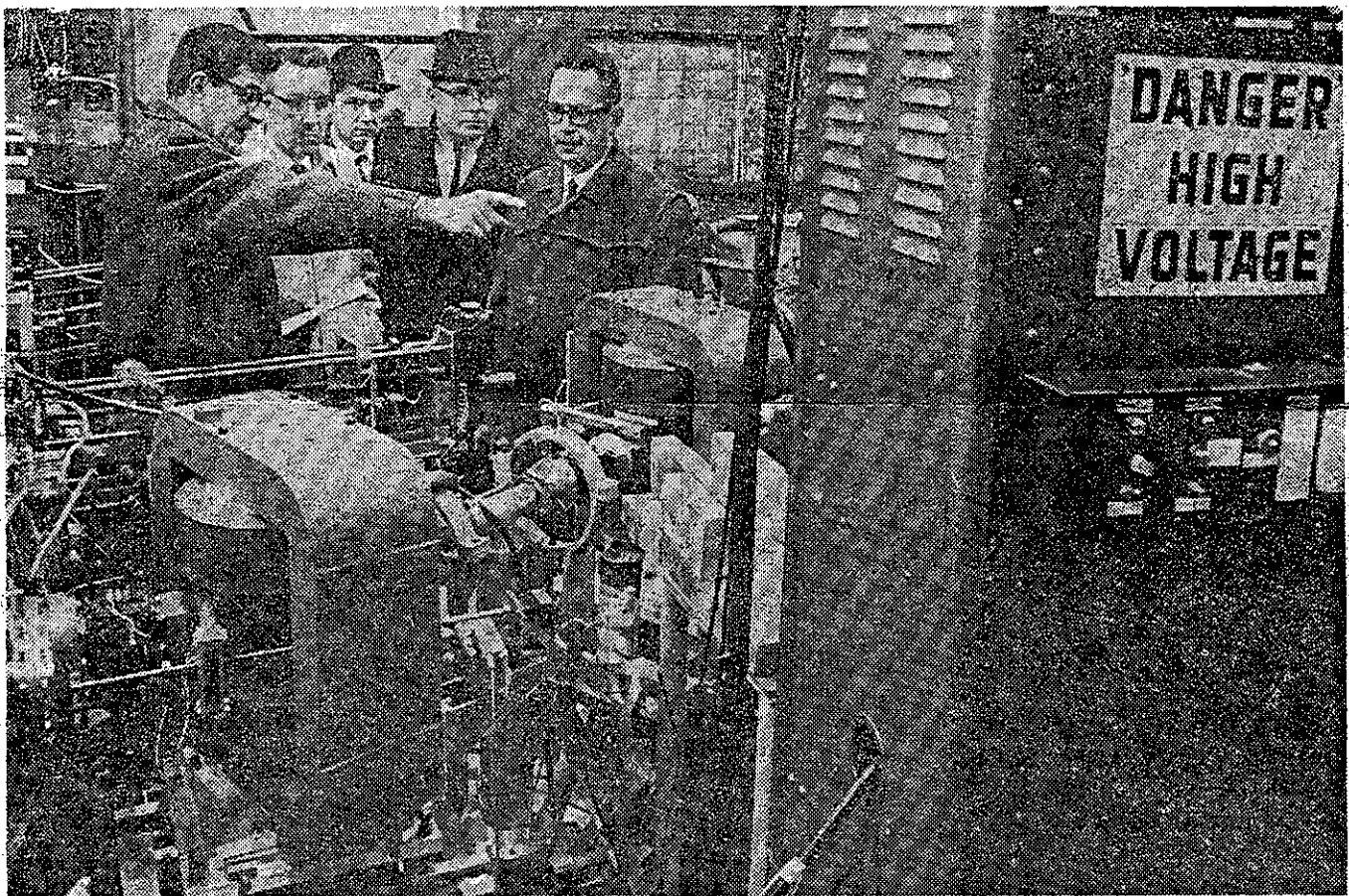
STATE OF WISCONSIN  
Cook County, ss.

Personally came before me, this 28th day of June, A. D., 1967, Laurence R. Lunden, President, and William S. Kerr, Secretary of the above named Corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said Corporation, and acknowledged that they executed the foregoing instrument as such officers as the deed of said Corporation, by its authority.

Received for Record this 21st day of September, A. D., 1967 at 3:30 o'clock P.M. (SEAL)  
Harold K. Hill  
Register of Deeds  
Cecilia Beyler  
Deputy Register of Deeds

Kathryn Chapman Fouch  
Kathryn Chapman Fouch  
Notary Public, Cook County, Illinois  
My commission expires Dec 7 A. D. 1972

This instrument was drafted by George F. Lange, attorney.



**POINTING WITH PRIDE** — Fred Mills, left, director of the Midwest Universities Research Assn. (MURA), describes one of the machines at the MURA facilities during a tour by the team looking at sites for the Atomic Energy Commission's proposed \$300 million atom smasher. With him are, from left, John

Swartout, head of the team and assistant general manager of the Atomic Energy Commission (AEC); Jack Bane, an engineer with the commission; Ray Fricken, a physicist with the commission; and Harold Ticho, a high energy physicist from the University of California at Los Angeles.

—State Journal Photo by Edwin Stein

## Atom Smasher Team Impressed on Tour

# Stoughton Site Suitable to AEC

By DAVID BEDNAREK  
(State Journal Education Writer)

The head of a four-man team looking at sites for the Atomic Energy Commission's proposed \$300 million atom smasher Wednesday called the site near Stoughton suitable for the project.

"There is no question that the accelerator could be built on this site," said John Swartout, assistant general manager of the commission.

"But whether this is the best one is still a question," he added.

Swartout gave this preliminary assessment of the 5,466-acre site at both a press conference in the governor's office and at the site itself during the day-long tour.

He said he was most impressed by the fact that the site lies from 3 to 35 feet above bedrock and sandstone which would provide an ideal foundation for the accelerator.

He also said he was impressed by the availability of enough land for the project and the supply of water.

When asked if the Stoughton site had any weak points, Swartout said there are no glaring

ones, adding, "There is no one single factor which would preclude our putting an accelerator here."

He also said that the University of Wisconsin, which he called one of the outstanding universities in the country, enhances the site's academic and cultural advantages.

The Stoughton site, which lies along the west side of Highway 51 south of Madison, was the 19th one visited by this team.

By Dec. 15, the team will have evaluated the data collected on the sites, and submit the data to the National Academy of Sciences.

The academy will then compare

these sites with some 65 other sites, which have been visited by seven other teams, before making a recommendation to the Atomic Energy Commission (AEC).

Political considerations will undoubtedly enter the situation before the ultimate decision is made.

### Viet War a Factor?

Although Swartout would not confirm it, another member of the group visiting the site Wednesday said it is entirely possible that the escalation of the war in Viet Nam might delay the entire project.

He alluded to President Johnson's recent statement that we might have "to tighten our civil-

ian belt" in view of the war in Viet Nam.

If the decision on a site becomes difficult, he explained, it might be wise for Mr. Johnson to delay the entire project and use the Viet Nam war as an excuse.

The competition among the states for the atom smasher which would be the largest in the world has been keen.

### \$300 Million To Start

The project would mean an initial building program costing \$300 million and lasting seven to eight years.

Add to this another \$50 million

Turn to Page 2, Col. 1

## MURA Discussions Are Pessimistic

From page 1, column 4

of the entire 150 million during the next several years will follow naturally in congress.

### Scientists Make Plea

Meeting with the president on the project, besides Nelson, Kastenmeier and Proxmire were Senator Humphrey (Dem., Minn.), senate whip; Representative Melvin Price (Dem., Ill.) and Ralph K. Huitt, a University of Wisconsin political science professor who was formerly on Johnson's staff.

Three other midwesterners who were to have seen the president earlier also attended the meeting. The two appointments were merged because Johnson was behind schedule.

These were Bernard Waldman, MURA director; Elvis J. Stahr, president of Indiana university and president of the

MURA corporation, and Edwin L. Goldwasser, a University of Illinois physicist.

Stahr was secretary of the army for the late President Kennedy until June 30, 1962, when he resigned to take the university post.

Goldwasser is a member of the 10 member panel from the president's science advisory committee that recommended last April that the project be authorized "as soon as possible."

### Reads Hostile Report

It was learned that Johnson read from a document which contained scientific arguments hostile to the MURA project. Some scientists from the east and west coasts fear that, if the MURA project goes through, it would delay other projects in their areas.

"The president has determined to keep the level of government expenditures down," Kastenmeier said. "MURA is not high on his list of priority projects. A final decision has not been made."

"We will continue to do whatever can be done to impress upon the administration the great importance of MURA not only to the midwest but to the entire nation."

Only limited time remains. The printed budget he will submit next month to congress is now being prepared.

In 1804, Napoleon Bonaparte crowned himself emperor of France.  
 In 1942, the atomic age began when scientists working under a football stadium at the University of Chicago demonstrated a self-sustaining nuclear reaction.  
 In 1952, President-Elect Eisenhower arrived in Korea to fulfill a campaign promise to visit the country in hopes of ending the war.  
 In 1964, 2 1/2 million persons greeted Pope Paul as he visited Bombay.

12:30 a.m.  
 Mean temperature yesterday 36.  
 Normal 27.  
 Degree days 29.  
 Barometric pressure at 6 p.m. (sea level) 29.94 in.  
 Total precipitation since Jan. 1 35.70 in.  
**TODAY IN OTHER YEARS**  
 Warmest 61 degrees in 1962.  
 Coldest -12 degrees in 1886.  
 Wettest .58 in. in 1912.

# AEC Team Finds Stoughton Site Suitable for Smasher

FROM PAGE 1

for equipment and an annual operating budget of \$60 million and the economic importance of the facility becomes apparent.

The proposed atom smasher of 200 billion electron volts (BEV) is more than twice as large as the 70 BEV accelerator being built in the Soviet Union. The largest one in the United States now is 33 BEV and is located on the East coast.

### Pamphlet Issued

Wisconsin's case for the atom smasher was presented in a 45-page pamphlet which was turned over to Swartout and the other members of the team — Jack Bane, Ray Fricken, and Harold Ticho.

The pamphlet listed the advantages of the land, access to electric power, and transportation and industrial environment, as well as letters from state leaders supporting the project.

In addition, Marshall Keith, former associate director of the Midwest Universities Research Assn. (MURA), and Fred Mills, the present director of MURA, accompanied the team on the tour of the site to answer addi-

tional questions. University of Wisconsin Vice-Pres. Robert L. Clodius and Robert Alberty, dean of the Graduate School, pledged complete university cooperation with the scientists and physicists who might man the accelerator.

Mills said the MURA staff in the past has been able to use the university as much as it wanted.

### No Adverse Reaction

On the possibility of adverse reaction to the project, both Clodius and Alberty said reaction has been just the opposite. Alberty said there has been strong civic interest in this project from the beginning, and Clodius said facilities of this kind are "sought after by local people."

Gov. Warren P. Knowles and the Legislature have approved a bill authorizing \$10 million or whatever is necessary to buy the site.

Keith, now at the University of Minnesota, told the team that Wisconsin law provides that the state can take over all of the land in the proposed site by condemnation and turn it over to the commission in 24 hours.

## 2 Cambridge Women Hurt in Accident

Two 19-year-old Cambridge women, Rachel Fields and Kathleen Geiger, suffered face cuts about 1:30 p.m. Wednesday when their car struck the rear

## Marine Grateful for Boot Camp

PARRIS ISLAND, S.C. (UPI)—A young marine fighting in Viet Nam has written a note of appreciation to his boot camp drill in-

McCloskey said it was likely that Chinese workers were helping to repair the bomb-blasted rail line which was important to shipping freight from China through North Viet Nam to other Chinese terminals.

But intelligence sources said the increased Peking aid, including help on rail repairs, apparently was designed to speed the dispatch of regular North Vietnamese units to South Viet Nam.

But there was no evidence that Red China was preparing to join directly in the fighting in South Viet Nam.

As for Rusk, he made these other points:

**ONE.** There will be no easing of relations with Cuba until Premier Fidel Castro gives up efforts to subvert the hemisphere and cut his military ties with Russia.

**TWO.** In answer to a question, Rusk denied that the Central Intelligence Agency (CIA) either makes policy or acts without knowledge of Administration officials.

## Jury Convicts Killer of Career Girls

NEW YORK (AP) — Richard Robles, a burglar and dope addict, was convicted Wednesday night of the twin slayings of career girls Janice Wylie and Emily Hoffert.

Robles, 22, faces a mandatory life sentence for the Aug. 28, 1963, bludgeoning and knifeing of the two girls in their East Side apartment.

A jury of seven men and five women returned their guilty verdict in slightly less than six hours.

## Mucks Sr. Listed in 'Good' Condition

Archie Mucks Sr., 69, Oshkosh, who has been undergoing a medical evaluation at University hospitals, Wednesday night was reported in "good" condition.

Mucks is a University of Wisconsin emeritus professor of agricultural extension and a former

vive well enough in space to make a flight to the Moon, the longest planned in the Apollo program?

The Gemini 6 astronauts, Navy Capt. Walter M. Schirra Jr. and Air Force Maj. Thomas P. Stafford, underwent a less extensive physical Wednesday. They will receive a final exam three days before their scheduled Dec. 13 blast-off.

The double Gemini shot calls for a rendezvous and formation flight of the two space ships 185 miles above the Earth—perhaps within inches of each other.

Space Agency officials say there is about a 50-50 chance of launching both capsules in the prescribed time to accomplish the rendezvous.

The weatherman predicted that at the planned 1:30 p.m. CST launch time Saturday there would be a scattered cloud ceiling above 3,000 feet, winds 9 to 17 miles an hour, seas 2 to 3 feet, and temperature near 70.

### 'Looks Good'

Dr. Charles A. Berry, Gemini flight surgeon, subjected both astronaut teams to long sessions under the stethoscope and on the examining table today and said: "Everything looks good. Both crews are very relaxed."

Later, Air Force Lt. Col. Borman and Navy Cmdr. Lovell attended a briefing on the condition of spacecraft and Titan 2 rocket systems and reviewed their complex flight plan which calls for them to circle the globe 206 times in 329 hours, 30 minutes.

They also kept close tabs on launch pad preparedness. Liquid oxygen was piped into the power-producing fuel cell system and into the capsule life support system. A three-hour exercise called a pre-count was conducted during which technicians checked for stray voltage currents and fuel leaks in the spacecraft.

### Calcium Studied

Gemini 7 will be jammed with instruments to gather medical data on Borman and Lovell.

Of major importance will be how much calcium is lost from the bones of the astronauts. This loss is what makes the bones of older people more fragile than that of younger persons. If a space pilot developed "old bones" in orbit, they could be damaged when they shift from weightlessness to re-entry forces several times the pull of gravity.

