

## Research Division Upgrades Information Management System for Operations Group

By Jack Schmidt

Fermilab is currently exploiting both upgraded and new fixed-target beamlines and detectors designed for 1-TeV operation. This includes the world's highest energy photon, muon, pion, and polarized proton beams. In total, the present fixed-target physics run involves 14 high-energy particle beamlines and 16 experiments. But this proliferation of beams, experiments, and experimental users has presented a formidable problem in operating and servicing the beamlines and attending to the needs of the users. This is the responsibility of the Research Division Operators group at Fermilab. The Operations Group monitors cooling systems, enclosure interlocks, safety systems, both radiation and conventional, power supplies, instrumentation, and control systems, as well as tune the primary (and sometimes secondary) beams to all experimental areas. Needless to say, tremendous amounts of data are transmitted and received through the Central Operations Center each second.

In the past, the Operations Group used a handwritten logbook to record all problems and pertinent information. As the transport system expanded and became more complicated, this method proved to be cumbersome and inefficient. Information was easily lost, and it was time consuming to research problems that were more than a few hours old. It became apparent that a computerized Information Management System was needed.

The idea was to develop a system tailored to Operations' needs encompassing the crew chief's logbook and other beamline documentation. Three operators, Jack Schmidt, Roger Zimmermann, and Mike Vraniak, were assigned to the project. Their first objective was to set about listing the requirements for such a system. The list included the ability to make daily log entries, display current memos, update phone numbers and lists, capability of searching through past log entries for problem tracking, easily definable keys to accommodate growth, accessibility from the central computer cluster, and auto-

matic hardcopy generation of logged entries at end of shift. After researching various methods of implementing this system, such as commercially available database software, FERMILAB-developed software, etc., it was determined that customized software was required.

After exploring the different programming languages and hardware available, the operators decided to write the "electronic" logbook in TPU, a programmable editor provided by DEC, and to run the logbook on a MicroVAX II. Special features of the system include: experimenters and supervisors can examine current shift entries, quick access to pertinent memos and lists, multiple windowing to allow the operator to examine memos while making log entries, and the ability to examine previous shift records.

Although the idea of a logbook being written in an editor met with some initial skepticism, the electronic logbook has proven to be very reliable. The software was implemented during the 1987 fixed-target run with great success, and additional software will be available for use by experimenters during the 1988 fixed-target run.

### Coming to Ramsey Auditorium

January 15:

Lecture: "Hole in the Sky" by Susan Solomon

January 30:

Chamber music: The Parley of Instruments

February 27:

Musical theater: *Purlie*

For information on these and other upcoming events, call ext. ARTS (2787) weekdays between 10:00 a.m. and 11:30 a.m. or 12:30 p.m. to 4:00 p.m.

## Fermilab Arts Series Hosts Evening of "Dixieland and All that Jazz"



*Jimmy McPartland*



*Marian McPartland*



*Bud Freeman*

From classical piano and violin studies to the "First Lady of Jazz" and "a legendary jazz cornetist": that's Marian and Jimmy McPartland! These two vital forces in the history of American Jazz, along with their colleague and friend, saxophonist Bud Freeman, team up for a landmark evening of "Dixieland and All That Jazz" on Saturday, December 5, 1987, at 8:00 p.m. in Ramsey Auditorium.

Marian McPartland's virtuoso performances at the piano and her personal style of jazz have won her

acclaim, a large, enthusiastic following, and an international reputation as one of the most important figures in jazz today. She met Jimmy touring Europe with a USO troupe during World War II, and when they returned to the United States, she began playing with such greats as Benny Goodman, Oscar Peterson, Duke Ellington, and Jimmy's Chicago Dixieland Band. Through her Peabody Award-winning radio program, "Marian McPartland's Piano Jazz," she has explored the art of jazz piano and performed with legendary jazz artists of this era.

Jimmy McPartland is the originator of the Chicago variant of Dixieland which evolved in the middle twenties through those musicians who are remembered as "the Austin High School Gang," just a gang of guys who originally played violin, but couldn't resist the lure of jazz. They taught themselves cornet, saxophone, trombone, drums, and piano, practiced the music of the New Orleans Rhythm Kings and Bix Beiderbecke and the Wolverines, which they learned from phonograph records, and made history. Jimmy McPartland and Bud Freeman are now the only two surviving members of the Austin High School Gang.

Experience this unique evening of jazz by calling ext. ARTS (2787) weekdays between 10:00 a.m. and 11:30 a.m. or 12:30 p.m. and 4:00 p.m. for tickets. Admission is \$9.00.

