

FermiNews

September 19, 1986 Vol. IX, No. 15

Fermi National Accelerator Laboratory

Fermilab is First Stop for DOE/NEESA Mobil Energy Laboratory



Participants in MEL's visit to Fermilab were (left to right) John Yourshaw, observer from the Veterans Administration's Westside Medical Center; Ralph Johns, Fermilab F.O.E.; Dennis Bowron, Fermilab F.O.E.; Reid Riehl, Fermilab F.O.E.; Paul Delaney, MEL instructor, NEESA; Bill Riches, Fermilab Energy Management Coordinator; Charles Applewhite, observer from Westside; Karel Klima, DOE Chicago Operations Office; Dick Graff, Fermilab F.O.E.; and Jack Mills, Fermilab F.O.E.

Its name is MEL. It does not own a diner in a defunct TV situation comedy. MEL is the Mobile Energy Laboratory, the first of four huge Scenicruiser-type buses to be loaded with energy-monitoring equipment and deployed around the country. Mission: to function as an energy-monitoring station and perform energy-metering surveys and analyses for federal agencies and facilities. MEL is the brain-child of the people at the Department of Energy's Federal Energy Management Program (FEMP). DOE and FEMP provided funding to the U.S. Navy's Naval Energy and Environmental Support Activity (NEESA) to develop and construct the four MELs.

From August 12 through the 18th, Fermilab was the first DOE facility visited by the first MEL. MEL's task at Fermilab was to identify potential energy conservation opportunities and produce recommendations for economical energy use, thereby reducing expenditures of operational costs. MEL's primary targets this trip were Wilson Hall and the Central Utility Building.

While Fermilab personnel manipulated transformers, chillers, and air conditioners in order to simulate abnormal or peak use situations, MEL ran its tests and reached its conclusions which will help the Lab evaluate power use in areas such as the power feeder lines to the computer floors in Wilson Hall, the power factor of the basement computer chiller load, the Wilson Hall power factor and transformer capacity, and the resultant impact on the overall site power factor, which is required by CommEd to be above 85%.

Karel Klima of DOE's Chicago Operations Office, arranged for MEL to make its first area visit in Chicago, and Bill Riches, Fermilab's Energy Management Coordinator, arranged for the Lab to be first on MEL's local itinerary. Observers from other potential client sites came along for the trip; several Fermilab people participated in the tests and were instructed by Paul Delany of NEESA in the placement and use of monitoring instrumentation on electrical and cooling systems. These Lab staffers will receive certificates acknowledging their training in the operation of MEL.

MEL will be back at Fermilab in January to conduct important heating studies. An Illinois winter ought return the favor where rigorous tests are concerned.

NTF Celebrates First 10 Years

On September 7, Fermilab's Neutron Therapy Facility (NTF) celebrated the 10th anniversary of their first patient treatment. A picnic, hosted by the Laboratory at the Kuhn Barn in the Village, gave NTF and Lab staff members, past and present, volunteer workers, doctors, and former patients a chance to come together in observance of a remarkable accomplishment.

One hundred and fifty people attended, including pioneers of neutron therapy at Fermilab, members of the original and current NTF groups, Lab personnel who have contributed to NTF's success over the years, local volunteers who have devoted their time and efforts to NTF, and, as honored guests, Mr. and Mrs. Harold Knutson. In October of 1976, Mr. Knutson was the seventh patient treated at NTF.



Left to right: Dr. Lionel Cohen, Mr. Harold Knutson, and Dr. Frank Hendrickson.

Mr. Knutson recalled that, in 1976, he had to make a choice between radical surgery which would have altered his features and affected his ability to eat and speak, and the then-experimental

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NTF treatments. He observed that the NTF treatments not only had a salutary impact on his medical condition, but that the experience "changed his life" as well. In the 10 years since his treatment he has devoted more time to family and friends, and to other NTF patients; he calls himself NTF's "best salesman."

Also among the attendees were Larry Lanzl and Don Young, who were among the group that began Fermilab's NTF, and Lionel Cohen, Frank Hendrickson, Allan Jones, JoAnne Mansell, and Ivan Rosenberg who were all members of the original NTF staff. That NTF has been a total Fermilab effort was made clear by the number of divisions and sections represented at the picnic: from the Directorate through Business Services, the Controls Group, Safety, E/E Support, Mechanical Support, the Switchyard, the Linac, Lab Services, the Medical Office, and DOE, as well as the Lab hack drivers who pick up patients from train stations and local lodgings or hospitals.