## Nice While It Lasts, and Forecast's Good

Indian summer has come and gone but the brief respite from chill late November weather which blanketed the Madison area Wednesday, is expected to continue today with highs in the 40s

# Group Suggests Voting Age of 18

## Removal of Literacy Tests, Poll Taxes Also Proposed by President's Study

Washington, D. C. — A Presidential commission recommended Friday that all states consider dropping the minimum age for voters to 18. It also called for eliminating poll



for 18 year old voting was the belief that, by the time young people reach 21, they are "so far removed from the stimulation of the educational process that their interest in public affairs has waned."

The report lamented "the low voter participation of the age group from 21 to 30." It surmised that many young people never acquired the voting habit because they failed to start voting right after graduation from high school.

### Permitted in Two States

Georgia and Kentucky are the only states that allow 18 year olds to vote. The age minimum is 19 in Alaska and 20 in Hawaii and 21 in the other 46 states.

Like the poll tax, the report

ments to not more than 30 days and state requirements to not more than six months.

Allow new residents of a state to vote for president if they were qualified to vote in their own state.

Keep registration books open until three or four weeks, at the minimum, before an election.

Keep polling places open until at least 9 p.m.



# Senator Sees Fraud in Smasher Site List

Washington, D. C. — UPI — Sen. Long (D-Mo.) charged Monday that there was "mas-



Long

sive deception" and "violation of good faith" in the selection of six sites for the final competition for a 375 million-dollar atom smasher. In a prepared senate speech, Long voiced "alarm" that the atomic energy commission was considering six sites that he said were "seriously inadequate."

The sites "fail to meet the basic physical requirements which the commission itself set last year," he charged.

The six finalists, selected by the National Academy of Sciences, are near Ann Arbor, Mich.; Madison, Wis.; Brookhaven, N. Y.; Chicago; Denver, Col., and Sacramento, Calif.

The AEC now is evaluating

supplemental data from the sponsors of the sites after the academy chose them from 85 semifinal contenders.

## Asks Re-evaluation

Long called for a re-evaluation of all 85 sites. Originally, more than 200 sites were proposed in 46 states.

Denver and Madison fail on the "vital requirements" of sufficient electric power, Long said.

Long noted that the AEC stressed the importance of proximity to a major airport, but he said Sacramento did not have a major airport and was two and a half hours driving time from the San Francisco airport.

He said Madison offered only limited direct air line service to major cities except for Chicago, and that Brookhaven was one and a half hours from a major airport.

## Missouri Sites Rejected

Long said the sites at Ann Arbor, Brookhaven, Denver and Sacramento all failed to meet the AEC requirements of terrain and would increase construction costs as a result.

The Missouri senator noted that four cities in his state—Kansas City, St. Louis, Joplin and Flat River—had submitted proposals which were rejected.

"Of course, I was disappointed," Long said. "But the deception I am talking about affects the whole nation."

"Never before in the history of federal construction programs has the government had so many offers, so many sites to choose from," Long said.

"But something has gone wrong. What began as a search for the best site has turned out to be a miserable deception."

"The national academy of sciences has interfered and the good faith of all those who submitted sites has been violated."

The senator said it was a shame that the AEC turned over to the academy the chore of choosing the list of final sites. He said no sooner was it done than the academy changed the criteria, although every proposal submitted was based on original AEC criteria.

"This is an alarming development," Long said. "By refusing to stick to the original AEC criteria the academy has picked six sites of which not a single one satisfies more than five of the eight major AEC criteria. Three of the six recommended sites fail to meet half of the major criteria."

# Power Firm Rebuts Long on Smasher

Madison, Wis. — UPI — Charges by Sen. Long (D-Mo.) over selection of a site for a 375 million dollar atom smasher were contradicted Monday by Wisconsin officials.

Long charged that none of the six sites still under consideration met all of the atomic energy commission's requirements. He said Wisconsin's proposed site between Madison and Stoughton lacked sufficient electric power to run the machine and that transportation was inadequate.

"Certainly there is sufficient power," said J. Don Howard, president of Wisconsin Power and Light Co., Madison. "We will make enough power available."

Howard, whose firm would provide the electrical energy required to run the 200 billion electron volt machine, said he didn't know where Long got his information. He said there was already sufficient power to run the machine.

## New Bids

Howard said the company would prepare a new bid by Friday based on revised AEC power requirements.

New information indicates that the accelerator will need a peak of 193,000 kilowatts with a 49% load factor, instead of 200,000 watts at a 70% load factor as originally indicated, Howard said.

On the original requirements, Wisconsin's bid of 7.7 mills per kilowatt hour was third lowest among the six sites. Denver bid 6.2 mills and Ann Arbor, Mich., 6.9.

New bids are expected on power at all six sites, according to Carl J. Forsberg, chairman of the board at Wisconsin Power & Light. He said the new requirements should permit a lower bid by his firm.

## No Comment

University of Wisconsin Vice-President Robert L. Clodius said he didn't want to comment on Long's charges.

"The site speaks for itself," Clodius said.

Long's criticism of the Wisconsin site over its distance from a major airport conflicted with a proposal made to an AEC team that visited the site in April.

At that time, the state proposed that an air shuttle service be operated between the smasher site area and Chicago. The state would subsidize the operation until it was taken over by a private firm.

# Johnson Will Confer on MURA Smasher

## Nelson and Humphrey to Take Fund Plea for Accelerator to White House

Journal Washington Bureau  
Washington, D. C. — Senator Nelson (Dem., Wis.) and Senator Humphrey (Dem., Minn.) will meet President Johnson at 10:30 a.m. Friday to seek funds for the 150 million dollar atomic accelerator proposed for Stoughton, Wis.

Nelson announced Wednesday that the White House meeting had been arranged by Humphrey, the senate Democratic whip. The appointment was achieved after weeks of effort by the two senators, who had tried fruitlessly to see the late President Kennedy about the project.

Ralph K. Huitt, a University of Wisconsin political science professor who served on Mr. Johnson's staff in 1954 and 1960, also will attend the meeting.

### Budget Push Planned

The three men will try to assure that funds to start the big atom smasher are provided in the budget the president sends to congress next month.

The accelerator would be designed and operated under the Midwestern Universities Research association (MURA), an association of 15 universities in nine midwestern states.

Nelson said that although the project had the support of 16 senators and 57 representatives from the MURA states, it was thought best to have only a few discuss the project with the president.

MURA has asked for \$4,500,000 to be spent in the fiscal year which begins July 1 and for authority to obligate another six million.

### Borings, Fees Covered

The actual expenditures would cover test borings and architect-engineering fees. No earth would be moved before the spring of 1965 at the earliest.

One indication that the appropriation might be considerably smaller came Wednesday from Humphrey's office.

"President Kennedy indicated before his death to Senator Humphrey that he would support some 'seed money,'" a Humphrey staff member said. "The chances seemed to be very dim for any construction money."

In Milwaukee, officials of industrial firms experienced in government contract procedures said that "seed money" was an unhappy expression.

Usually, they said, it means that the government will supply

funds to keep a research and development team together and thinking, but that no production funds will be allotted.

MURA has been supported this way for nearly a decade. Its budget for the current year was \$1,975,000.

# MURA's Accelerator Frustrated by Dispute

Project Planned, Site Already Bought, but Geographical Fight Impedes Decision

Association's Design Contends With Two Other Proposals for US Dollars

By THOMAS A. BLINKHORN  
Of The Journal Staff

Stoughton, Wis. — Frustration has bedeviled the Midwest Universities Research association (MURA) since it was organized in 1954 to develop a high energy atomic accelerator for this section of the country.

Today, after almost 10 years, this much is certain:

Comprehensive plans are finished. An eminent scientific panel has given its conditional approval. A working model is operating in a lonely cornfield here. And a large adjacent tract has been purchased for the actual facility. In short, everything is ready to go.

Yet the project is ensnared in a scientific-political controversy that has reached the highest levels of government. And, according to MURA officials, President Kennedy himself will have to resolve it. His decision could have significant consequences for Wisconsin and the midwest.

#### Started by Physicists

MURA was inspired by a small group of university physicists who saw the pressing need for a basic research center in this area.

Their specific objective was establishment of an accelerator — commonly called an atom smasher — which is an important tool for probing mysteries of the nucleus, and consequently the universe itself.

Very simply, it is a massive machine in which charged atomic particles called protons are accelerated by electrical "kicks" to near the speed of light (186,000 miles a second) and then made to strike a target nucleus. Through this process, scientists are able to peer into the inner sanctum of the material universe.

#### Gains Interest

As the MURA idea circulated, interest grew until the organization included representatives of 15 universities in nine midwestern states. In 1956, the atomic energy commission, impressed with the group's objectives, agreed to finance development. It has been doing so ever since, appropriating between 1.5 and 2 million dollars annually since about 1959.

Two early accelerator pro-

Turn to page 2, column 1

By HARRY S. PEASE  
Of The Journal Staff

In the purely scientific phase of the pending atom smasher contest, as described in an accompanying story, the proposed MURA accelerator must measure up against two other machines designed for different purposes.

MURA designers planned a system which would produce an almost continuous stream of atomic particles at an energy of 12.5 billion electron volts (Bev). Existing machines reach or surpass this energy level, but accelerate so few particles at a time that finding some rare atomic events would take a lifetime.

The University of California's Lawrence radiation laboratory at Berkeley wants to build a machine which would raise small groups of particles to 200 Bev.

The atomic energy commission's Brookhaven national laboratory on Long Island, N. Y., wants to begin planning of an accelerator which would spin even fewer particles up to energies in the 600 to 1,000 Bev range.

#### Modification Sought

Brookhaven also wants to modify the major atom smasher it has now.

A special scientific advisory committee recommended to the federal government in April that the Berkeley machine be built "at the earliest possible date."

It also recommended that the Brookhaven projects go forward.

Its fourth recommendation said:

"Authorize in fiscal year 1965 the construction, by MURA, of a supercurrent accelerator with-

Turn to Smasher, page 2, col. 3

# Nelson Is Optimistic on Atom Smasher Plan

## Senator Sees MURA Site Near Stoughton Where \$155 Million Plant Is Proposed

By HARRY S. PEASE  
Of The Journal Staff

Stoughton, Wis.—At least 17 midwestern senators will join in urging that a 155 million dollar atom smasher be built at the Midwestern Universities Research association (MURA) laboratory near here, Senator Nelson (Dem., Wis.) said Friday.

Nelson visited the site to confer with scientists. He sought ammunition for use in persuading President Kennedy to support atomic energy commission financing of the seven year project.

MURA proposes to build a 12.5 billion electron volt proton accelerator. It would emit a beam of particles 100 times as intense as any existing tool for nuclear research and would complete in less than three days some experiments which take four to five months with machines now operating.

### Viewed by Television

Nelson viewed by closed circuit television the operation of a 50 million electron volt accelerator in which radical design features of the proposed big atom smasher have been tested and found practical.

The television was necessary because the accelerator emits dangerous radiation when it is operating. It is shielded in an artificial cave of concrete and earth.

Until about three weeks ago, the behavior of electrons in the accelerator was detectable only with instruments thrust into its atomic race track. Magnets and coils which turn the particle beam out of the accelerator were recently installed.

### Light Spot Viewed

Allowed to strike a phosphorous screen, the electrons produce a pulsating spot of light about three-sixteenths of an inch across. The light can flash 60 times a second but was held to one-tenth of that speed while the senator watched.

The "beam extraction" equipment was built by a group of scientists and technicians led by Dr. Michael F. Shea, a Notre Dame faculty member now on the MURA staff.

Its success delighted a MURA group since it proved that at least 85% of the accelerator's dense horde of electrons could

be diverted for convenient use in experiments. The high intensity beam of the proposed big machine could be steered in a similar way.

Included in the atomic energy commission's budget request for the year which begins next July 1 are three items for the MURA accelerator.

One would authorize construction of the machine.

The others would provide 4.5 million dollars to be spent during the year and authorize commitment of another 5.5 million to be paid from later appropriations.

### Would Employ 1,000

Actual expenditures for the machine would range up to about 40 million dollars a year when construction activity was at its height.

MURA officials estimated that the completed machine would cost 20 million dollars a year to operate. It would employ about 1,000 persons, including 162 physicists. Its electricity bill alone would amount to about five million dollars a year.

Representative Kastenmeier (Dem., Wis.) was to have attended the session Friday. However, he stayed in Washington to vote on the foreign aid bill.

Nelson said he believed that there was a better than 50-50 chance that the MURA project would be approved by the bureau of the budget and by congress next year.

# MURA Has a 'Good Case,' Humphrey Says

## Atom Smasher Backing Cited in Talk at UW

By ROGER GRIBBLE  
(State Journal Staff Writer)

Sen. Hubert Humphrey (D-Minn.) told reporters here Thursday that "we have a very good case" for getting the \$150 million high energy accelerator at the Midwestern Universities Research Assn. (MURA) site near Stoughton in the next federal budget.

Humphrey also told a Wisconsin Union theater audience that the richest areas in the country are those where money is poured in education and research.

"This is why congressmen from this area are demanding from the President, out of economic justice, that we be given a chance to find our way in the atomic energy field," he said.

### Life or Death Issue

Approval of the project at the MURA site will mean not only the benefits derived from the millions of dollars in the project, but also the addition of people in the area, he said, adding, "In this space and electronic age, the proper placement of contracts can be the difference between life and death in a community."

Humphrey declared that California received 42 per cent of federal research money last year while the entire Midwest got only 6 per cent.

On politics, Humphrey told reporters he feels Sen. Barry Goldwater (R-Ariz.) "is well on his way to the nomination. He may be stopped, but this doesn't look probable," he added.

Humphrey predicted that Goldwater could make a good fight in some Southern and Western states, but said he couldn't carry Minnesota and wouldn't stand a chance against President Kennedy.

But he added that he himself had no more "political interest in coming to Wisconsin at this time than in going to the North pole." He also has no plans to run for anything by the Senate, he said.

### Hails Test Ban Treaty

Humphrey hailed the signing of the test ban treaty and President Kennedy's announcement on the sale of grain to the Soviet Union. He linked Russian Premier Nikita Khrushchev's signing of the test ban treaty with his nation's need

for food, and said that Soviet radio stations have been telling Russians that President Kennedy has made grain available for sale to Russia.

Russia can't be a great power if it has to spend large amounts for food, he said, adding that whatever money is spent on food can't be spent on missiles.

Humphrey also predicted that by the end of the year "the greatest advance will be made in human rights since Emancipation Proclamation" 100 years ago. "I believe we will pass civil rights legislation more far-reaching than that of any other government in any time," he said.

The Administration's tax cut proposal will also pass, he predicted, although he admitted there is risk involved in an \$11 billion cut when there is still a deficit.

### Lists Top Issues

Humphrey said the greatest issues facing the nation today are the struggle for human rights, problems of economic growth and development, and the "process of peace."

