

FERMILAB NEWS

 Fermi National Accelerator Laboratory

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NEW CIRCUIT IMPROVES MONITORING

Industry is interested in producing it. The attraction is its versatility and low cost.

The programmable multi-color video display controller allows operators and experimenters to display data on standard television monitor screens as letters, figures and a wide variety of graphics, with excellent resolution and in selected colors.

To protect Laboratory interests, Jim Simanton, leader of the Electronic Support Group, and Carl Wegner, technical specialist, both with Fermilab's Research Services, have applied for a patent.

The controller module was originally suggested by Marvin E. Johnson, assistant head of Research Services, as a way to upgrade the Experimental Controls System. It was then developed by the electronics team of Simanton, Wegner and Wayne Koskey, technician.

Experiments at Fermilab were becoming more sophisticated, beam facilities were continually expanding and controls and operations were growing more complex. This led to the need for more and better monitoring stations that could graphically portray changing trends as well as display data in compact rows and columns of letters and numbers. After searching the literature and investigating the work of others, Simanton and his team created the circuitry they felt would best meet Fermilab's needs and budget.

"This single printed circuit module provides all the electronics required to communicate interactively by a keyboard or computer port and generate high-resolution graphics (pictures) and-or text displays on inexpensive television monitors," said Simanton. "This module can be programmed to duplicate the operations of popular commercial computer terminals or combine the best features of several such terminals."



...Displaying their handiwork, (L-R), Jim Simanton, Carl Wegner, John Ingebretsen and Wayne Koskey. The monitor shows a simulated colliding beam event...

He further said, "Using modern programmed logic array technique, Carl shoe-horned into a small space what would have been an impressive volume of conventional logical circuitry. Wayne tamed the hardware with some timely seat-of-the-pants programming."

Simanton also said, "If a color monitor is available, a single module can generate black and white graphics and text characters in up to seven colors in any desired combinations. To color the graphics as well as the text, two interconnected modules provide three colors while three modules will provide seven colors."

Using this latter combination, John Ingebretsen, a programmer with the Computer Department, was able to generate through the computer vivid, animated displays during the recent visit of Sen. Adlai Stevenson, D-Ill., to Fermilab. The presentation was particularly relevant because it demonstrated transferrable technology--that is, technology that can be used by industry.

URA APPOINTS COMMITTEE OF SCIENTISTS

A committee of eminent scientists has been appointed by the Board of Trustees of Universities Research Association to visit Fermilab annually and to submit a written report of their findings to the Board.

The committee's first visit will come June 1 and 2.

"While Fermilab, in common with all other large laboratories, has numerous special committees of outside experts who advise the director, it has never had a review committee with responsibility for general oversight and which reports directly to the Board of Trustees," said Prof. Milton G. White, newly elected president of URA.

White, while still chairman of the Board, nominated, and the Board approved, the following members of the committee: Barry Barish, California Institute of Technology; Thomas Fields, Argonne National Laboratory; Val Fitch, Princeton University; J. D. Jackson, University of California at Berkeley; Donald Meyer, University of Michigan, and Paul Reardon, Princeton Plasma Physics Laboratory.

Also, John Rees, Stanford Linear Accelerator; Maury Tigner, Cornell University; Gustafson Voss, DESY; William Willis, Brookhaven National Laboratory; and C. N. Yang, State University of New York.

Fitch will serve as the committee's first chairman.

Two members of the Board of Trustees will be appointed to the visiting committee, White said. "The committee has been empowered to determine for itself the agenda for its meetings, consistent with the Laboratory's on-going activities," White also said.

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FERMILAB ANNOUNCES WILSON FELLOWS PROGRAM

Talented men and women who have recently earned their doctorate in physics now have the opportunity to qualify for a Robert R. Wilson fellowship. The fellowship is named in honor of Fermilab's first director, Dr. Wilson, who retired last year, continues to participate actively in his work at Fermilab on a joint appointment with the University of Chicago, where he holds the Peter B. Ritzma professorship.

The fellows will be selected for a term



...Welcome home, as bus comes to stop at Aspen East in the Village following return from Fox Valley Shopping Center...

BUS NOW STOPS AT FERMILAB

Fermilab employees, users and visitors now have a new way to get from the site to the Fox Valley Shopping Center--by bus.

Each Tuesday at 9:50 a.m., a bus operated by the Regional Transportation Authority will stop at Aspen East, Batavia Road and Sauk Blvd. The bus will then head to the shopping center, arriving in front of the J.C.Penney store around 10:10 a.m. It will pick up passengers at the same stop at 12:15 p.m., arriving back at Aspen East at 12:35 p.m. The trip each way takes about 20 minutes.

The new route is the result of the persistent encouragement of Batavia alderman Peter F. M. Koehler, who also is a physicist with the Accelerator Division. Previously, the bus would travel through the site, but would not stop. It seemed logical to Koehler and many others that if the bus ran through Fermilab, it should make at least one stop on the site.

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of three years at an annual salary between \$17,000 and \$26,000.

"Fellows in accelerator science will be associated with the group responsible for the accelerator on which they choose to work," said Dr. Charles M. Ankenbrandt, chairman of the Fellows Committee. "The purpose of these appointments is to encourage talented scientists to pursue a career in accelerator physics at Fermilab." Fellows in high energy physics will work at Fermilab in an area of experimental high energy research of their own choice. * * * * *

CANADIAN BRASS HERE FOR ART SERIES

One critic called them "the pride and joy of Canada." Another reviewer described them as having brilliant virtuosity, solid musicianship, musical versatility plus a first-rate comedic talent that has set them aside as extraordinary performers of both Baroque music and jazz.

