November 12, 1981 FERMI NATIONAL ACCELERATOR LABORATORY

# FermiNews



Rene Donaldson (seated right) and Peggie Lasenby (seated left) direct efforts of Ferminews correspondents. Second row (left to right) are Thornton Murphy, Phyllis Hale, Dennis Theriot, Jean Plese, Harlan Dick, Treva Gourlay, Cynthia Sazama-Reay, Hank Hinterberger, Elsie Renaud; third row (left to right) are Tony Frelo, Barb Edmondson, Michelle Gleason, Pat Yost, Dick Carrigan, Margaret Pearson, Bob Trendler, Brad Cox, Roy Rubinstein, Jim Finks, Barb Perington.

# CORRESPONDENTS APPOINTED

Beginning with this issue, Ferminews will be published biweekly to help meet Laboratory concerns in reducing expenses; it is also hoped that this change in organization will reflect interests of a larger number of employees. Because Ferminews will appear less frequently, correspondents have been appointed to assist the Publications Rene Donaldson, editor, with reporting and writing of newsworthy items. The correspondents and their affiliations are Harlan Dick, Michelle Gleason, Marilyn Paul, Elsie Renaud, Tim Toohig/Thornton Murphy, LaDaune Trierweiler, Accelerator Division; Jeff Appel, Dick Carrigan, Brad Cox, Barb Edmondson, Barb Perington, Dennis Theriot, Bob Trendler, Research Division; Frank Cole, Antiproton Source Project Section; Jim Finks, Richard Kujath, John Paulk, Business Services Section; Rick Fenner/Tony Frelo, Peggie Lasenby, Margaret Pearson, Cynthia Sazama-Reay, Pat Yost, Laboratory Services Section; Lincoln Read, Safety Section; Hank Hinterberger, Technical Services Section; Treva Gourlay, Cordon Kerns, Physics Department; Phyllis Hale, Jean Plese, Roy Rubinstein, Director's Office.

Ferminews is a publication limited in circulation to Laboratory employees and their families. Its purpose is to inform people about Laboratory programs, work in progress and plans for the future, to inform people about Laboratory events of interest, and to give news about employees to their friends and colleagues.

If any employee has information for Ferminews, he is urged to contact the correspondent in his department or division, who will then transmit the story to the Publications Office. For short items and want ads, the Publications Office can be contacted directly, ext. 3278.

## THIRTEEN ATTEND LINEAR ACCELERATOR CONFERENCE

by F.T. Cole

Thirteen Fermilab people participated in the 1981 Linear Accelerator Conference hosted by Los Alamos National Laboratory and held at the Bishop's Lodge in Santa Fe, New Mexico from October 19 through October 23. Our people included Phil Livdahl, Deputy Director; Larry Allen, Cy Curtis, Tony Donaldson, Bob Goodwin, Max Palmer, Chuck Schmidt, Mike Shea, Lee Teng, and Elliott Treadwell of the Accelerator Division and Frank Cole, Dave Johnson, and Don Young of the Antiproton Source Section. Most of the Fermilab people gave papers at the meeting.

The Linear Accelerator Conferences were started in 1961 by people from Brookhaven, Los Alamos, and MURA who were interested in designing and building proton linear accelerators. (After MURA passed away from the scene, the MURA linac people joined this Laboratory and built our 200-MeV linac.) This conference, the eleventh in the series, had a much broader agenda, reflecting interest in accelerators on a much wider scale. Advances in many of these accelerator concepts and devices were There were interesting results reported. in control systems, microtrons, electron linear accelerators, the transport of intense beams, computation of linac field patterns, and collective accelerators.

One of the most important new ideas in linear accelerators in many years is the RFQ (radiofrequency quadrupoles), a new way of shaping the electromagnetic fields at the low-energy end of a linac, invented by the Soviet physicists Kapchinskii and Taployakov and extensively developed by Los Alamos. A number of other laboratories have now taken up RFQ and told about their work on it.

Fermilab people reported on their work on linac operation and improvements, negative—ion sources, control systems, and collective accelerators. The paper considered by everyone to be the most interesting at the Conference was given by Phil Livdahl. He described the history and accomplishments of the MTA project, which took place at Livermore in California in the 1950's. Several high—intensity linear accelerators were built to produce uranium—235 and plutonium by bombarding natural

uranium or thorium. All the participants were entranced by Phil's story of building accelerators under forced draft. They operated with a large liquid nitrogen leak, something safety people would never allow today, and Phil cracked the soles of his shoes wading around in liquid nitrogen.