He declared that "brainpower" must be developed from "un-

tapped resources" in the country if the U.S. is to compete economically with its allies, its real competitors.

Humphrey called upon businessmen to invest in universities to help develop this "brainpower."

Areas which put the most money into education are the richest, he said, and no state or nation ever went bankrupt from putting too much money in education.

Humphrey suggested that now is the time for the U.S. to continue to work for peace through continued support of the United Nations, cooperation with allies and the Soviet Union in exploration of outer space and the Moon, and stepping up of educational, cultural scientific and economic exchanges.

### For More Trade

Cooperation with Communist European nations in the field of health, and increased trade in non-strategic materials are other areas which should be pushed, he said. He called the past U.S. policy of not selling many items to Russia while U.S. allies sell Rus-

sia the same goods "stupid," adding that "We should sell them anything they can't shoot back" on a short-term basis.

Russian citizens are growing tired of their responsibilities, he said, and Russia is feeling the drain of the cold war. But he warned that if the U.S. does not press its advantages, Russia will win the cold war by default.

Humphrey will tour the MURA site today before leaving for Muskegon, Mich.

### Hailed by Harrington

In introducing Humphrey, University of Wisconsin Pres. Fred Harvey Harrington called him a "leading figure" in helping to land the MURA project. "We in the Midwest are increasingly concerned about our future, and are doing something about it," he added.

As Humphrey arrived at Municipal airport here he met George Goss, a member of the White House staff who was leaving on another flight after visiting his mother. They chatted briefly before Goss' flight left.



SENATOR WELCOMED—Sen. Hubert Humphrey, left, chats with Robert Taylor, assistant to the University of Wisconsin president, after his arrival at Truax Field Thursday night.

—State Journal Photo by Richard Sroda

Talk With President Scheduled

# Nelson Will Push MURA Plan



ATTENTION—Sen. Gaylord Nelson (D-Wis.) chatted with Col. Donovan Carpenter, past president of the Madison chapter of the Reserve Officers Assn., left, and Maj. Russell Mittel-

stadt, president, center, before speaking to a chapter meeting at the Middleton Sportsmen's club Friday night.

—State Journal Photo by Richard Sroda

## Rabinovitz's Status Still Is Unknown

By JAMES D. SELK  
(State Journal Staff Writer)

Sen. Gaylord Nelson (D-Wis.) said Friday he plans to meet with Sen. Hubert Humphrey (D-Minn.) soon to approach President Johnson about the New Administration's plans on a proposal to build a \$130 million nuclear accelerator at Stoughton.

Nelson, Humphrey, and Rep. Robert W. Kastenmeier (D-Watertown), had scheduled an appointment with President Kennedy before the late President's assassination Friday.

### Believed Favored

It was believed that President Kennedy favored the accelerator proposal put forth by the Midwest Universities Research Assn. (MURA).

Nelson, who was in Wisconsin to address a meeting of the Madison chapter of the Reserve Officers Assn., said he did not know what the new Administration will do about President Kennedy's controversial appointment of Sheboygan Atty. David Rabinovitz to the Western district Federal Court bench.

The senator said the appointment is still being considered a Senate committee.

Nelson told about 80 officers and wives attending the association meeting in the Middleton Sportsmen's club that adequate foreign aid appropriations are as important to United States security as its military posture.

### Called Bar to Reds

He said economic aid to underdeveloped countries "is really an extension of military aid" because unless the economies and governments of underdeveloped countries are developed the countries are ripe for revolution and Communists take over.

He said he doubted that the public was sufficiently informed on the importance of foreign aid and the public's attitude is reflected in the Congress.

He said when the Administration's \$50 billion defense budget reached the floor of the Senate it was passed after one hour's debate.

The \$3.7 billion foreign aid bill was debated for more than three weeks, he said.

Nelson also said the civil rights and tax reduction bills have a "fair chance of passage in one form or another."

### Automation Problem

The senator said the problem of automation displacing workers in the United States is in its infancy and added that unemployment is also becoming a problem of the middle class.

Many high school and college graduates are among the ranks of the unemployed or the underemployed, he said.

"What happens to their political commitment to this system" if they cannot make their full contributions? he asked.

The program was under the direction of Atty. Russell Mittelstadt, a reserve Army major, and president of the Madison chapter of the officers group.

# MURA Co-operation With Argonne OK'd

## But Stahr Continues to Argue Stoughton Site Is Better One for Accelerator

Journal Wire Services  
Chicago, Ill.—Midwestern Universities Research association (MURA) agreed Monday to cooperate with Argonne national laboratories, Lemont, Ill., in designing a 15 million dollar linear accelerator to serve as an injector for a zero gradient synchrotron at Argonne.

But Elvis J. Stahr, president of MURA and Indiana university, continued a campaign to get a 150 million dollar MURA high energy accelerator atom smasher at Stoughton, Wis.

After the MURA board of directors at its quarterly meeting agreed to collaborate with Argonne and Brookhaven national laboratory, Long Island, N. Y., Stahr said that co-operation was in the national interest.

### MURA Project Rejected

Stahr said the design would lead to a formal proposal for atomic energy commission support of the Argonne project in 1966.

President Johnson has rejected an AEC advisory committee recommendation that the MURA atom smasher be located at Stoughton. But Stahr said:

"A very careful survey showed that an area near Stoughton would be the best place. We have a tremendous stake in the future of high energy physics in the midwest."

MURA, composed of 15 institutions in the midwest, including the University of Wisconsin, has pressed for a Stoughton accelerator as an essential step to getting nuclear research in the midwest. Without such a facility, it has been argued, scientists who get doctoral degrees from midwestern universities would almost surely move to the east or west coasts where most existing research facilities are situated.

### Seaborg Explains

Testifying in Washington Monday before the house-senate atomic energy committee, Glenn T. Seaborg, AEC chairman, said the decision not to include the MURA project in the budget was made after most careful consideration of the recommendations by the scientific community.

"The MURA program has been reoriented focusing in a general midwest high energy physics effort, including accelerator design at the Argonne National Laboratory," he said. "The midwest group would collaborate with other groups, particularly the one at Brookhaven, already working on the design of a very high energy accelerator."

### Reasoning Outlined

Senator Humphrey (Dem., Minn.) reported last week that Seaborg had suggested that MURA initiate discussion for co-operation with Argonne. If an agreement could be

reached, he said, MURA would be sustained as a group and its physicists would enter Argonne "on a completely equal basis with those now using the laboratory" and would be less likely to leave the midwest.

Details of the co-operation still must be worked out.

## John Schneider Granted Parole

Madison, Wis.—P—John C. Schneider, jr., Sheboygan, former Democratic assemblyman serving a two year sentence in state prison for theft, has been granted a parole.

The state public welfare department said Tuesday that Schneider, 48, would be released from prison Feb. 4 and would be under parole supervision until his term expires. He had filed an application for pardon.

Schneider, who was the Democratic nominee for state treasurer in 1962, was convicted of stealing \$19,000 from a cemetery association he operated. He was given a two year sentence Feb. 4, 1963.

George M. Keith, welfare department deputy director, said the parole board approved Schneider's release because it felt he was not a risk and had a good behavior record. The board also recognized that release would allow Schneider to support his family.

## Disaster Loans for Botul

### Fishing Interests Can Receive Aid Under Bill Sent by Senate to President

Washington, D. C.—P—Great Lakes fishing interests which suffered economic injury during the botulism scare would be able to obtain disaster loans from the small business administration under a bill passed by the senate and sent to the White House Monday.

The deadly botulism was discovered in smoked fish processed last fall. It was blamed for several deaths.

The senate, which previously approved the bill, completed final action when it accepted a house amendment which knocked out a senate provision authorizing a 34.3 million dollar increase in the federal agency's revolving fund.

### Had House Approval

Senator Proxmire (Dem., Wis.) in recommending that action, quoted Eugene P. Foley, agency administrator, as saying the agency could do without additional authorization in keeping with President John-

# Wisconsin State



WEATHER: Mostly Cloudy and Cool With a Chance of Snow. High

35, THREE SECTIONS  
No. 8 126th Year

MADISON, FRIDAY, APRIL 8, 1966



POINT OF INTEREST — Dr. Glenn T. Seaborg, chairman of the Atomic Energy Commission (AEC), is flanked by Dr. Gerald F. Tape, a commissioner, left; and Gov. Warren P.

Knowles Thursday during a conference which was part of an inspection-tour of the Stoughton area atom smasher site.

—State Journal Photo by John Kreisler

## AEC Team Tours Stoughton Area

# Smasher Site Decision Seen Before Year's End

By WILLIAM WITT  
(State Journal Staff Writer)

Wisconsin should know before the end of the year whether a \$375 million atom smasher will be built on the Midwestern Universities Research Assn. (MURA) site near Stoughton or somewhere else.

Glenn Seaborg, chairman of the Atomic Energy Commission, (AEC) and a team of eight other AEC officials toured the site Thursday afternoon and conferred with University of Wisconsin and state officials.

It was a final on-the-spot review by the AEC before it made a recommendation on one of six sites to President Johnson.

Seaborg requested that all questions referred by the AEC team to officials here be answered by a May 15 deadline.

The tour is part of a whirlwind inspection of all six sites, one after the other, so that of-

officials can get the "feel" of the physical layouts.

The team arrived here by jet at about 1 p.m. from a similar tour of the Ann Arbor, Mich., proposed site for the world's largest atom smasher, a 200 billion electron-volt (BEV) machine.

They were scheduled to leave at 5:30 p.m. for Chicago. Today they plan to tour the nearby Weston, Ill., site, and the Denver, Colo., site.

On Saturday they will tour the Sacramento area, Calif., site, and schedule the final visit to the sixth site, Brookhaven, N.Y., later.

Seaborg and the team of scientists, technicians, and commissioners maintained a tight schedule here, visiting university campus housing facilities, conferring with University Pres. Fred Harvey Harrington and Gov. Warren P. Knowles in Harring-

ton's office; Driving to the Stoughton area MURA site; inspecting the small atom smasher already in operation there; listening to a series from the state, MURA, and the university on everything from Wisconsin weather to condemnation proceedings;

And finally posing questions and comments on considerations which will weigh in making the final recommendation. Seaborg listed the following:

Land and physical characteristics, utilities — especially the cost of electric power which he said was high here compared to estimates from other sites; attractiveness of the environment including beauty of the landscape, cultural advantages, and housing conditions;

Civil rights and equal employment opportunities — which Sea-

Turn to Page 2, Col. 3

## AEC Officials Check A-Site

Decision Is Due Before Year's End

FROM PAGE 1

borg said appeared to be excellent; and the availability of part-time appointments from the university scientific community.

Harrington revealed that it would cost an estimated \$5 million to acquire the present contemplated site of 5,466 acres. Knowles said a recent law appropriates any reasonable amount for acquisition, and the land could be turned over to the AEC almost immediately.

The site lies about 11 miles southeast of Madison along Highway 51 west of Lake Kegonsa in Dane county. MURA owns only 240 acres of the total, almost 70 acres are in public ownership; and 183 individuals own the remaining farm land.

Knowles said that the remainder could be acquired by condemnation if necessary.

Seaborg said that acquisition must be made with a minimum of upset to individual owners, and that this would be taken into consideration in making a recommendation.

### Other Factors

He listed as other factors the construction and operation cost of the giant machine, which will be about a mile in diameter, and accessibility to the site, since some 70 per cent of the scientists working there will come from other parts of the country.

He emphasized the AEC interest in the cost of power. J. Don Howard, president of the Wisconsin Power and Light Co., said that 20 million kilowatts of power would be available.

Seaborg said that he didn't believe availability of power would present any particular problems, except for the length of power line required from Madison to Stoughton, but added, "We want you to take a real good look into what you can do with power costs, because this may turn out to be of some importance. Some estimates from other sites have definitely been lower."

Howard and other officials were given detailed questionnaires to fill out and return to the AEC before May 15.

### Community For It

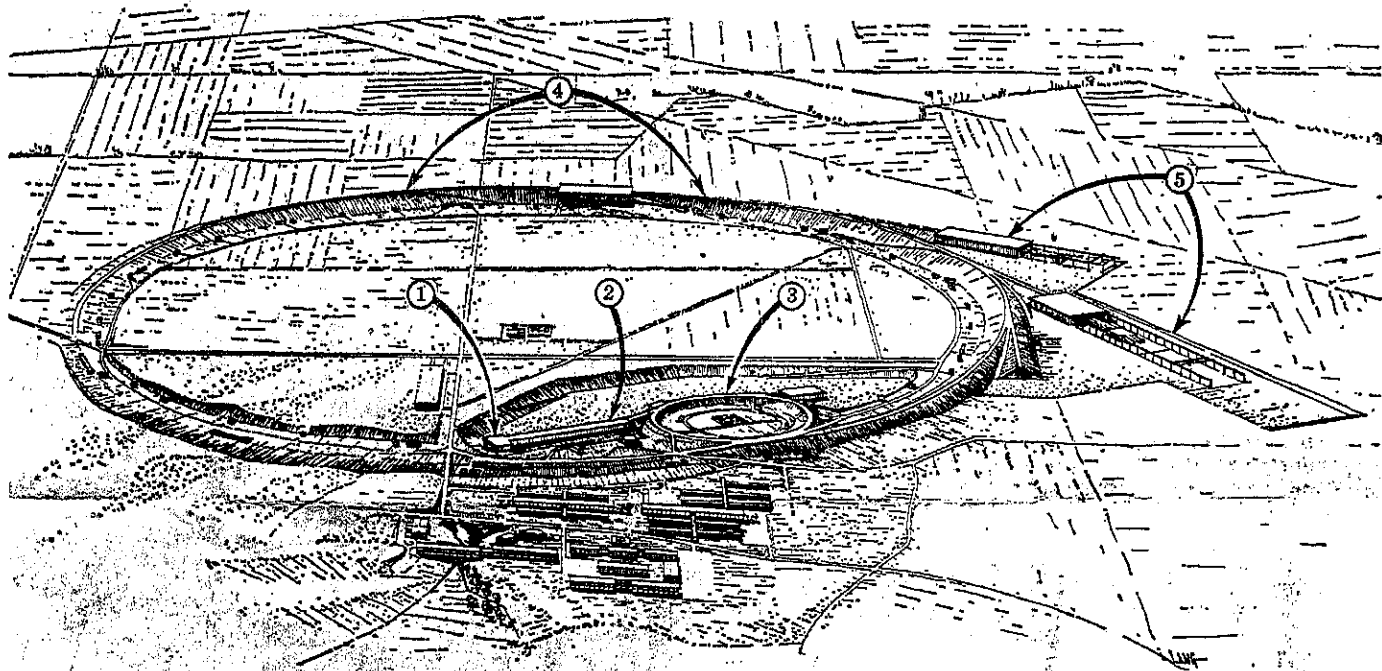
Harry F. Miedema, publisher of the Stoughton newspaper, told commissioners that the Stoughton community would welcome the machine.