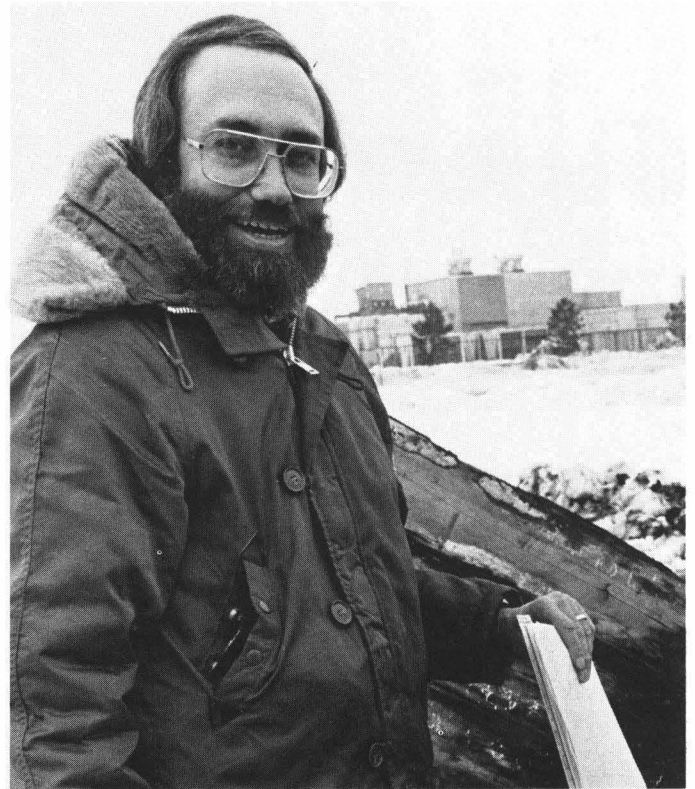
The Canadian Brass will give a concert of Baroque music and jazz April 28. The performance will begin at 8:30 p.m. in the Central Laboratory auditorium. Their appearance is part of the Fermilab Art Series and is arranged by the Auditorium Committee of Fermilab.

The price of a reserved seat is \$4. Reservations may be made by calling the Guest Office, Ext. 3124.

Reviewers have described their staging as unique to groups playing music that ranges from renaissance to ragtime. The five-member group, which consists of two trumpets, a French horn, a trombone and a tuba, also has been described as fun to watch and wonderful to hear. A critic referred to one of their programs as "a light evening of serious music--incredibly performed."



...Canadian Brass...



...Sam Baker...

NEW ENVIRONMENTAL PROTECTION POST FILLED

Samuel I. Baker of the Safety Section has been named Fermilab's first Senior Environmental Protection Officer (SEPO).

Baker's appointment became effective March 5. In his new position, he will be responsible for radioactive as well as non-radioactive pollutants that threaten health, safety and the environment.

The appointment, announced by Philip V. Livdahl, acting director of Fermilab, considerably strengthens the laboratory's already existing program of controlling pollutants. A. Lincoln Read, head of the Safety Section, described SEPO as "a very important position for getting our amplified program off to a good start."

The new position expands Baker's present responsibilities, which primarily included running a radioactive pollutants control program. A physicist with the Safety Section's Radiation Physics Group, he has been with Fermilab since April 1972.

Baker and his wife, Candi, have two sons, Jeff, 13 and Ryan, 1.

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...Bob Armstrong (L), security chief, sounds the tornado alarm that sends everyone in the Central Laboratory scurrying to

sub-level shelters (R) during a practice alert. (The enclosed brochure provides more information about tornado procedures)...

BLOOD DRIVE SCHEDULED FOR FERMILAB

The Aurora Blood Bank will hold a blood drive at the Central Laboratory April 4.

Blood bank staff members will be here from 9 a.m. to 2:30 p.m. to accept blood from donors in the conference room located in the southwest corner of the atrium.

The medical office encourages persons who wish to donate blood to make an appointment by calling the office at Extension 3232. However, an appointment is not mandatory.

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IT'S EASTER TIME AGAIN FOR THE KIDS

That fabled Easter bunny will be here April 14 encouraging the kids to find the decorated eggs hidden before they arrive,

Yes, it's Easter egg hunt time for youngsters ages 2 through 8 at 1 p.m. at the Village Barn. Parents are being asked to remind their children to bring a bag or a basket.

The event is sponsored by NALREC. For additional information, call Jane Pesetski, Ext. 3646.

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CALL FOR BARN DANCERS

The Fermilab Folk Club will hold a barn dance March 31. It will begin at 8 p.m. in the Village Barn, admission \$1.50 per person. Music by Chicago Barn Dance Co. Refreshments will be available.

VOLUNTEERS SOUGHT TO CLEAN SEEDS FOR PRAIRIE

Volunteers are needed to help make Fermilab an even more beautiful place to work and visit.

Members of the Fermilab Prairie Restoration Project want people to help them prepare native seeds for planting later this year. The seed cleaning encounter will be held April 7 from 9 a.m. to 4 p.m. in the Village Barn. Volunteers have been asked to bring their own lunch and beverage.

Tony Donaldson, who will supervise the project, expects about 400 pounds of seeds to be prepared for later planting. In the past five annual sessions, 1,440 pounds of seeds have been prepared.

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SUMMER HOUSING APPLICATION DEADLINE NEARS

March 30 is the deadline for the Housing Office to have applications for summer on-site housing. Responses to applications are expected to be mailed April 17, in time for occupancy to begin the week of May 28. Further questions should be directed to the Housing Office, Ext. 3777.

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VOLLEYBALLERS TO HOLD MEETING

A planning meeting has been organized for persons interested in playing volleyball. The session will be held April 3 at 5:15 p.m. at the Users Center in the Village. Helen McCulloch, Fermilab recreation coordinator, will moderate the meeting.

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