All of the Fermilab people came back from this fine conference with new ideas to try on our accelerators and a refreshed outlook.

#### FERMILAB ART SERIES REMINDER

Tony award winning actress, Uta Hagen, will present "Charlotte" on Saturday, November 14, 1981 at 8 p.m. in Ramsey Auditorium. The one-woman play, written by Peter Hacks and directed by Miss Hagen's husband, Herbert Berghof, depicts the relationship between Charlotte von Stein and the great German poet and statesman, Johann Wolfgang von Goethe. All seats are reserved. Admission is \$5. Tickets and information are available at the information desk in Wilson Hall, ext. 3353.



Barbara Graves (left) and Janet Gregory of the Personnel Office are pleased that the Fermilab Employee Handbook has been distributed to all employees. The Handbook is designed to provide reference to personnel policies, procedures, and general information pertinent to employment at the Laboratory. If you did not receive a copy, contact ext. 4367.



#### NEW DUTIES FOR FIREFIGHTER

John Steinhoff, a full-time firefighter at Fermilab for six years, has recently been named Chief of the Montgomery and Countryside Fire Protection District. Previously, Steinhoff was a firefighter with the Lisle Fire Protection District and prior to that, a Lieutenant with the Stickney Fire Department.

As Chief, he will be in charge of 30 volunteer firefighters and responsible for fire protection of an area of about 10 square miles.

Jack will remain as a full-time firefighter at Fermilab.

#### SHARE-A-RIDE BULLETIN BOARD

Employees and Users will notice a "Share-A-Ride" Bulletin Board near the entrance to the Users Office, Atrium-lE. The purpose of the board is just as the name implies for this "do-it-yourself" project. The Users Ofice staff will provide pencils, paper, and stick pins. Offers to give rides may also be called in to the office for posting, ext. 3111.

The "Share-A-Ride" idea for the Bulletin Board was suggested by Mike Tartaglia of MIT who was assisted in the technical and artwork by Tom Regan of SUNY, Stony Brook and Sherry Balika of the Users Office. "This project does not replace the efforts of others to form carpools," says Mike, "but is probably more useful for trips from state to state. With the upcoming holidays, it should be especially helpful to graduate students who do not have a car.'

#### XEROX 2080 IN DUPLICATING

During the month of November, Xerox Corporation is offering Fermilab an on-site demonstration of its 2080 Xerox Aided Drafting System.

Input to the 2080 can be as wide as 36 inches by any length; output is 24 inches by any length. A zoom lens provides unlimited reduction and enlargement. Sybil Krebs, Duplicating supervisor, says, "Engineering and drafting groups will find the 2080 useful in creating 'ink quality' drawings on polyester, elimination of sepias, overlay drafting, and converting blue-line prints into tracings."

For the individuals that were able to view the machine on November 2 and 3, Sybi1 requests that you send her a memo stating the value of the 2080 to your work.

There will be another demonstration of the machine's capabilities on Wednesday, November 18 every hour on the hour. To reserve a time, please contact Duplicating.

#### EQUIPMENT COLUMN TO APPEAR

Equipment Needed

By Ed Tilles, ext. 3697: process controller, cam-operated.

In future issues of Ferminews an "Equipment Needed" column will appear, similar to the one above, to help employees locate pieces of equipment needed to perform Laboratory work. This column is intended to help locate equipment only after checking with the Property Office.

Property Office The maintains computerized log of all capital and sensitive equipment purchased by the Laboratory. If an item is needed, the Property Office, ext. 3585, can determine if the piece of equipment has been purchased by the Laboratory, and by what division, or if that item is available for loan from other agencies which circulate excess lists through the Property Office. The Property Office can locate needed equipment by standard description and model number and can often provide it at no cost to the division.



## Enchanted Audience Dreams With Halloween Storyteller ...



### NALREC PLANS THANKSGIVING AND CHRISTMAS EVENTS

One turkey will be raffled every half hour at NALREC's annual Thanksgiving Party on Friday, November 20, in the Village Barn from 5:15 p.m. to 11 p.m. See a NALREC representative and buy a chance to win a holiday turkey (5 tickets for \$1.00). The "Southbound" will popular local band provide entertainment including country music and rock-and-roll from the 50's and 60's. Food will be available. For further information contact Mike Frett or Jim Fitzgerald at extensions 4763 or 3629 respectively.