"The people are anxious to cooperate. Not 100 per cent, but as high as is humanly possible," he said.

He told of a community meeting held this week at which area farmers voiced concern lest their farmland be taken through condemnation with only token payment.

"The farmers questioned whether they will have \$100-an-acre farmland," he said. But he said that the question was "nicely resolved" with MURA officials present.

Seaborg concluded, "The decision will be based on the most efficient construction and operation, where the taxpayer can get the most for his money—so it will be a matter of many small differences in the sites."



The proposed 200 billion electron volt accelerator will send charged particles hurtling around a buried ring .86 of a mile in diameter. Particles will be generated in a Cockcroft-Walton preinjector (1), fed into a linear accelerator (2), turned into an injector ring 650 feet across (3)

and finally spun up to full energy in the big loop (4). Scientists will make tests in experimental areas (5). Other buildings are shops, offices, equipment stations and laboratories. Later additions might cover several square miles.

—University of California Drawing

# Biggest Test Tube of All Would Span Many Miles

By HARRY S. PEASE  
Of The Journal Staff

Stoughton, Wis. — The 200 billion electron volt accelerator for which the National Academy of Sciences nominated this area last week will be history's biggest test tube.

Never before has so monstrous a machine been proposed to investigate so small a phenomenon.

When fully developed the accelerator and its accessories may ramble over most of nine square miles, but 10 billion of the bullets it will fire could be lined up across the period that ends this sentence. Some of the atomic fragments which figure in its experiments may be considerably smaller.

### Index of Complexity

Cost alone is an index of complexity. The atomic energy commission, which received the academy's recommendations, estimates that the big accelerator would require 375 million dollars for construction and an annual operating budget of 60 million.

[The academy also nominated five other locations—Ann Arbor, Mich.; a site 35 miles northwest of Chicago; Denver; the Brookhaven national laboratory at Upton, N. Y., and a foothill area outside Sacramento, Calif. The AEC will make the final choice, probably influenced by presidential and congressional recommendations.]

The machine will require laboratory and office floor space equal to 10 Milwaukee municipal office buildings; electricity equal to two-thirds the output of the whole Lakeside power plant; water flow equal to a fourth of that in Milwaukee's mains. The water, however, will not be consumed. It can be used over and over again.

Nearly 1,000 huge magnets will steer the accelerator's stream of charged particles around a doughnut .86 of a mile across. The magnets alone will weigh an estimated 19,400 tons.

The hollow doughnut, which serves as a racecourse will confine the particle beam in a path no more than 2 inches high and 5 inches wide. Its entire length—nearly three miles—must hold a better vacuum than most laboratories can achieve.

When running, the machine will emit intense radioactivity. It will be buried under 25 feet of earth shielding.

### Built Up in Four Steps

The accelerator is intended to spray out a pulse of 30 trillion positively charged protons 23 times a minute, according to a design summary prepared

last June by the staff of the University of California's Lawrence radiation laboratory.

The particles will be built up to full energy in four steps.

They will be emitted by a Cockcroft-Walton preinjector, an electronic assembly somewhat similar to a television set's high voltage supply. The preinjector will pass the particles along at 750,000 electron volts (Kev).

Whipped by high frequency radio waves, the atomic bullets will course down a straightaway as long as a football field. At this stage, speed ceases to mean much. The protons travel near the 186,000 mile a second speed of light. Pushing them harder makes them heavier and more energetic but adds only a trifle to velocity.

At the end of the linear accelerator the particles, now up to 200 million electron volts (Mev), turn into the circular raceway of a synchrotron which would rank as a major atom smasher if it stood alone.

### Guided Into Circular Track

Magnets weighing about 1,200 tons guide the protons into a circular track 650 feet across. Eighteen times a second they get a radio energy boost until they reach eight billion electron volts (Bev).

At this power level they are diverted into the big ring, for final acceleration to 200 Bev.

The process repeats itself seven times before a change in the magnetic field lets the whole cloud of particles fly out into an experimental area.

The protons are so numerous that a dozen experiments can be carried on at a time. Ordinarily, scientists who use the machine will make preparations in their own laboratories, spend a minimum period of actual experiment at the new accelerator center and then go home again to figure out the results.

### 100 Experiments a Year

In this way, more than 100 experiments a year will be possible, even though some take three months or more.

The designers estimate that the full time staff of physicists will number about 100, and that 300 visiting physicists will use the accelerator at one time or another. The total, 400, is about one-third of the scientists estimated to be working in this field of study in 1976.

Total full time employment at the laboratory, counting the folks who empty wastebaskets and scrape dishes in the cafeteria, is estimated at 2,400.

### Seven Years Estimated

The designers estimate that seven years will pass between congressional authorization of the 200 Bev accelerator and the beginning of experiments. However, they already envision major expansion programs.

Most impressive could be a third experimental area at the periphery of the big ring, one or more storage rings in which protons from the accelerator could be kept whirling while another batch is brought up to 200 Bev, and facilities to generate a 200 Bev beam of anti-protons.

[An antiproton has electromagnetic characteristics opposite to those of a normal proton. When the two meet, they annihilate each other.]

The expansion programs could very nearly double the size and cost of the accelerator complex.

Friday, December 20, 1963

## High C to R

### MURA Fund Future Called 'Pessimistic'

Congressmen Assert  
Outlook 'Not Good'  
After Discussions  
With President

By JOHN W. KOLE

Journal Washington Bureau

Washington, D. C. — President Johnson Friday gave a pessimistic report on the chances for funds to start the 150 million dollar atomic accelerator proposed for Stoughton, Wis.

He told midwestern politicians, university officials and scientists at a meeting in the White House that the atom smasher, planned for almost a decade, was not high on his priority list.

"It did not sound favorable in light of the budget problem," Senator Nelson (Dem., Wis.) said after the meeting.

"The outlook for this project is not good at this point," Representative Kastenmeier (Dem., Wis.) commented. The accelerator would be built in his (2nd) congressional district.

#### Laird Sees Approval

Senator Proxmire (Dem., Wis.) said the president "indicated strong opposition on grounds of trying to keep the budget down."

Representative Laird (Rep., Wis.), a high ranking member of the house appropriations committee, had said before the meeting that he believed the president would approve an initial appropriation of around five million dollars for fiscal 1965, which starts next July 1.

Both Nelson and Kastenmeier emphasized that Johnson made no final decision. They pledged that they would continue working for the project, which they urge as a stimulus for the economic and educational future of the midwest.

#### Would Double Staff

The hoped for initial funds would allow the Midwestern Universities Research association (MURA), the developer of the project, to:

Increase its staff from 100 to 200 persons.

Start architectural and engineering plans for the construction of the project.

But even more important, MURA scientists feel that an appropriation will commit the federal government irrevocably to the project.

If Mr. Johnson backs this appropriation, they believe, authorization for the expenditure

Turn to page 26, column 4

### Controversy Snags Stoughton Smasher

From page 1, column 2

posals were redefined and revised when scientists changed some of their objectives. Meanwhile, a dispute erupted over a site.

Powerful commission members favored the Argonne national laboratory outside Chicago. MURA wanted it outside Madison. After protracted bickering, a compromise was reached — MURA would go ahead with development work but Argonne also would get an accelerator, which now is in operation.

In March, 1962, MURA researchers presented their third proposal — a 183 page document. Bernard Waldman, MURA director, calls it one of the most comprehensive of its kind ever prepared.

Subsequently, the government appointed a special scientific advisory panel to assess the nation's future needs in high energy accelerator physics. Among other things, it recommended that the MURA facility be built near Madison at a cost of 155 million dollars.

Since then, another road-block has developed according to MURA officials. Certain scientists from the east and west coasts — where eight of the country's nine accelerators are already located — fear that the MURA machine might jeopardize or impede their plans for newer and bigger facilities and have started pressuring AEC and other government officials in their own behalf.

Educators, industrialists, scientists and politicians from nine

midwestern states have stepped up their urgings that the atomic energy commission provide construction funds for the Stoughton facility, about 10 miles southeast of Madison and the University of Wisconsin.

The groups acknowledge that this complex machine will not bring a flock of research contracts and new industries to the region immediately. But they believe it is an essential, fundamental tool, since it attracts scientists working on the frontiers of knowledge.

It is no secret that facilities similar to the one in question helped spark the great research and development boom on the east and west coasts.

Today states in these areas consistently draw off most of the nation's scientific brainpower and get the lion's share of 17 billion dollars' worth of annual research and development business as well.

It is to "correct" this economic imbalance that midwest-

ern civic industrial leaders have banded together to seek development of new scientific and technological resources here and to support MURA.

According to Waldman, there is strong scientific as well as economic justification for the MURA accelerator. The one existing midwest accelerator at the Argonne national laboratory has just started operating and already is booked up with experiments for the next two years.

While designed for a similar energy capacity as the one at Argonne, Waldman says, the MURA machine is otherwise

totally different. It would be the only really high intensity accelerator in the country. This, he asserted, gives the machine greater flexibility and would enable researchers to perform more experiments and complete them sooner.

A special government scientific advisory panel which studied the nation's future needs in high energy physics has just recommended construction of the machine so long as it doesn't interfere with planning for and eventual construction of east and west coast projects.

Chen Ning Yang, 1957 Nobel prize winner in physics, who now is a member of the Institute for Advanced Study in Princeton, N. J., has said that the MURA machine would greatly enhance work in high energy physics and "is worthy of encouragement and support."

The decision on whether initial construction funds for the project should be included in next year's budget rests ultimately with President Kennedy. He will review the recommendation on the matter to be made to him by Jerome B. Wiesner, his scientific adviser.

# WAUKEE JOURNAL

© 1963, by The Journal Company

Monday, October 14, 1963

Daily, per copy, 10 cents  
By carrier, 45 cents weekly

Latest Edition ††

## 57 Congressmen Support Accelerator at Stoughton

### Developed by MURA

The accelerator would be built according to plans developed by the Midwest Universities Research Association (MURA), a nonprofit corporation comprised of 15 universities in nine midwestern states.

The signers of the letter included congressmen from each of the states represented in MURA. There were 36 Democratic signers and 21 Republicans. All six Republican and four Democratic congressmen from Wisconsin signed the letter.

The states represented were Wisconsin, Illinois, Minnesota, Michigan, Iowa, Indiana, Ohio, Kansas and Missouri.

Among key congressmen who subscribed to the letter were Representative Price (Dem., Ill.), the second ranking Democrat on the joint atomic energy committee, and Representative Halleck (Rep., Ind.) GOP leader in the house.

### Kastenmeier's Project

The letter was initiated by Representative Kastenmeier (Dem., Wis.) in whose district the accelerator would be constructed.

Kastenmeier said a number of other midwestern congressmen were supporting the MURA project, but were not available when the letter was being circulated for signatures.

The letter pointed out that one-third of all advanced degrees in the physical sciences were awarded by midwestern universities. Regrettably, it said, many of those graduate researchers move either to the west or east coasts because of the superior research facilities built essentially with federal funds.

## Letter Sent to Kennedy Asks Funds

### MURA Project Cited as Way to Halt Flow of Talent to East, West Coasts

Journal Washington Bureau

Washington, D. C. — Fifty-seven congressmen from nine midwestern states joined Monday in urging President Kennedy to approve funds for construction of the proposed 155 million dollar high intensity accelerator at Stoughton, Wis.

In a letter to the president, the congressmen said inclusion of funds for the accelerator in the fiscal 1965 budget would be "a concrete demonstration of your interest in the midwest which would be recognized not only by the educational community, but by every midwesterner who has seen the movement of highly trained technicians and renowned nuclear physicists to the west and east coasts."

[An accelerator is used to step up the speed of atomic particles such as electrons and protons to a degree where they can be shot at atomic nuclei in order to split them so that scientists can learn more about atoms. Because its object is to split the atom it is often called an atom smasher.]

## Stoughton Area One of Five, Physicists Say

# Area Smasher Site Gains 'Finals'

WASHINGTON (AP) — The Milwaukee Sentinel said Thursday that a Stoughton, Wis., site will be one of five picked for final consideration as the location for a proposed \$340 million atomic accelerator.

Several unidentified physicists were cited as the source. The

physicists asked that their names not be used. None of them participated in the site selection.

The physicists said the site near Madison will be picked, along with four others, from an original group of more than 130 by a special site selection committee

appointed by the National Academy of Science.

The recommendations of the committee are expected to be sent to the Atomic Energy Commission (AEC) within a few days. The AEC will then study the list and pick one of the five sites as

the location for the 200-billion electron-volt proton accelerator, the group said.

They listed the other four sites to be given final consideration as Ann Arbor, Mich.; Barington, Ill.; Berkeley, Calif.; and Denver, Colo.

One physicist said Thursday, "None of the people I talked to have heard this officially, but they regard it as accurate information."

A spokesman for the AEC said that he could neither confirm nor deny the report.

He said AEC had not received a report from the site selection committee although one is expected Mar. 15.

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# THE GREAT ATOM-SMASHER CONTEST

Big towns and small, bidding for \$340,000,000 atom-research lab, learn to take hard looks at local assets. They are in a wild contest that is producing a surprise payoff.

BY T GEORGE HARRIS LOOK SENIOR EDITOR

THE TALK IN MANY a town and city over the past year has hung up on a weird subject: atom smashers. I let it go by me at first, but when bartenders and social workers, businessmen and Negro leaders around the country all get shook about the same thing, a reporter ought to pay attention. The Atomic Energy Commission, some said, was running a sort of civic beauty contest to pick a home for a huge research laboratory. "If we get that AEC lab," a Memphis banker said, "we'll be on the move!" In 200 other places, spread over 46 states, hundreds of otherwise sensible men were writing thousands of words to complete one sentence: "We ought to get that thing because. . ."

Atomic physicists have been designing bigger and bigger atom smashers since the first one, smaller than a mule collar, broke open the nuclear age at the University of California in 1931. Now, racing the Russians, the AEC hopes to build the granddaddy of them all, the 200 billion electron-volt proton accelerator. Bigger around than three racetracks, the 200 BEV will be the Hercules of scientific tools. Glorious! As the Great Pyramid of Cheops put ancient Egypt's Giza on the map, this gadget can give somebody's Main Street real class.

The contestants all said they were writing or calling Dr. Paul W. McDaniel, director of the AEC's Division of Research, Washington, D.C., ZIP 20545, so I went hunting for his office. It was way out in Germantown, Md., far enough away to stay in business if an atomic bomb hits the White House. Dr. McDaniel, peaceful as the landscape around him, kept above controversy. He left that to me.

He had never intended, I knew, to set off an atomic stampede. The AEC, working along in its best semisecret style, had resolved to build the next nuclear laboratory out in California, showcase for giant research-and-development projects.

But the rest of the country, notably the pushy Midwest, has been slowly waking up to the way big science hatches golden eggs for the No. 1 state. Other states have sworn to snatch a goose or two.