- Tammey Kikta



## Wellness Works: Great American Smokeout Lights Up

Thursday, November 19, 1987, is the day for quitters. That's when the American Cancer Society will sponsor its 11th annual Great American Smokeout, a nationwide "holiday" from smoking. The Smokeout is meant to be a good-natured effort to encourage smokers to give up cigarettes, cigars, and pipes for 24 hours.



The Lab's Wellness Works Committee, like many other employers around the country, is joining forces with the American Cancer Society's Great American Smokeout. The committee is setting up an information table in the Wilson Hall Atrium lobby to provide support to those employees who plan on quitting for 24 hours. Free materials (stickers, pins, quitting tips, etc.) provided by the American Cancer Society will be available at the table between 7:00 a.m. and 1:30 p.m., Thursday, November 19, 1987.

A pack of sugarless gum will be given to every quitter who participates in the Adopt-a-Smoker program. Non-smokers are encouraged to adopt a smoker for the day. Non-smokers are to be especially kind to smokers who are trying to quit. Don't nag or threaten! Provide your adoptee with a survival kit of low-calorie nibbles. Offer praise and encouragement. If you decide to quit for the day, complete the adoption paper attached to the Classified Ad\$ and return it to the Wellness Works Committee table the morning of the 19th. We would like to know how many give it a try.

Watch for posters around the Lab announcing the Great American Smokeout with tips on how to quit. Don't go it alone! Quitting smoking is easier when you have someone to do it with. Circle November 19th on your calendar and join millions of quitters. Show yourself you can do it for the day!

## In the Library

Orientations to the Library's collection and services are offered to the Fermilab public. Find out about access to the preprint collection, computer searches, and bring in your particular research questions.

Call Paula Garrett at ext. 3401 or LIBRARY on the VAX to schedule an orientation. Individuals and groups are welcome.

## Benefits Notes

*The following is the text of a letter mailed to Benefit Plan Administrators from Clifton R. Wharton, Jr., Chairman and Chief Executive Officer of TIAA-CREF, regarding the recent dramatic stock market decline and its impact on CREF participants.*

- Paula Cashin

Commenting on the unprecedented actions of the stock market is almost as risky as predicting tomorrow's closing averages on the New York, Tokyo, London, or Hong Kong markets. No one truly knows the short- or long-term implications, and only time will give us the answers.

Nevertheless, because of the extremely important role that CREF plays in your institution's retirement planning and in the lives of your participating employees, I thought it would be useful to give you our views on the repercussions as far as CREF is concerned.

The first essential is to keep the specific CREF situation in perspective. Despite the dramatic fluctuations in the stock market, to which, of course, CREF is inexorably tied, the decline in CREF accumulation unit value since October 19, while significant, has *not* been disastrous. Indeed, the net effect as of [October 29, 1987] has been to return the unit value to just above where it began the year (CREF Stock Accumulation Unit Value 10/29/87: \$30.52 [est.], year-end unit value 1986: \$29.75).

This is not to minimize the extent of the decline in unit value, but rather to put it in proper context. I should point out that for the five-year period ending September 30, the average CREF compound annual net total investment return was 27.9 percent. Therefore, while the current decline is of concern, its effect should not be so serious for the longer-term CREF participant who has benefited from the substantial gains of recent years. **continued on page 4**

## Friday the 13th - Part I: Jason Drives the Baseline for an Easy Two

On Friday, November 13, 1987, at 5:30 p.m. in the Fermilab gym, there will be a volleyball game between the local theorists and experimentalists to determine the championship of the known Universe and parts of Warrenville. Fermilab Director Leon Lederman announced he would sponsor the championship and award a lavish and expensive "Director's Cup" to the winner. In addition to the Director's Cup, the winner of the game will receive complete control of all the dark matter in the Universe.

The Theory team is co-captained by Bill Bardeen and Rocky Kolb. Kolb predicts victory for the theorists. He says he holds no grudge against the experimentalists, although occasionally the experimental program interferes with the smooth operation of the Astrotheory Group. Several theorists were reportedly upset that experimentalists clutter the lunch room during noon. "At least they should get up and offer their chair to a theorist" one postdoc reflected.

The experimental team is captained by Physics Department Head Dan Green. The team is made up of Fermilab experimentalists (staff members or postdocs) who hold Ph.D. degrees from either respectable universities or Columbia.

The game is seen as a way to increase contact between the theorists and the experimentalists. One postdoc in theory said, "I have never met an experimentalist. I understand there is some sort of accelerator nearby, and they hang around that sort of thing."