Two of NTF's volunteers and their wives were in attendance: Mr. and Mrs. John Benson, and Mr. and Mrs. David Taylor. Over the years, these people have helped house, transport, and feed out-of-state patients.

In its 10 years of operation NTF has treated 1800 patients referred by physicians from all over the U.S. NTF, which is now operated by the Midwest Institute for Neutron Therapy, is at present treating 15 patients (20% from out of state) three times per week each

One former patient from 1976 couldn't attend the celebration. He sent his regrets, but added that he was delighted to be attending his daughter's wedding that weekend, thanks in no small measure to the people of Fermilab and NTF.

Strate2ic Moves

Effective September 1, Director **Leon Lederman** has appointed **Daniel Green** Head of the Physics Department in the Research Division, replacing **Thomas Kirk** who will be devoting more time to his experiment, E-665, during the upcoming fixed-target physics run. **Charles N. Brown** assumes Dan's former role as Physics Department Deputy Head.

Also effective September 1, **Ken Stanfield**, Head of the Research Division, made the following appointments: **Rick Coleman**, formerly Deputy Head of the Research Division Facilities Support Department, was named Meson Area Coordinator in the Experimental Areas, replacing Chuck Brown. **C. Thornton Murphy** was named Head of the Cryogenics Department, replacing **Rich Smith** who will be joining the Accelerator Division's activities at DØ.

Beginning October 1, **Francis Cole** will succeed **Roger Thompson** as Head of the Technical Information Section in the Laboratory Services Division. Frank will be sharing time between his new responsibilities and the Proton Synchrotron Medical Accelerator project.

Eugene Fisk has replaced **Peter Koehler** as co-leader (with **Paul Grannis**) of the DO experiment and as Head of the Experimental Support Department.

Fermilab Lecture Series Presents:

The Lives of A Cell, Lewis Thomas's award-winning book, catapulted him to national prominence. However, it was only a mid-career milestone for a man renowned as a practicing physician, medical researcher and teacher, and head of the Memorial Sloan-Kettering Cancer Center. Dr. Thomas brings this wealth of experience along with his unique insight to his lecture, "Pleasure: A Free Gift From Neurobiology" which can be heard in Ramsey Auditorium on Friday, October 10, 1986, at 8:00 p.m.



Dr. Lewis Thomas

Thomas's lecture topic is "pleasure," he will describe 30 years of research which has followed the discovery of the "pleasure center" in the rat brain. This topic will, however, be only the starting point, Thomas said that he will discuss not only "What...it may mean, (but also) related subjects on my mind." This is your invitation to a fascinating evening with one of America's most expansive minds, a perceptive critic of today's social and medical world.

Thomas is President Emeritus of the Memorial Sloan-Kettering Cancer Center. He has served on the faculties of five prestigious schools of medicine, published over 200 scientific papers and received 20 honorary degrees in four countries. Thomas's accomplishments include an impressive list of academic and hospital appointments, advisory activities on many government and editorial boards, and awards including those for two of his books, *The Lives of A Cell* and *The Medussa and The Snail*.

Admission to Thomas's lecture is \$2.00, \$1.00 for senior citizens, and tickets are available at the Information Desk in the Atrium of Wilson Hall, ext . 3353 between 10:00 a.m. and noon, or 1:00 p.m. to 4:00 p.m. Phone reservations are held for five days awaiting payment. Due to ticket demand, those reservations not paid for within five working days are released for sale.

- Frank Cole

Percentage of men who say they are happier since their divorce or separation: 58

Percentage of women who say this: 85 - from *Harper's Index*

Benefits Note:

Tax Reform Legislation Could Include Sweeping Changes to Retirement Plans

If the agreement recently reported out of the House-Senate Conference Committee on tax reform becomes law as expected, there will be significant changes in retirement and tax-deferred plans. Although the full impact of the agreement cannot be known until it is available and has been studied extensively, a brief outline of provisions affecting retirement and Supplemental Retirement Accounts follows:

"Elective employee contributions" to a TIAA-CREF SRA will be limited to the greater of \$9500 or the limit that applies to "401(K) plans." The 401(K) limit will be \$7000 but will be indexed to inflation. Thus, when the 401(K) limit reaches \$9500 the TIAA-CREF SRA limit will be indexed to inflation. The other SRA's: T. Rowe Price, Dreyfus, and Fidelity (403[B] [7] plans) will probably have the same limit as TIAA-CREF SRA. To date information has been sparse regarding 403 (B) (7) plans.