So, when word of the AEC plan went forth from a hearing in Congress last March, a deep political rumble was heard in the land, and then—

BLOOEY! From Umatilla County in Oregon to the Great Dismal Swamp of Virginia, from Grand Forks, N.D., to Haverhill, Mass., local leaders blasted into action. University chiefs, mayors, chambers of commerce, economists and governors—126 sets of boosters—surveyed their community resources and claimed themselves ready for a niche in the nuclear age. Some pitched for several sites, and the operations map on the AEC wall broke out all over with spots to check.

Where could McDaniel settle down with his big machine? Seeking a precedent in previous hunts for land, McDaniel decided that nobody had looked upon such a sea of uncertainty since Noah sent out the doves after 40 days and nights.

Scientists somehow discovered that the popular lust for the lab was not inspired entirely by love of subatomic truth. Curiosity, they deduced, is a less contagious instinct than avarice. The 200 BEV will be the heart of a \$340-million lab for nonwar research and, once built, will pump out \$60 million a year. That much high-energy money can accelerate a regional economy for years. More important, the smasher will draw in a permanent staff of 2,000 scientists and technicians. There's the real gold mine. Such human capital, many businessmen know, creates new wealth in today's educated economy. Around Boston's Route 128 and San Francisco's Bay Area, research brains spin off waves of new products and services practical enough to make money, lots of it.

So the AEC, unaccustomed to this kind of attention, found itself pursued by ardent city fathers. The politicking got so hot that critics sneered "pork barrel." California scientists muttered "raffle." Never before had so many people wanted the same way-out project, a tight situation in an era when Federal patronage comes less in postmaster jobs—who wants them?—than in projects and contracts. Congressman Craig Hosmer, unhappy California Republican, went to the well of the House to denounce "the 200-BEV bonanza—the Government's biggest free offer to all comers since opening the Cherokee Strip to homesteaders in 1893."

But the AEC kept right on giving all comers a

continued



The U.S. Atomic Energy Commission's huge lab will zing out 200-BEV protons and hard cash. Everybody wants it for his hometown.

DRAWINGS BY ROY MCKIE

# "I always assumed LBJ'd put it in Texas." But the Midwest looks hot.

fair shake. McDaniel, a small-town product from, he says, "a Milquetoast background," handed out how-to-apply kits. The 200 BEV, the folks learned, will be a steel pipe the size of a man's arm, laid in a three-mile circle through 528 magnets pulsing power enough to light up Chattanooga. All this force will kick tiny pieces of atoms—protons—faster and faster around the pipe until they approach the speed of a light beam. Built-up momentum will shove 200 billion electron volts of energy inside each proton "bullet"—enough to tear apart the atoms they hit and reveal to lab instruments a little more about what matter is made of.

As any mechanic could see right off, this huge but delicate device will need megawatts (180,000,000 watts, to be exact) of cheap electricity and a level, quake-free stretch of land. Vermont and Delaware, where it's hard to find 3,000 level acres not spoken for, didn't enter the contest. Nor did offshore Hawaii and Alaska. All others had to worry over their earthquake records. Denver, first city to demand the new smasher, drew seismic maps to prove that Colorado is like Gibraltar. This claim became embarrassing. One piece of docile ground, acting up like a child in the presence of guests, quivered several times while the whole city was on its p's & q's for AEC attention.

Ambitious to join the nuclear club, leader groups everywhere flexed muscle enough to bend a lot of local absolutes—even power rates. Both public and private utilities, under heavy pressure, kept slicing the electricity costs quoted to the AEC. Indiana cut the price in half. Utility executives in some cities can now be identified at a glance. They're the men with twisted arms.

Oddly enough, the contest for Federal largess inspired many to treat Uncle Sam like a needy nephew. Group after group proposed to give the Government thousands of acres for the lab. That's a switch. Oil-minded Oklahomans, of course, cagily retained the mineral rights for themselves. Kentucky's gentleman governor, Ned Breathitt, offered not only free land, but a generous "umbrella" of other conveniences if the AEC accepted his state's Southern hospitality. Wealthy old Ohio promised the U.S. Government a \$10-million handout.

For pure spunk, however, nobody topped the Appalachian town of Portsmouth, Ohio, which made its bid against all opposition, including state bigwigs. Ordinary citizens passed around pledge cards on which thousands promised their dollar mites toward purchase of land for Uncle Sam. School kids signed up for 50 cents apiece.

Meanwhile, McDaniel made it clear that more subtle values would count in the contest finals. The winner community had to be a place where scientists would want to live and raise their children. Businessmen, eager to please, called on educators to write up the local school system, kindergarten to graduate level, in specifics that would tempt brain families. The schoolmen bragged hard. Art and culture hawkers bragged harder. But the main

effect of these surveys, so far as I can tell, has been to expose the flaws and set off a chain reaction of local uplift. "We're upgrading the whole country," says a dazzled AEC insider.

Yes, and more than he knows. Corporations hunting plant sites have always set off shock waves. To win any new payroll, city fathers offer anything from family jewels to integration. But, by comparison, the 200 BEV is a megaton blast. There's never been a winner-take-all competition so big, so wide-open and run under such demanding rules.

McDaniel candidly told any town how to improve its chances. "We wanted to help them put their true foot forward," he explains. Toward the end of 1965, though, a chilling thought slowly worked its way over from the Joint Committee on Atomic Energy, the AEC's political overseer. What about the losers? If they all felt like spurned lovers, Congress might never appropriate \$340 million to build the lab anywhere. Fainthearted scientists began to whisper about "alternatives," say, a cheaper smasher at an existing AEC lab.

McDaniel, no man to back down, simply set up eight teams of top scientists and administrators—one headed by his boss, AEC Assistant General Manager Dwight Ink—to call upon every serious proposer and gaze upon each comely site. He shrewdly warned both proposers and teams that the visits were too serious to allow wining and dining, or the making of long speeches. He hoped to get his crews back fast with clear-eyed reports.

The antiparty rule did not stop Haverhill, Mass., from decking the streets with flags and breaking out war-sized headlines: CITY WELCOMES SITE TEAM. Houston's Chamber of Commerce rolled out its royal-blue carpet at the airport. The modest AEC men thought the fancy-dan reception must be for "some celebrity," so they slipped into the airport terminal and were hailing cabs when city fathers caught up.

Tension climbed. In Deep Dixie, visitor scientists bluntly asked community bigwigs what would happen when Negro Ph.D's tried to live in upper-class neighborhoods. "You could hear the gulp go round the room," recalls a Florida educator.

But the inspectors did most of the gulping. They came back bug-eyed at the quality of local leadership, the teamwork between educators and businessmen, and the ambitious culture flourishing in places once on the fringe of the backwoods. "There is," decided Ink, "an awakening of the municipalities." The inspectors had been systemati-

cally exposed to a little-known reality: that education and culture are no longer monopolized by a few urban centers. The Great Society, it seems, is more an emergent fact than a hopeful slogan.

This happy discovery put the site hunters in a sadder bind than ever. McDaniel found, even after his inspections, that the smasher could be built on about 85 of the sites. To make matters more interesting, the political dust had caught the eye of a fellow named Lyndon Baines Johnson. AEC won't talk about the President's role, but political cynics outside note that the Texas town of Austin had made proposal No. 125, next to last, weeks after some folks thought the contest had closed. There was even a nasty rumor floating around that the list could have been kept down to about 15 serious entries or less—but at the cost of ignoring all seven of the Texas cities that see atoms as a new kind of gusher. "I always assumed LBJ'd put it in Texas," says a Johnson fan in Florida.

Such suspicious attitudes are somehow bred by today's fertile intercourse between science and politics. After Ted Kennedy won a seat in the U.S. Senate on a promise to "do more" for Massachusetts, he honored his pledge by securing a \$61 million U.S. electronics-research lab there. Houston thanks President Johnson for its space-research center. As far away as California, job-hunting aerospace machinists, sensitive to wind shifts, talk about "moving to Texas to work for Lady Bird."

LBJ won't even put the 200 BEV in his Budget until he approves the site. Still, I'll bet it will be built—within 200 miles of Chicago, maybe at Madison, Wis. High-energy scientists consider themselves a "politically-fragile group," but through the National Academy of Sciences, they have a strong voice in the final decision. They know that the Russians are now winding up a 70-BEV smasher, double anything we'll have in use before the 200 BEV. To beat the Soviet bid, our high-energy physicists from all over the country need to get to the new "national lab" with ease. Chicago's busy O'Hare International Airport may outweigh all the civic beauty and porky politics in the yearlong contest. If so, the Podunks of the U.S.A. will figure they've been playing against a stacked deck.

But the big surprise is the way the game has turned out to be more valuable than the table stakes. "I'm still glad we tried," says one wise community leader. "It's the first time we took a real inventory of what's right and wrong with us. We found a lot of things we have to get to work on."

END

*In spite of wining-dining ban, the home folks made AEC men feel welcome.*



o. Snow Today. Snow Flurries Tonight. High, Mid-30s. Low, 15 to 20.

SON, WEDNESDAY, MARCH 23, 1966

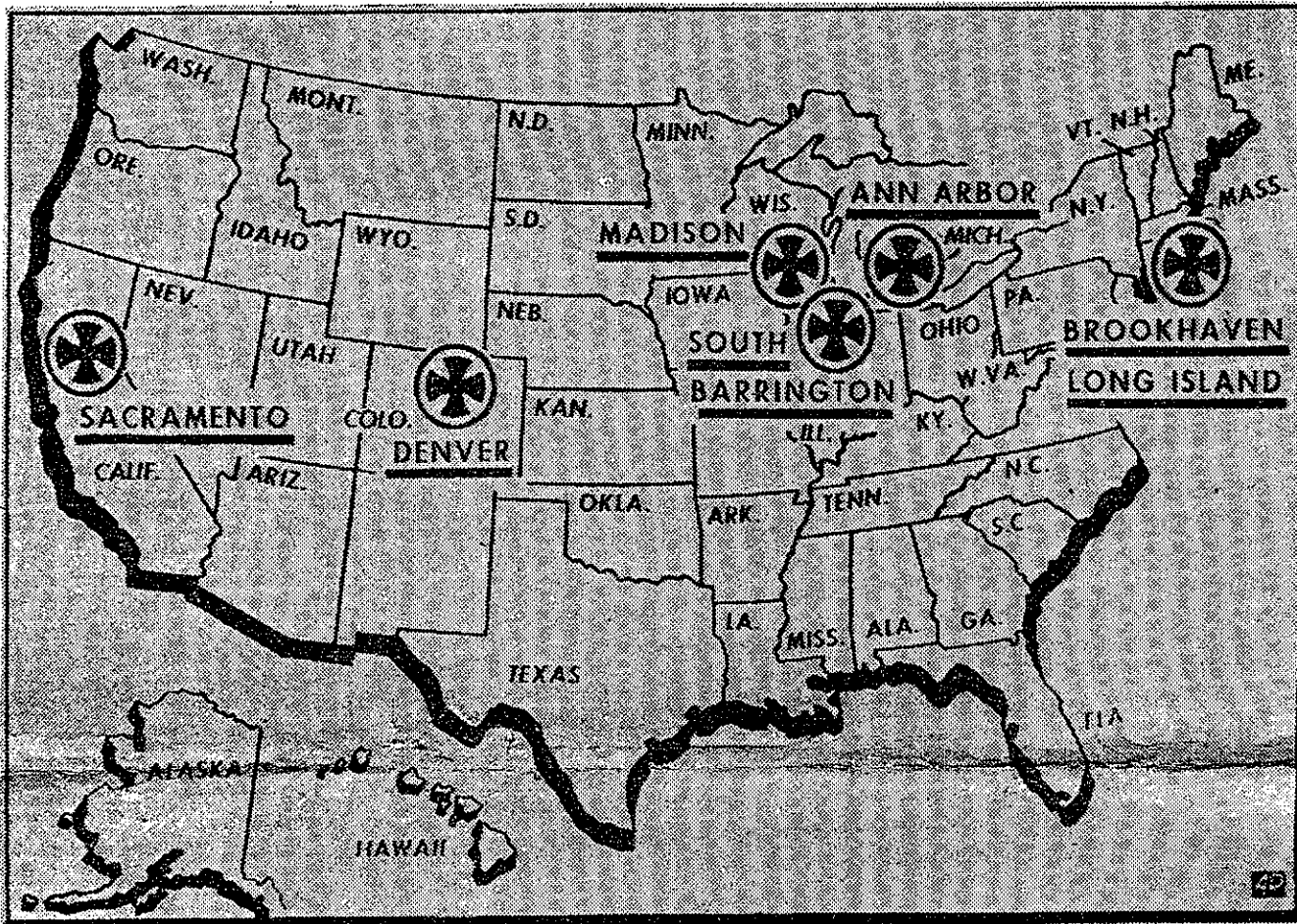
Second-Class Postage  
Paid at Madison, Wis.

★ ★ ★

MORNING FINAL 7c

# 2s STRIKE CLOSE CAMBODIA BORDER

## Stoughton Site Is Included in Finals for Atom-Smasher



### Final Decision 'Months Away,' AEC Cautions

The great atom smasher derby narrowed Tuesday, and the Stoughton site was among six finalists in six states.

The Atomic Energy Commission (AEC) announced in Washington that it had received a report from the National Academy of Sciences recommending the following as suitable sites for a \$375 million accelerator:

Stoughton area; Ann Arbor, Mich.; Brookhaven National Laboratory at Upton, Long Island, N. Y.; Denver, Colo.; the Sierra foothills 20 miles east of Sacramento, Calif.; and South Barrington (or Weston) near Chicago, Ill.

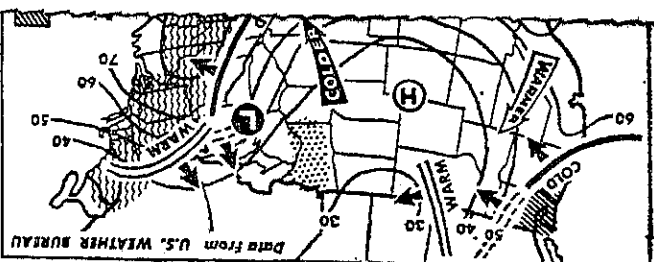
**World's Largest**  
The accelerator would be the largest in the world, nearly a

### Stoughton Reaction, Congress Reaction on Sec. 2, Page 1

mile in diameter, producing beams of protons with energies of 200 billion electron volts (BeV), more than six times more than

Here Are the Six Finalists, Including the One Near Madison, Bidding for the A-Smasher Site.