The umpire crew will be people who are fair, impartial, and capable of making reasonable decisions. [The crew is not expected to include anyone with the title Head of Fermilab Theoretical Astrophysics Group - Ed.] - submitted anonymously by the Head of Theoretical Astrophysics, ext. 4695.



### Activities Office.

#### Basketball League

The Fermilab basketball season opens on November 21, 1987. There will be a 10-game regular season and a five-game playoff series. The league plays on Thursday evenings at 5:30 p.m. and 6:30 p.m. There are still openings for individuals or teams interested in playing basketball. Call Jean on ext. 3126. Gym membership is required.

- Jean Guyer

### Congratulations to:



### "Benefits Notes" continued from page 3

Two additional factors should be considered in assessing the impact of the stock market decline. First, only a very small percentage of participants have their entire accumulations in CREF. The vast majority divide their premiums between TIAA and CREF or put them in TIAA alone, thereby moderating the impact of any short-run decline in the CREF unit value.

Secondly, retired employees receiving CREF annuities are *not* affected *at all* in their current income from this source. As you know, the CREF annuity unit value of \$82.86 (itself a 23% gain over the previous year and 171% over five years), became effective May 1 for the next 12 months. The new annuity value will not be set for another six months, and only then can the effect of "Black Monday" and any subsequent events be put into the equation.

Perhaps the over-riding principle of which we must remind ourselves is the long-term nature of CREF investment strategy, rather than short-term gains or losses. Fluctuations are a certainty when investing in common stocks and are to be expected, but we remain optimistic about the long-term outlook for common stock investments.

We know your employees, too, are very concerned about the situation, and we encourage you to share the information in this letter with them.

New uses for Velcro suggested each week by the public to Velcro USA: 4

Public revenues generated by marriage license fees in New York City in 1985: \$806,090 By divorce fees: \$3,637,095

*FermiNews* is published by the Fermilab Publications Office, P.O. Box 500, Batavia, IL, 60510 (312) 840-3278  
 Editor: R. Fenner Editorial Assist.: C. Kania  
 Fermilab is operated by Universities Research Association, Inc., under contract with the United States Department of Energy.

## **FermiNews - Cla\$\$ified Ad\$**

11/6/87

### **FOR SALE:**

#### **Motorized Vehicles**

1974 PLYMOUTH SATELLITE. Good running car, great winter car: \$400 or best offer. Tom, ext. 4982 or 4569, or (home) 584-8001.

1976 VW RABBIT. Rusty but sound mechanically: \$500. Call Mark, ext. 4776 or (312) 695-3263.

1978 BUICK LESABRE. Excellent condition: \$950. Call L. Teng, ext. 3805.

1980 FORD GRANADA. Burgundy, 6-cyl., auto., P.S., P.B., 4-door: \$600 or best offer. Call Tim at 961-1931.

1980 TRIUMPH TR-7. Convertible, 43,000 miles, 5-spd., A/C, new Goodyear Eagle ST tires, new ANSA exhaust, new clutch and brakes, fiberglass winter hardtop, car cover, bra, recent custom paint 1985 Corvette blue. A real sharp car: \$4,000 or best offer. Call Linda Alsip, ext. 4190.

1982 CADILLAC CIMARRON. Sporty, garage kept. Stick shift, power steering, power brakes, A/C, AM/FM/cassette stereo, 42,000 miles, excellent condition: \$3,800. 892-4676 evenings.

1983 CHEVY S-10 PICKUP. 4-wheel drive, 4-cyl., 4-spd., P/S, P/B, long bed, black & silver, 15-in. wheels: \$4,800. Call Wayne Smith, ext. 3132 or 892-2887 after 5:00 p.m.

1984 JAYCO 32-FT TRAILER w/ 1984 FORD 6.8-litre DIESEL SUPER CAB TRUCK. Both top of the line, includes awning, AM/FM/ stereo, shower, toilet, stove, refrigerator, generator, air conditioning, TV antenna, elect. brakes. Sleeps 6 easy. Also, bucket seats, P/S, P/B, tilt, cruise, AM/FM 1500# trailer used twice and truck rack for hauling boat also available: \$28,000 for truck and trailer. Must sell. (312) 554-1901 after 5:00 p.m.

#### **Miscellaneous**

LEFT FRONT FENDER for 1967 Chevy. Full size: \$50.00. POWER STEERING COMPLETE for 1967 Chevy: \$40. Call Wayne Smith, ext. 3132 or 892-2887 after 5:00 p.m.

G.E. ELECTRIC STOVE. Beige, good condition: \$125. OVAL TABLE w/leaf and four chairs: \$45.00 Call Jean, ext. 3126.