Effective January 1, 1987, TIAA-CREF SRA withdrawals will be subject to the same limitations as Dreyfus, T. Rowe Price, and Fidelity. Withdrawals will be prohibited unless the employee is age 59-1/2, encounters financial hardship, terminates employment, becomes disabled, or dies. TIAA-CREF is attempting to obtain information on the effective date to confirm that accumulations made prior to January 1, 1987, will not be subject to the restrictions.

A 10% additional tax will apply to withdrawals from TIAA-CREF SRA. (Assume this also will apply to Dreyfus, T. Rowe Price, and Fidelity.) The 10% additional tax will apply whether the withdrawal is made from an accumulation resulting from contributions made before January 1, 1987, or from an accumulation resulting from contributions made after that date. No additional tax will apply to the withdrawal if the employee: is at least 59-1/2; is age 55 and retires early; terminates employment and receives a lifetime annuity; has medical expenses to the extent that they exceed the tax-deductible limit; terminates employment in 1986 and receives the benefit before March 15, 1987, (and the benefit is taxable for the 1986 tax year); dies; or becomes disabled.

"Nondiscrimination" rules regarding plan participation and coverage will apply to all non-qualified plans such as TIAA-CREF. Plans will have to comply with these rules beginning January 11, 1989. The conference agreement would also impose new nondiscrimination rules on group insurance plans. The new rules will include tests for both eligibility and comparability of benefits.

In addition, TIAA-CREF will continue to be tax exempt in regard to its pension business. TIAA's insurance business will, however, be subject to taxation.

This is only a brief outline of the proposed tax bill. By the time of this publication the bill may be law. TIAA-CREF and the SRA custodians will be notifying participants of the *final* outcome. IRAs (Individual Retirement Accounts) also will be affected by the proposed legislation. Information regarding the impact on IRAs can be found in national newspapers and financial publications.

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Fidelity Supplemental Retirement Account (SRA)

Investment results for the period ending June 30, 1986, are available from the Employee Benefits Office. For a copy, call or write the Employee Benefits Office at ext. 3395 or 4361, MS 124.

- Paula Cashin

Unsightly Butts Pose a Threat to Quality of Life at Lab

No butts about it, the cigarette-butt situation around the Lab, and particularly in Wilson Hall, is becoming a burning issue.

In spite of a proliferation of receptacles, cigarette remnants litter the site like deceased mayflies after a hard frost.

"We have this beautiful building," said Director Leon Lederman, speaking of Wilson Hall, "and when you come up the front stairs you see cigarette butts on the ground. We've put sand-filled boxes everywhere, trying to accommodate smokers, and we still have a problem. People are either bad shots, or they're just not bothering to use the containers. Maybe the solution is to ban smoking; or else give free-throw clinics."

The rights of smokers versus non-smokers (and vice versus versa) and the attendant questions of second-hand smoke and self-determination, are not at issue here, at least not yet. But matters such as safety regulations, maintaining the Lab's aesthetic qualities, and the cost considerations of cleaning up after the careless are beginning to come into play as the situation worsens. Those with the habit are well advised to make a habit of putting it where it belongs when they put it out.

NALREC Sets Sail on Moonlight Cruise

The paddle boat *Belle Star* will cruise the Fox River on September 21, 1986, from 7:30 p.m. to 10:00 p.m., and NALREC has reserved a place for you.

A per-person charge of \$13.00 includes hot barbecue beef sandwiches (all you can eat), chips, pickles, cole slaw, ice cream, coffee, lemonade, and your favorite cold drink. Live music will waft across the shimmering Fox, and cruisers are encouraged to bring their favorite tapes for broadcast during the band's intermissions. Tickets are sold in advance only; see your local NALREC representative Mary at the Machine Shop, ext. 3711; E.T. at the Users Center (ext. 4562); or Peggy in the Tech. Center, ext. 4883.

Chez Leon Menu

Lunch on Wednesday, September 24, 1986, will be bouillabaisse with garlic bread, fresh green salad with roquefort and vinaigrette, and lemon cake roll.

Dinner on Thursday, September 25, 1986, will be scalloped oysters, roast duck with cranberry and kumquats, wild rice, Waldorf salad, and pumpkin pecan pie.

Lunch on Wednesday, October 1, 1986, will be cheese fondue, mixed salad, profiteroles with marzipan and chocolate sauce.

For reservations, call ext. 3111.