—AP Wirephoto



WEATHER VANE  
Data from U.S. WEATHER BUREAU

Stoughton Site  
Still A-Runner  
Final Decision  
Is Months Away

U.S. B-52 Bombers Strike  
Close to Cambodian Border

definitely going to be here, we'd probably break out the champagne — but not yet."  
The Atomic Energy Commission (AEC) two years ago rejected a proposed 10 to 12.5 BEV accelerator proposed on the Stoughton site by MURA, almost causing the organization to disband in discouragement.  
But it pulled through, finally building an operating budget of about \$1.75 million a year on contract work for the Argonne National Laboratories near Chicago and testing new ideas in accelerator design.  
The proposal to build an accelerator on the Stoughton site is not MURA's proposal, but rather the University of Wisconsin told us the machine were

consin and the University of Wisconsin that this site is closer to being chosen.  
"I see no reason why the 200 BEV machine can't be a smashing success here," he quipped. But there were reservations after years of striving to keep MURA alive:  
"The impact of the news? We have been through much worse ups and downs than could possibly come from this," he said. "If you told us the machine were

The news that the Stoughton site was among the six finalists for a proposed \$375 million atomic accelerator was received with relief and restraint in the sprawling MURA headquarters Tuesday.  
(MURA stands for Midwest Universities Research Assn.)  
A monotonous spring drizzle pattered outside the cement block building, but inside an air of electric excitement spread rapidly from office to office, up and down the corridors, and around the conference rooms and workrooms when the word was first received.  
Everyone told everyone else, until each person had heard it at least twice.  
Dr. Fred E. Mills, MURA director, said, "It has justified MURA's confidence in the site over the past 11 years, and we are pleased for the state of Wisconsin

# It's Smashing News, MURA Men Note Happily, but With Restraint

By WILLIAM WITT  
(State Journal Staff Writer)

Turn to Page 2, Col. 3

Turn to Page 2, Col. 6

any existing accelerator, and would be the largest single piece of scientific equipment ever constructed.

Near the accelerator would grow up an elite "City of Brains" of more than 2,000 resident scientists, not counting their families, plus perhaps 1,000 visiting high energy physicists, engineers, and mathematicians a year.

Competition began last April, when the AEC called for applications. It received 126 proposals involving more than 200 sites in 46 states. The list was cut to 85 sites in 43 states last fall, which the National Academy was asked to trim to half a dozen in its recommendation to the AEC.

### 5,000-Acre Tract

The proposed Stoughton site consists of a 5,000-acre tract of mostly farmland about 11 miles southeast of Madison, just west of Lake Kegonsa on Highway B and along Highway 51. It includes 240 acres owned by the Midwestern Universities Research Assn. (MURA), which has a small, pilot accelerator on the site.

The AEC said it "may take several months" for further studies before a final location is selected. The AEC is not necessarily bound to accept any of the six.

Communities across the nation

# on Termed Vital

Committee Chairman Harley O. Staggers (D-W. Va.) opened the meeting by promising a full airing of the cross-currents involved in the CATV debate.

"The future of CATV depends on its responsiveness to the general good," he said.

FCC Commissioner Robert T. Barley, in a dissenting statement, said Congress should limit itself to legislation prohibiting CATV from originating programs.

Before the committee is legislation prepared by the FCC proposing:

That Congress clarify and confirm general FCC jurisdiction over CATV systems.

That Congress restrict the origination of programs by CATV. That Congress decide whether, and if so when, CATV systems should be required to obtain consent of the originating broadcast programs.

That Congress decide whether CATV systems should be subject to additional state and local regulation as utilities.

Also before the committee is

them into homes for a fee. Henry said unrestricted CATV could threaten the continued existence of some rural broadcasters and the development of independent city stations.

Emphasizing that a basic aim of the FCC was to ensure fair competition, Henry added: "We think that we have proceeded cautiously and in a way that represents a fair accommodation of the needs of both the broadcast and CATV interests in bringing service to the public."

## Ferry Offers Coffee and--er--Sinkers

MERRIMAC — The Merrimac Chamber of Commerce will serve free coffee and doughnuts to passengers on the Merrimac ferry, Colfax II, on its first day of operation this season from 8 a.m. to 5 p.m. today.

## Today's Chuckle

The worst kind of reducing pill is the one who keeps on telling you how he did it.

Rs. Gorbet was charged with 18 months in prison or both. The measure won House passage by a 38 to 3 vote last week.

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MILWAUKEE — A warrant of criminal damage to property and disorderly conduct was issued Monday against Cletus Conant of Jackson county after the alleged shooting in the foot by his mother-in-law here.

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## Close to Cambodian Border

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## FROM PAGE 1

## FROM PAGE 1

# Smashing News, MURA Men Declare, But With Restraint

FROM PAGE 1

sin's, backed by the state of Wisconsin. The 15 universities making up MURA also submitted their proposals. Ann Arbor, Mich.; and South Barrington, near Chicago (not Argonne), are among the three finalists who have membership in MURA.

University Pres. Fred Harvey Harrington submitted Wisconsin's proposal for the Stoughton site to the AEC on June 14, 1965.

When the news arrived Tuesday, he was touring university services overseas. Dr. Karl E. Krill, a special assistant, said that the university was naturally very pleased to hear the site was among the finalists.

Krill represented the university before the federal site selection committee.

"It is not unexpected, though," he said. "We believe we have a very good site and it should be in the last six. In fact we hope, of course, to be the final choice."

He also said that he was pleased to see the two other Midwestern sites among the finalists.

### Knowles Praises UW

Gov. Warren P. Knowles praised the university's role, noting the importance of a major university near the site to provide staff and talent.

"The fact that Wisconsin is still in the running is a tribute to our great University of Wisconsin."

He cautioned against undue optimism:

"Wisconsin is still in the running, but there is a long road to travel before this atomic accelerator project becomes a reality. The matter will probably be in the hands of the AEC for several months for further study.

"The AEC will make its final recommendation to the President.

### Wisconsin State Journal

Second-class postage paid at Madison, Wisconsin. Published daily and Sunday except Christmas day, by Madison Newspapers, Inc., owners and publishers. Editorial services by contract with Wisconsin State Journal Division of Lee Enterprises, Inc. Subscription rates daily and Sunday by carrier, 50c per week payable to the carrier boy. In Dane County on RFD daily by mail and Sunday delivered to mail box by farm service carrier 50c per week; 15c Sunday only payable either weekly or no more than five weeks in advance to farm service carrier. Daily only by mail on Dane County RFDs \$20.80 per year, \$10.40 for six months, payable in advance to office. Beyond Dane County on RFD daily by mail and Sunday delivered to mail box by farm service carrier 40c per week; 15c Sunday only payable either weekly or no more than five weeks in advance to farm service carrier. By mail in Wisconsin beyond carrier delivery limits daily and Sunday 1 year \$20.80, 6 months \$10.40. Daily only 1 year \$13.00, 6 months \$6.50. By mail outside of state of Wisconsin in the United States daily and Sunday, 1 year \$28.40. Sunday only 15c per issue, or \$7.80 per year.

who, in turn, will authorize the selected sites.

"After that, Congress will be asked to allocate the necessary funds for construction of the proposed research facility."

### Fleming Comments

Robben W. Fleming, university chancellor, called the site's selection among others a tribute to the university and the state.

"Placement of this research facility at Stoughton would make it very much available to scientists throughout the country and it would, of course, be a tremendous asset to the Midwest and to Wisconsin."

Madison Mayor Otto Festge pledged the full cooperation of the city in supporting the project:

"It is heartening to know that Stoughton is still being considered. The city of Madison certainly will cooperate to the fullest extent so that this important federal project will be located in this area."

What are the strong points of the Stoughton site?

Mills said, "Some of the important considerations are the geological excellence of the site; the presence of a large, very responsive, and responsible university; a high level of cultural standards in the Madison and surrounding area;

"The availability of underground water for cooling purposes for the machine; and the very close availability of substantial electrical power (about 500 electro-magnets of 200,000 kilowatts each have been cited as necessary for the machine alone).

The lack of major transportation facilities was the one possible drawback, he said. "We don't have O'Hare Field in our backyard, but we are only several hours away by auto, so that is not as serious as at first sight."

### Beloit Minister Dies in Crash

BELOIT — An accident here Tuesday afternoon involving six cars killed a Beloit minister, The Rev. Arthur J. Snow, 58, pastor of the Second Congregational Church.

The accident, which injured three other persons, happened at about 4 p.m. at Fourth st. and Maple ave.

Rock County Coroner Richard McCaul said the death was due to apparent head injuries.

The proposed U.S. machine will, it is hoped, shed light on the inner workings and composition of fundamental matter, and perhaps on the mysteries of life and the universe.

The practical effects on medicine and space travel, to name only two fields, are incalculable.

### Others 'Advantages'

Some of the points mentioned in favor of the other five sites were:

**Ann Arbor** — Proximity of the science-strong University of Michigan, nearness of the Detroit airport, large lakes nearby.

**Brookhaven** — An AEC laboratory already established and working on high energy physics. Adequate electric power. Many Northeastern universities accessible.

**Denver** — Terrain is rolling, but excavation could be done cheaply. Attractive, growing city near Universities of Colorado and Denver.

**Sierra Foothills** — Hard rock beneath the surface. Mild winters, available power, higher education facilities good.

**South Barrington** — Only half an hour's drive from O'Hare Field. Argonne National Laboratory of AEC and several universities are reasonably close.

### Fulbright Suggests Deal With Red China

Storrs, Conn. (AP) — Sen. J. W. Fulbright (D - Ark.) suggested Tuesday night that the United States withdraw its forces from Southeast Asia if China will agree to refrain from military intervention and respect the political independence of countries in that area.

He said a lasting peace in Southeast Asia depends far more on a settlement between the U.S. and China than on who is to participate in a South Vietnamese government and how it is to be formed.

"As long as China and America are competitors for predominance in Southeast Asia there can be no lasting peace or stability in that part of the world," said Fulbright, chairman of the Senate Foreign Relations committee.

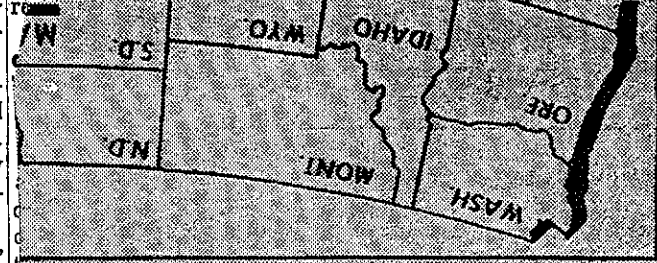
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in Finals for Stoughton

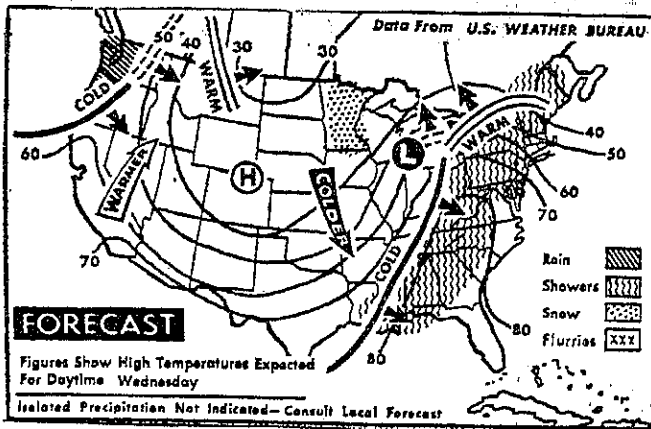
AMBOI 2S STR

SON, WEDNESDAY, MARCH 23, 1966

**FISH & SEA**  
**FRESH ... FLO**  
**THE EAST CO**  
**OVER 100**  
**OF FISH AND**  
**AT ALL**  
**GOEL**  
 635 UNIVERSITY AVE.

o Snow Today. Snow Flurries Tonight.  
**State**  
 in!

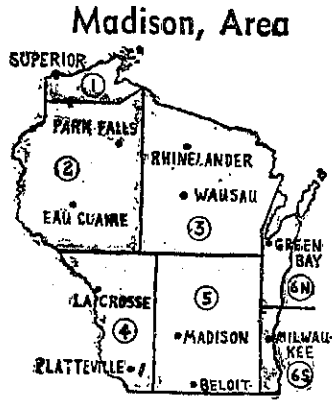
# WEATHER VANE



**U. S. FORECAST** — Temperatures will rise in the west and fall in the Midwest today. Showers are predicted from Maine down the east coast and on the northwest coast.

—AP Wirephoto Map

**MADISON FORECAST**  
Rain changing to snow, windy and colder today. Colder with snow diminishing to occasional snow flurries tonight. Clearing but cold Thursday. High today in the mid 30s. Low tonight 15 to 20. Winds northerly today at 15 to 30 miles per hour.



**Madison, Area**

**ZONE FORECASTS**  
ZONES 1, 2, 3NW, and 4N: Mostly cloudy and windy today with snow accumulating to around 4 inches accompanied by some blowing and drifting. Snow diminishing to flurries tonight and Thursday. Temperatures will fall slowly.

ZONES 3SE, 4S, and 6: Windy and colder today with rain changing to snow. Colder with snow flurries tonight and Thursday. Steady or slowly falling temperatures today.

### Madison Skies

**WEDNESDAY, MAR. 23**  
Sunset today ..... 6:14 p.m.  
Sunrise Thursday ..... 5:55 a.m.  
Moonset tonight ..... 7:51 p.m.  
First Quarter ..... March 29

**PROMINENT STARS**  
Sirius, in the south at sunset, sets ..... 11:09 p.m.  
Procyon, high in south at moonset, will be seen well above Sirius as that star sets.  
Spica, rises ..... 8:19 p.m.

### Today in History

(By United Press International)  
Today is Wednesday, Mar. 23, the 82nd day of 1966 with 283 to follow.  
On this day in history:  
In 1775, Patrick Henry told the Virginia convention: "I know not what course others may take, but as for me, give me liberty or give me death."  
In 1933, the Reichstag saved Adolph Hitler "blanket powers" for four years.  
In 1942, Japanese-Americans were moved from their homes along the Pacific coast to inland communities as a wartime precaution.  
In 1943, the Danes, bravely defying Nazis occupying the nation, voted 99 per cent for democracy and one per cent for the new order of Germany.  
**A THOUGHT FOR THE DAY**—German author Goethe: "The sum which two married people owe to one another defies calculation. It is an infinite debt, which can only be discharged through all eternity."