CAST IRON STOVE. Round, antique, made in 1863, very ornate, good condition, use for heating or display: \$200 or best offer. MAGIC-HEAT HEAT EXCHANGER. For use w/wood or coal; fuel-oil burners, good condition: \$50 or best offer. Call Ernie, ext. 3626 or (815) 896-6823.

WATERBED. Queen size, w/padded rails. Also water heater & drain/fill hose. Asking \$110 or best offer for all. Call Ron at ext. 4070.

**Continued on reverse**

SOFA: \$50. QUEEN-SIZE BED, custom made (in two sections): \$50. Rattan love seat. Call Dave Iversen, ext. 4538.

BABY BUGGY. Good condition. Converts to stroller when junior gets a little older: \$40. Call Ralph at ext. 4724 or Jan at 879-2452.

HAMMOND SPINET ORGAN. W/built-in tape recorder. Walnut cabinet, excellent condition. Call Betty at ext. 3833 or (312) 888-2052.

CROSS-COUNTRY SKIS. Step, waxless, 210mm: \$40. CROSS-COUNTRY SKI BOOTS. Hauge, size 44: \$15. ICE SKATES. Baver, men's hockey, size 8: \$16. ICE SKATES. Baver, men's hockey, size 11: \$20. HOCKEY SHIN GUARDS. Men's, 2 sets: \$10 ea. HOCKEY GLOVES. Two sets: \$5 & \$10 ea. Call Ralph at ext. 4896.

BOY'S ROLLER RINK SKATES. Size 7, like new: \$15 or best offer. Call Marge, ext. 3800.

STEEL WHEELS FOR VW RABBIT: \$10 per pair. SEARS 12-in. B&W TV: \$10. MAGIC CHEF MICROWAVE OVEN: \$50. Call Ken Sievert, ext. 4050.

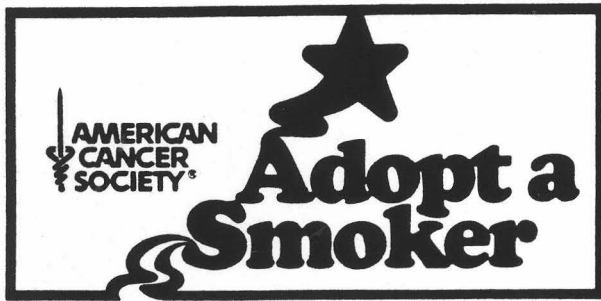
SEARS ROAD HANDLER RADIAL SNOW TIRES. 155/80 R13 (for Chevette, etc.) Used one season: \$20/pr. Call Charles Bonham, Sr., 896-2314.

21-FT. AIRSTREAM TRAVEL TRAILER. Sleeps four. Furnace, oven, range w/vent fan, refrigerator, toilet, shower. Storage and closet space. All-aluminum leakproof exterior. Excellent condition: \$3700 firm. Call Gerry at ext. 3930 or (312) 365-2961.

TWO SNOW TIRES. G-70-15 radial. About 2/3 tread remaining. On new 5-lug Ford rims, fits vans, pickups, etc.: \$40 (\$30 without rims). Call Dean Validis, ext. 3700 or (312) 279-7056.

CHINCHILLAS. Charcoal, buff, silver, & brown velvet colors available. Just a few left, will take orders: \$25 to \$35. Call Tom, ext. 3611 Monday-Friday, 8:00 a.m. to 4:30 p.m. or 879-1123 after 5:00 p.m.

SMALL BABY-GRAND PIANO. 4 ft, 9 in., good tone, good condition: \$1500. Call Sandra, ext. 3962.



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## Adoption Papers

I, \_\_\_\_\_, as a nonsmoker, will take it upon myself to help \_\_\_\_\_ on the path to smokelessness. For my part I will provide you with constant encouragement, fruit and peanuts if need be, and a shoulder to cry on.

It will be expected that \_\_\_\_\_ will assist me by adhering to the following suggestions:

1. Hide cigarettes, ashtrays, lighters and matches.
2. Tell all your friends that you have been adopted and will not smoke on the day of the Great American Smokeout (GAS), the third Thursday in November.
3. Call on your foster nonsmoker (me!) in times of weakness.
4. Refrain from frequenting smoke filled rooms.
5. Repeat to yourself over and over "not smoking is a GAS."

I, \_\_\_\_\_, the foster nonsmoker will try to cajole the aforementioned smoker to continue on the road to smokelessness following the Great American Smokeout, but this formal arrangement will conclude 24 hours after it began.

Signed: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
(nonsmoker) (temporary smoker)