Scheduled NALREC events for the holidays include a Children's Christmas Party (ages 2-7) on December 13 from 2 p.m. to 4 p.m. and an Employee's Christmas Party after work on December 22.

#### DANCE CLASSES FOR BEGINNERS

Aerobic dance classes for beginners will start Nov. 16. Classes will be held Mondays, Tuesdays and Thursdays from 6:15 to 7:15 p.m. for five weeks.

Participants can sign up for three nights a week at a cost of \$25 or for two nights a week for \$17.50. The program is sponsored by the Aurora YMCA. If you'd like to register or want more information, contact Pat Yost, ext. 4365.

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Tickets are being sold now through November 20 for Fermilab's annual Christmas Dinner Dance to be held Saturday, December 5, at St. Andrew's Country Club in West Chicago. The schedule for the evening is cocktails 6:30 to 7:30; dinner 7:30 to 9:00; door prizes 9:00 to 9:30, and at 9:30 an 18-piece orchestra "Big Band Sound" will provide music for dancing. The price is \$15 per person, which includes a prime rib dinner and two free drinks. For further information contact Jo Baaske, ext 3046 Jean Plese, 3211; Jesse Guerra, 4305/3198; or Nancy Shanahan, 3469.

#### CONGRATULATIONS TO. . .

Kathy and Vic Kuchler (Architectural Services) on the birth of their 5 1b. 15 oz. daughter, Kelly Ann, on October 13, 1981, at Hinsdale Hospital. She joins 2 year old Ryan.

Elaine J. and David Burch (Computing) on the birth of their first child Michael Edward on October 19 at Sherman Hospital. Michael weighed 10 lbs. 7 oz!

#### UNITED WAY FILM PREVIEWS

"Thoughts and Feeling," a United Way film starring NFL players and wives, will be shown November 17 at 11:30 a.m., noon, 12:30 p.m., and 1 p.m. in Ramsey Auditor-This six-minute color film is narrated by Bryant Gumbel; all employees are welcome.

FOR SALE:

CARS:

1979 Chevy Monza. AM/FM stereo; 4 spd; power steering; 36,000 miles; good condition. Call 892-4926.

1973 Blazer. Body needs some repair. Many extras. \$3700 or offer. Call 879-3357.

1974 Chev Caprice Station Wagon. V-8; A/C; power steering; power brakes; tilt wheel, automatic trans.; roof rack; 70,000 miles. Good condition. \$1200. Call Frank, ext. 3808.

MISC.:

Sears Space Heater. 50,000 BTU; burns kerosene or No. 1 fuel oil. \$115. Call Don, ext. 4164.

18 ft Grady-White Boat and Trailer. Trailer like new; boat needs paint; \$595 or offer. Call Gerrie, ext. 3617 or 896-9014.

Electric Fireplace. Simulated brick face; electric log; screened front; wood look top and hearth; approx. 62 in.  $\times$  18 in.  $\times$  40 in. Call Allen, ext. 4465.

Drapes, insulated, aqua, 2 panels each 81 in. x 60 in., pleated, \$40; Bicycle helmet, Bell "Prime," size 7-7-1/8, new, \$25; Violin, 3/4 size, for 9-12 years, in playing condition w/case and bow, \$75; Camera, Polaroid Sonar one step, new, \$60; Camera flash, electronic, for PC cameras, Kodak 110 and x-type instamatics, \$6; Watch, Timex LCD, man's size, \$15; Shoes, women's safety Oxford size 9B, in excellent condition, free to a Fermilab employee who can wear them. Call S. Gronenmeyer, ext. 3109 or page 325.

Model Kit. Jaguar XK-e GT Sports Coupe. 1/8 size, opening and closing doors, crank operated windows, operating front suspension, steerable wheels; partially assembled. \$10 or best offer. Call R. Donaldson, ext 3278.

Magnavision laser discs, 2 Walt Disney movies, \$5 ea.; miscellaneous Atary tapes, \$12 ea.; CB home base, Realistic Navaho TRC 440, \$60; man size 8 hockey skates (Bauer), \$25; Honeywell thermostat, \$5. Call Graciela Finstrom, ext. 4801.

WANTED:

Even Trade: One black Brentwood-style rocker for a brown Brentwood-style rocker. Call Craig, ext. 4427.

Anyone interested in exchanging home video movies for viewing VHS or Beta Format call Terry, ext. 4447 or page 834.

NOTICE:

Ceramic classes near Waubonsee College. Also, custom-made gifts, greenware, and supplies. Call 557-2523.