## Smashing News, MURA Men Declare, But With Restraint

FROM PAGE 1

sin's, backed by the state of Wisconsin. The 15 universities making up MURA also submitted their proposals. Ann Arbor

### State, Nation

OFFICIAL REPORT BY UNITED STATES WEATHER BUREAU

	Temperature		Precip.
	High	Low	
Albuquerque	49	30	—
Atlanta	75	52	—
Bismarck	33	26	—
Boston	52	37	.06
Brownsville	78	66	—
Charlotte	77	55	—
Chicago	47	39	.64
Cleveland	68	50	.02
Denver	31	21	.16
Des Moines	46	43	.38
Detroit	58	42	.65
Dubuque	43	41	.54
Duluth	41	23	—
El Paso	75	52	—
Fl. Worth	78	66	—
Green Bay	43	37	.28
Helena	36	19	—
Jacksonville	79	40	—
Juneau	39	34	.06
Kansas City	80	57	.79
La Crosse	45	37	.80
Las Vegas	61	44	—
Los Angeles	81	51	—
Mad. Airport	41	36	.08
Memphis	78	62	—
Miami	73	70	—
Milwaukee	40	37	1.29
Minneapolis	46	34	—
New Orleans	79	60	—
New York City	58	41	—
Park Falls	44	32	—
Phoenix	80	41	—
S. Lake City	43	17	.02
San Francisco	69	50	—
Sit. Ste. Marie	49	34	.18
Seattle	53	31	—
Washington	82	48	—
Wausau	46	34	.06
Winnipeg	16	11	—

### MADISON WEATHER (At Municipal Airport)

Yes-fer-day	Tem-perature	Rela-tive humidity	Wind Veloc-ity	Cloud-iness
6 a.m.	38	96	10 rpm	100%
Noon	37	96	15 rpm	100%
6 p.m.	39	86	10 rpm	100%
Highest temperature yesterday	41			
at 12:30 a.m.				
Lowest temperature yesterday	36			
at 6:30 a.m.				
Mean temperature yesterday	39			
Normal	32			
Degree Days	26			
Barometric Pressure at 6 p.m.	(sea level) 29.84 in.			
Total precipitation since Jan. 1	3.43 in.			

**TODAY IN OTHER YEARS**  
Warmest 78 degrees in 1910.  
Coldest -6 degrees in 1888.  
Wettest .72 in. in 1913.

### Now You Know

(By United Press International)  
Los Angeles has the shortest street car line in the world, Angel's Flight — a street railway which travels 315 feet up and down a steep hill.

## Stoughton Site Still A-Runner

### Final Decision Is Months Away

FROM PAGE 1

have fought for a year to get the gigantic machine, which has become a national project. It would take six to eight years to build, and have an annual operating budget estimated at about \$60 million.

The AEC stated: "The President's budget for fiscal year 1967 (starting July 1, 1966) contains a request for \$2.2 million in operating funds to continue studies on the accelerator. These are being conducted primarily at the AEC's Lawrence Radiation Laboratory in Berkeley, Calif. (not included in the six sites).

"As the budget states, design funds will be requested after a site is selected.

"The accelerator would be the main facility in a proposed new National Accelerator Center."

It said the National Academy site committee's principal concerns in making its recommendations to the AEC "included the physical properties of the site, the problems of assembling an outstanding staff, and accessibility for visiting scientists who will conduct about 75 per cent of the experiments."

### All Superior, None Ideal

It called all six sites "superior" but not "ideal," adding that "each is excellent in at least one of the most important features and within acceptable limits with respect to others."

The points mentioned in favor of the Stoughton site were "ideal" underground conditions (bedrock) for burial of the accelerator, and the University of Wisconsin which is strong in science.

The accelerator, buried in a raised underground bunker, would hurl particles of atoms — protons — against each other with more than six times the energy of the most powerful atom smashers in existence.

These are at the Brookhaven Laboratory, N.Y., and at Geneva, Switzerland, each about 30 BEV.

The Soviet Union is building a 70-BEV machine.

The proposed U.S. machine will, it is hoped, shed light on the inner workings, and composition of fundamental matter, and perhaps on the mysteries of life.

The practical effects on medicine and space travel, to name only two fields, are incalculable.

### Others' Advantages

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Ann Arbor — Proximity of the

## U.S. B-52 Bombers Strike Close to Cambodian Border

FROM PAGE 1

and Vinh by Navy fliers from the carriers Ranger and Enterprise. A spokesman said that, among other strikes in 38 missions, they wrecked two bridges and a ferry crossing.

### Squad Ambushed

Simmering differences between premier Nguyen Cao Ky's government and the Buddhist leadership cropped up again as other incidents rounded out the military highlights: "ONE. Elements of the U. S. 25th Infantry division ambushed a squad of 10 or 12 Viet Cong in the central highlands 35 miles north of Ban Me Thuot and killed four. They captured two automatic rifles of Red Chinese make.

"TWO. A patrol of the U. S. 101st Airborne division's First brigade, probing a coastal area 12 miles south of Tuy Hoa where the paratroopers had a seven-hour fight with a Red company Sunday, found 10 Viet Cong bodies in a shallow grave.

"THREE. Intelligence sources located a Viet Cong rest camp 75 miles east-northeast of Saigon. U. S. Navy and Air Force planes raided it, knocking out an automatic weapons emplacement and wrecking a number of buildings. Aerial spotters said 60 Viet Cong were killed.

"FOUR. A guerilla attack in the night on the airport at Dalat, a mountain resort 140 miles north-east of Saigon, was reported to have damaged a number of planes. Details on the number and types of planes were lacking. About 50 guerillas penetrated

the airport after subjecting it a mortar barrage.

Fresh anti-government demonstrations in Saigon, Da Nang, Hue though peaceful in nature added to the political ferment touched off Mar. 10 by the government's dismissal of a Buddhist favorite, Lt. Gen. Nguyen Chi Tri, as commander of South Vietnam's First corps area.

### Denes Charge

Buddhists took umbrage at weekend speech by Ky in Dalat charging he had accused them being traitors, unreasonable, and generally suspect. Ky denied the charge. He said he had never accused the Buddhists of anything.

The Buddhist institute — campaigning for a new constitution a national election, and a speedup in social and economic reforms — issued a communique complaining about these quotes:

"Any form of disturbance, street demonstration, strike, or walkout will have no influence on the government. The armed forces and the administration will not yield to unjustified claims which are contrary to the interest of the nation and the people. This is a warning . . ."

Ky declared in a widely publicized denial that he had "never thought the Buddhist wishes were illogical and unpatriotic." He said his Dalat speech was aimed at "feudalists, colonialists, and Communists" who were seeking to disrupt national unity and weaken South Viet Nam's fighting spirit.

## Shooting Victim Also Is Charged

MILLSTON — A warrant of criminal damage to property and disorderly conduct was issued Monday against Cletus Conant of the Tomah area after he was allegedly shot in the foot by his mother-in-law here.

The warrant was issued by Dist. Atty. Robert Radcliff of Jackson county after the alleged shooting Sunday afternoon in the home of Conant's mother-in-law, Mrs. Clara Gorbet.

Conant, who is estranged from his wife, reportedly came to the home about 4:30 p.m. Sunday to see his five children when Mrs. Gorbet shot him in the left foot. He was reportedly in satisfactory condition in La Crosse hospital.

Radcliff would not disclose any further details. The charge of criminal damage carries a maximum penalty of a \$200 fine or six months in prison or both. Mrs. Gorbet was charged with

## Senate OKs Funds for Viet Nam War

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Passage of the appropriation bill was accompanied by demands from Sen. Richard B. Russell (D-Ga.) for a stepping up of power to "bring this war to a close."

Russell, chairman of the Senate Armed Services committee, said present tactics may require 10 or 12 years to bring the Viet Cong to their knees and "the American people are going to be very unhappy about it" unless the Communists are forced to the peace table soon.

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## In Bid for Smasher

# WPL Lowers Its A-Power Price

By WILLIAM WITT  
(State Journal Staff Writer)

The Wisconsin Power and Light Co. (WPL) came down a mill Monday in its bid to supply power to the proposed world's biggest atom smasher.

The bid, 6.5 mills per kilowatt hour, even though one mill lower than its previous bid of last year, is still not the lowest submitted by the six finalists.

The other original bids, submitted to the Atomic Energy Commission (AEC), were Denver, Colo., 6.2 mills; Ann Arbor, Mich., 6.98 mills; Brookhaven, N.Y., 8.2 mills; Sacramento, Calif., 8.4 mills; and Weston, Ill., 9.1 mills.

These bids will also have been revised downward in reports which were due before the AEC Monday for final examination prior to recommendation of one site above all others.

The WPL bid was on the Stoughton site, and resulted from requests left by the commission

during a visit to the site on Apr. 7.

### New Specifications

At that time, the AEC left new power specifications with the WPL which called for lower load factors and enabled the company to decrease its rate bid.

The AEC had cautioned officials that the rate should be lower, to be in line with bids from the other five sites.

In addition, it asked for reports in other areas ranging from condemnation procedures to airline service.

The WPL report included a proposal for a 345,000-volt transmission line to be completed to the site by 1973, the year when the proposed 200 billion electron volt (BEV) machine is scheduled for completion.

By 1974 the WPL said it would have an additional electric generating unit added to its system for commercial operation.

The report stated that costs were based on the assumption

that the power load requirement would approach 200,000 volts during the fifth year of operation for the \$375 million machine.

It is scheduled to be operational by July 1, 1974; if approved and budgeted as planned.

### Could Go Up

The WPL bid stated that the 6.5 mills was the minimum monthly average rate per kilowatt hour, and that it would go up for any increase in construction, fuel costs, or taxes above the levels prevailing on May 1, 1966.

Supplying power will involve the WPL, Madison Gas and Electric Co., Northern States Power Co., Wisconsin Electric Power Co., and the Wisconsin Public Service Corp.

It will necessitate the construction of several power lines around the state network in addition to those planned for normal expansion.

Another key provision of the report called for an airline shuttle service between the site and Chicago, with construction of two concrete runways, a parallel taxiway, lighting, auxiliary taxiways, an apron, and a ramp and administration building at a total cost of \$900,000.

The shuttle service was expected to handle about a dozen round trip flights per day by 1974, with annual service costs to rise to \$210,000 in seven years. The state would subsidize the operation at a cost of \$16,250 a year at that level if a projected \$15 for a one-way fare to Chicago were charged.

The R. Dixon Speas Associates consulting company from New York was called in to prepare the estimate.

### Field's Potential

The proposed on-site airport would accommodate light twin-engine planes, plus give restricted use of some of the smaller business jets and a few heavier twin-engine aircraft in the DC-3 and Convair category.

The report also includes summaries of proposed land acquisition by the state which pledge "unlimited funds" to buy the site, of 5,466 acres about 11 miles southeast of Madison along Highway 51 west of Lake Kegonsa.

As to acquisition, the report says that if the site cannot be bought promptly through negotiations with the land owners, it can be acquired "immediately by condemnation, which the state would conduct."

In addition, the report notes that though no problems are foreseen in acquiring the right-of-way for power lines, "in Wisconsin, public utility companies are authorized to acquire such land as they may need for right-of-way through condemnation proceedings if necessary."

The state owns only about 300 of the 5,466 acres. The rest, mostly farmland, is owned by 183 individuals.

The report states that long-range accelerator development may require the acquisition of another 5,000 acres, which it says is "easily available immediately south of the proposed site."

It calls this land "in low-production farm use," and notes that the University of Wisconsin is prepared to buy this additional land at the time of site selection, which AEC Chairman Glenn Seaborg said should come before the end of this year.

Housing for visiting scientists and graduate students is proposed, to include 100 apartments and 100 rooms; and a conference center with three auditoriums, seminar rooms, food service facilities, a swimming pool, and three tennis courts, at a total cost of almost \$2.4 million.

# Pentagon

## THE CAPITAL

### WEATHER

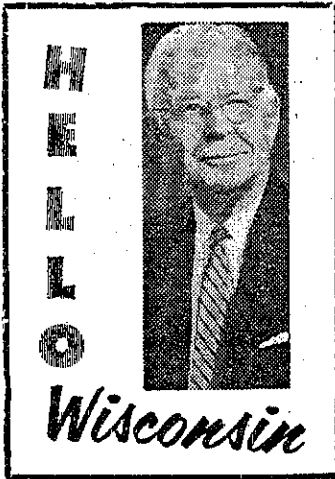
Fair, cool tonight, Sunday. Light, variable winds. Low tonight upper 30s; high Sunday in 60s. Sun rose 5:23; sets 8:27.

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VOL. 98, NO. 143  
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HERE  
IN  
WISCONSIN

By WILLIAM T. EVJUE

AFTER A DREARY winter and cool spring, this scribe finds pleasure, at the end of a busy day, in relaxing on the porch overlooking beautiful Lake Mendota. How restful it is to watch the rippling waves and to see the boats with their white sails skimming over the water. The season is just beginning and during this holiday weekend, scores of boats of every description will be propelling their way through the water. The white oak near the porch is bursting into full leaf . . . The beautiful cardinal with his melodious song is engaged in his customary concert . . . The park next door is covered with a rich green carpet—a sprinkling of dandelions here and there. Yes, many enjoyable hours will be spent here during these precious late spring and summer months.

● HERE IS A SOMBER reminder of those who gave their lives to preserve the heritage of freedom and democracy. We reproduce a Memorial Day message and a sketch printed (Continued on Page 3, Col. 1)

### THEIR LAST FULL MEASURE



A DAY TO REMEMBER

The muffled dirge of a military band . . . the rhythmic cadence of marching men . . . the creaking,

### Meeting Told of Petition

## Reveal Opposition of Oregon Group To MURA A-Lab

By RICHARD BRAUTIGAM  
(Of The Capital Times Staff)

OREGON — A proposed multi-million dollar atomic accelerator for the Stoughton-Oregon area met its first vocal opposition Friday night at a 2½-hour meeting in the school cafeteria here.

The meeting, called for information purposes by the Oregon-Brooklyn Jaycees and Chamber of Commerce, drew about 100 area residents.

Present to answer questions about the planned accelerator were Dr. Fred E. Mills, director of the Midwestern Universities Research Association (MURA), and members of the Oregon School Board.

Ivan Gregory, Route 1, Oregon, and Jack McManus, a Madison attorney who owns land bordering on the 5,000 acres that would constitute the site of the accelerator, headed the opposition.

Gregory told the meeting that taking of the 5,000 acres would involve families on about 55 farms and 55 home sites. He said he has obtained 43 signatures to a petition opposing the planned accelerator out of 44 persons approached.

Although Gregory and McManus expressed strong opposition to the project, it found an equally strong support from Mrs. John B. McManus.

Mr. and Mrs. John B. McManus operate one of Wisconsin's best-known kennels, Gooseberry Hill,

which they will lose if the accelerator is awarded to the Stoughton-Oregon site. John B. McManus and Jack McManus are not related.

Mrs. McManus said she and her husband don't want to give up their property, but felt that it would be "ridiculous" for them or anyone else to stand in the way of progress.

Mrs. McManus pointed out that area residents have discussed ways of increasing the local tax base for years, but that now some would fight a project that would do just that.

Location of the accelerator in the Stoughton-Oregon area would benefit the entire state as well as the towns and villages involved, she said.

Her remarks drew the only sustained applause of the evening.

Dr. Mills opened the formal part of the session with an explanation of how an accelerator operates and the function it performs in scientific research.