Extracurricular Activities

Tennis², Anyone?

The first round of a tennis doubles league will be starting in October. Matches are played on Sunday evenings in the Fermilab Recreation Complex. Players must be of at least "intermediate" level skill, and have some prior tennis doubles experience. Recreation Complex membership is a prerequisite to participation.

If you are interested in joining the league, please call Linda Even at ext. 4847.

Okay, How About Racquetball?

The Fermilab Racquetball League is looking for interested players. League play begins Monday, September 29, 1986, at Country Courts in Geneva. For info, contact Tony Anello, ext. 3254, MS 347, by September 22. Written correspondence should include your Lab extension, mail station, and approximate skill level (A,B,C, or D).

And Later, Some Barn Dancing

The Fermilab Folk Club, in cooperation with the Fox Valley Folklore Society, resumes its round of barn dances at Kuhn Barn in the Village. "Great old-timey music and the calling and teaching of the Chicago Barn Dance Co." are featured on the second Sunday of each month. The traditional square and contradances, and clogging begin at 7:00 p.m. No experience is necessary; each dance is walked-through before action commences. Light refreshments are served, and the entire family is welcome. Admission is \$3.00 for adults, \$1.50 for children.

Or, Perhaps, Take in a Movie

On Friday, September 26, 1986, the Fermilab Film Society will present *Picnic at Hanging Rock*, a "haunting, mysterious, and metaphorically rich tale about the disappearance of three young girls. A memorable, beautifully photographed film" directed by Peter Weir, best known for his recent film, *Witness*. Showtime is 8:00 p.m. at the Ramsey Auditorium. Admission is \$2.00 for adults, \$.50 for children; tickets are sold at the door.

Congratulations To:

Susan and Tom (*AD/Cryo. Systems*) Peterson on the birth of Karin Marie on August 25, 1986, at Delnor Hospital. Karin weighed 6 lbs., 4 oz., and was 18 in. long. Big brother Eric welcomed Karin home.

Help Beautify Fermilab

Posting notices of workshops, seminars, meetings, demonstrations, etc., by the Wilson Hall elevators is one way of getting your message across; running those notices in *FermiNews* is arguably less unsightly and definitely more effective: the elevators don't run in the Village, for instance. Send pertinent (or even impertinent) information to *FermiNews*, MS 107. Please allow three weeks lead-time.

Credit Checks

Q: *What precautions should I take to insure that, in the event of my death or incapacitation, money in my C.U. account(s) automatically becomes a part of my estate?*

A: There are two different issues which need to be addressed in this question. First, in the event of your death, the funds on deposit in your Credit Union accounts *do* automatically become part of your estate. There are several ways you can determine the distribution of those funds: 1) Your accounts can be set up as "Totten Trusts" whereby you name beneficiaries and their proportional interests; 2) a joint owner can be named who has the right to make deposits and withdrawals; and 3) you can determine the disposition of your accounts through your will.

The second issue centers on who can handle your Credit Union accounts in the event of your incapacitation. The answer to this question is fairly straightforward. The joint owner of your accounts is the only one who can handle transactions for you in the event you are disabled or incapacitated, unless otherwise ordered by the courts, or if proof of assigned power of attorney is furnished.

Q: *How does the Buying Service work when an automobile is the item being purchased?*

A: United Buying Service publishes an annual book that lists all domestic cars alphabetically. This book provides the base price of each car in addition to the wholesale and retail costs of all options. The book is kept in the Credit Union office and is available to our members from 8:00 a.m. until 5:00 p.m. during the week.

Once you have determined which car you want to purchase, call United Buying Service (312-778-5000). They will send to your home address a certificate that lists the participating car dealer in your area. United Buying Service guarantees the price of the car to be as follows: Chicago factory price + \$150.00 = base price

additional options @ retail cost = options
total cost

- Linda Irving

Percentage of jeeps sold in 1984 that were bought by people living in urban or suburban areas: **59**

Number of the three best-selling automobiles in 1985 that were pickup trucks: **2**

Number of stretch limousines sold in 1980: **2000**

In 1985: **6500**

Percentage of land in the average American city taken up by roads and parking spaces: **40**

- from *Harper's Index*

FermiNews is published by the Fermilab Technical Publications Office, P.O. Box 500, Batavia, IL, 60510 (312) 840-3278
Editors: R. Fenner, S. Winchester
Photography: Fermilab Photo Unit
Fermilab is operated by the Universities Research Association, Inc., under contract with the United States Department of Energy.