He emphasized that an accelerator is not a nuclear reactor.

In answer to questions, he said that the only possibility of an explosion is in bubble chambers which use liquid hydrogen. He compared the possibility here with that posed by a gasoline truck on the highway.

Since an accelerator is not a reactor, he said, there is no danger of radioactive contamination.

Questioned on the preservation of Hook Lake, Dr. Mills said there are no plans to drain the lake nor to build in its vicinity.

Dr. Mills said there is a possibility that one road may be closed but pointed out that there could be no other shutting off of traffic because operation of the accelerator requires access, too.

Actual construction of the multi-million dollar project would be carried out over eight years and would not result in a sudden influx of great numbers of people, he said. When in full operation, there will be a staff of about 2,500, most of whom will be professional people, he explained.

Gregory and Jack McManus pointed out that some \$1,700,000 would be taken off the property tax rolls, but School Board members said this would be replaced in large part because the dis-

(Continued on Page 2, Col. 5)

# Opposition To MURA's Lab Is Told

(Continued from Page 1)  
placed families would relocate elsewhere in the district and accelerator employees would be building also.

Gregory and McManus also felt the district could expect a doubling of school enrollments within five years and a tripling in 10 years. However, School Board members said there is a normal enrollment increase of 5 per cent a year. This may increase to 15 per cent in 10 years. In numbers of students the increase would be from the present 2,000 to about 3,000, board members estimated.

School construction should present no problems, board members said, because the new high school, built for an enrollment of 600, is planned to be expanded to 2,000.

The school board members also pointed out that in similar situations, such as in Sun Prairie, the government provides aid to local communities to help them absorb unexpected enrollment increases.

Gregory told The Capital Times that copies of the opposition petition will be sent to Gov. Knowles, University of Wisconsin Pres. Fred Harvey Harrington, U.S. Sens. William Proxmire and Gaylord Nelson, the Atomic Energy Commission and other agencies.

Signatures are being sought only from residents or property owners in the 5,000-acre site, Gregory said.

Gregory told the meeting, and in an interview with The Capital Times, said the only question involved is one of economics.

In addition to a natural desire to remain where they are, the residents want to be able to sell on the open market, at their terms, when they want to, he said.

The interest of the state and the University is also an economic one, he said. He said that the only reason being advanced for locating the accelerator in the area is economic. There is no reason of health or of safety for acquiring the land by condemnation, he added.

Whatever scientific or educational principle is involved could be accomplished at any of the other six sites, he said.

Although the accelerator is being pictured as a million dollar bonanza for the area, the persons to be displaced could not share in it, Gregory said.

"We don't deny that this would put a boom in the area," Gregory said, "but a boom is not necessarily good. The University is overcrowded and needs space for its other activities. The accelerator is a prestige item, a kind of intellectual pork barrel."

## Probe Crash of Six Jets

HUELVA, Spain (AP)—The crash of six French jet fighters in southwestern Spain Friday touched off an immediate investigation by Spanish and French officials.

All six pilots parachuted to safety before their Mystere IV planes crashed in a swampy pasture area near this Atlantic port 280 miles southwest of Madrid,



This little girl, with a plastic bag she used as tear gas mask pulled back on top of her head, is shown after police broke up an anti-government demonstration in Saigon. The tear gas used to disperse the demonstrators was so common in the streets that even little bystanders had to protect themselves. (AP Wirephoto via Radio from Saigon).

## 'Leak' of Ag Rates Is Probed

By OVID A. MARTIN

WASHINGTON (AP)—Agriculture Department officials are investigating the premature disclosure of a decision to postpone possible reductions in rates the department pays for storing government grains.

This is the second investigation launched this week by the department into leaks of official government announcements.

The latest leak occurred Thursday. Secretary Orville Freeman's announcement concerning government grain storage rates was not given to newsmen in Washington until after 3 p.m. that day in an apparent move to avoid any possible influence on grain markets before they closed for the day.

It was learned, however, that the decision became known in North Dakota several hours before the announcement was made public in Washington.

Department officials said they doubted premature disclosure of the decision in North Dakota could have been used to an advantage in the commodity markets.

But they said this does not hold true with regard to the securities markets.

Stocks of many companies in the grain storage business are traded on these markets. The storage decision information became known in North Dakota while these markets were open. The decision could have been expected to have a bullish effect on prices of such stock because it indicated a higher return from grain storage than would have been possible had the rates been reduced.

It could not be determined immediately, however, if trading of grain storage company stock reacted significantly to premature disclosure of Freeman's announcement.

Two days ago it was reported the department's Office of Inspector General was investigating a complaint of a premature leak of government plans to increase soybean production this year.

This complaint claimed that a

asked by the White House not to discuss the party until after it is over.

Nugent and Luci had been expected to arrive Friday night, but the White House announced they would probably arrive sometime this afternoon instead. No explanation for the change in plans was offered.

Nugent has been working in Washington since he graduated from Marquette University last year.

He was expected to spend tonight at a Marquette fraternity house. Luci was expected to spend the night at the Feldstein home.

Luci and Nugent are expected to travel to Waukegan, Ill. Nugent's home town, for a bridal shower being given Sunday by a Nugent family friend, Mrs. Joseph Matalenas.

## Castro Places Cuban Military On Full Alert

HAVANA (UPI)—The armed forces ministry said today the Cuban armed forces have gone on full alert and are prepared for immediate combat if circumstances require it.

Premier Fidel Castro ordered the Cuban people and military on a "state of alert" Friday night in the wake of what he called "thousands of provocations" by U.S. Marines at the American Guantanamo Naval Base.

A communique issued by the ministry in the name of the joint chiefs of staff today said the nation's armed forces had been put on alert and had adopted all pertinent measures to go immediately into combat readiness if circumstances demand it.

## India Will Get Farm Products

WASHINGTON (UPI)—Agriculture Secretary Orville L. Freeman Friday announced a new "food for peace" agreement under which drought-stricken India will receive \$313 million worth of U.S. farm commodities, chiefly grain.

The new agreement, announced also New Delhi, brought to \$1.1 billion the value of food made available to India since Sept. 30, 1964.

## Today In History

(By The Associated Press)  
Today is Saturday, May 28, the 148th day of 1966. There are 217 days left in the year.

Today's highlight in history:  
On this date in 1918, the first U. S. offensive operation of World War I was carried out by the 28th Infantry of the 1st Division on the Western Front in France.

On this date:  
In 1754, George Washington fought his first battle at Great Meadows, Pa.

In 1940, the armed forces of Belgium surrendered to the Germans.

In 1942, Mexico declared war against the Axis.

In 1944, the Allies captured the towns of Aprilia and Carroceto on

...ing the confrontation of the world powers in Central Europe which varies in bounding with this division. Senate Majority Leader Mike Mansfield has proposed thinning out U.S. forces in Europe and an Associated Press poll of 75 senators shows 44 favored some reduction in the 225,000-man U.S. force in Western Europe under NATO. Six U.S. Army divisions are in West Germany. Rusk said the NATO military units from NATO. Sen. Henry M. Jackson (D-Wash.) whose national security committee has been holding hearings on NATO and the troop commitment issue, said he supports Rusk's views. "Hopefully in time, there can be some reduction of American ground forces, but certainly this is not the time to discuss the possibility," Jackson said. "To re-assure allies. Obviously, he said, European leaders have heard the talk of troop reductions and are asking, 'what's this all about?'" At the news conference, Rusk said problems arising from President Charles De Gaulle's plans to withdraw France from NATO's military structure will be a major topic of discussion at the Brussels meeting. Neither top Wisconsin Democrats nor the press have been invited to the dinner dance being given for the President's 18-year-old daughter and the 22-year-old Nugent by Mr. and Mrs. William Feldstein of suburban Whitefish Bay. Feldstein, a friend of President Johnson had indicated he might call a news conference to discuss details of the event. How-

party at the Milwaukee Athletic Club.

## AEC Turns Plan Down

# Last MURA Hope Gone as Budget Omits Its Funds

By IVAN KAYE  
(Capital Times Washington Correspondent)

WASHINGTON—The hope for a great nuclear accelerator at the Midwest Universities Research Association's installation near Stoughtons, Wis., has now gone up in smoke.

The Atomic Energy Commission has decided flatly against building the proposed \$150 million machine, and the 1965 executive budget omits any money for the project.

President Lyndon Johnson's strong ECONOMY drive could not have helped the MURA cause any, and the accumulated scientific weight of the numerous advocates of Berkeley, Cambridge,

Brookhaven and Argonne, did not do MURA any good.

Even though MURA scientists will be allowed to help design a gigantic trillion volt accelerator that will be constructed in the future, there is practically no chance that this great machine will be located in the Midwest.

MURA must look forward sadly to the prospect that many of its most distinguished researchers will be lured to the East or West Coast to work at the existing nuclear installations.

Political reaction was quick and angry. Sen. William Proxmire (D-Wis) and Cong. Bob Kastenmeier (D-Watertown), in a joint statement, said that they would not accept the decision to deny the construction funds.

"We are more determined than  
(Continued on Page 4, Col. 6)

## IBM Directors Vote Stock Split

NEW YORK (AP)—A stock split, the sixth in 11 years, was voted today by directors of International Business Machines corp., the world's largest maker of business machines.

The split would take the form of one new share for each four now held. It is subject to stockholder approval at the IBM April 28 annual meeting. This nearly always is a formality. The usual quarterly dividend of \$1.25 a share was declared.

## MURA Is Out Of Budget

(Continued from Page 1)

ever to fight to include these funds in the budget when it comes to Congress," the two Democrats said.

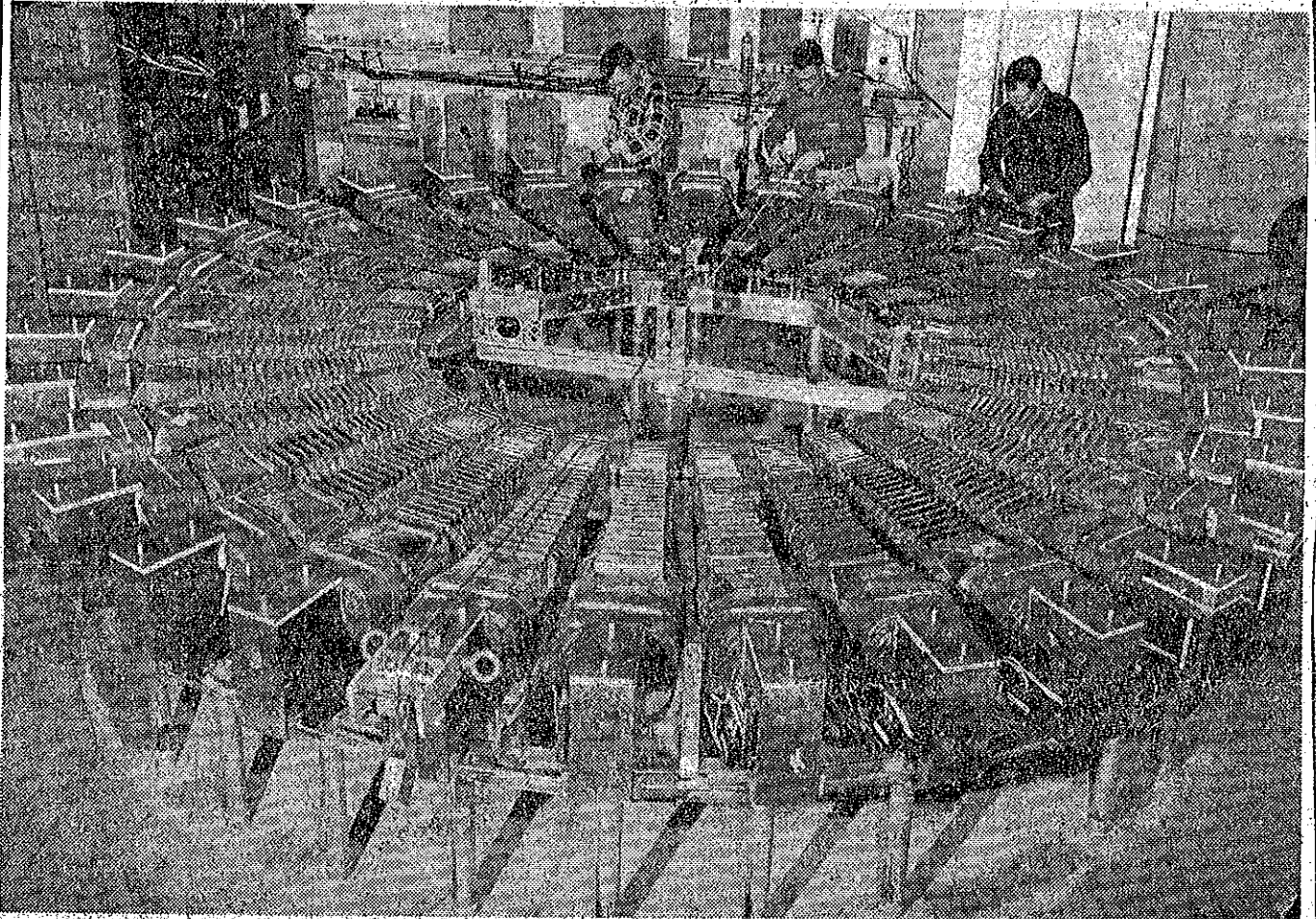
They admitted, however, that such a fight was faced with almost insurmountable odds.

Sen. Gaylord Nelson (D-Wis) expressed "my tremendous regret over the rejection of the MURA accelerator."

Nelson said that the "MURA accelerator, 10 years in creation, has been abruptly dumped by the AEC and the President's science adviser. This is a tragic mistake in judgment."

Nelson urged the MURA research team to "hold together" while legislators here attempted to secure some kind of commitment from the executive branch for future nuclear machines.

# Magnets for Model Atom-Smasher



This is the bottom tier of the 32-magnet assembly in the 50-million electron volt model atom-smasher now being put together by Midwest Universities Research Association (MURA) at its site 10 miles southeast of Madison near Stoughton. Actually these are just half-magnets. The 32 upper components are being lifted into place this week. Each of the 64 pieces weighs 1,400 pounds—altogether more than 40 tons. This test model is the forerunner of the giant atom-smasher which MURA scientists hope to build on the same site.

Complete magnets resemble the open jaws of a crocodile, each looking into the center of the circle. Atomic particles moving in a

doughnut-shaped vacuum tube between the upper and lower jaws will be bent and focused in a circular path by the pull of the magnets. In the giant machine proposed by MURA two oppositely directed proton beams will move roughly a quarter of a million times per second around a circle 1,200 feet in diameter, and produce one million proton-proton collisions per second in a four-inch interaction region. The fixed magnetic field in the MURA design makes it possible to "stack" protons inside the atom-smasher and obtain a beam 100 times more intense than that in any previous machine. (Gary Schulz Photo)