March 31, 1983 Fermi National Accelerator Laboratory



MINI'S MAXIMIZE ALARM REPORTING SYSTEM



Members of the Fire Information Reporting and Utility System (FIRUS) group responsible for maintenance, upgrade, and expansion of the system are (back row, left to right) Rich Mahler, Al Franck, Steve Morris; (front row) Eileen Hann and Joe Flores.

by Al Franck

Last year a series of meetings were held on improving the Wilson Hall fire reporting equipment. The equipment which is presently in service has been made obsolete by the manufacturer, making it difficult and expensive to maintain. After several proposals were evalutated by Safety, the Fire Department, Plant Maintenance, DOE, and the Controls Group, a solution was agreed upon which satisfied the criteria of safety, reliability, and cost.

It was decided to retrofit each of the existing 33 Honeywell equipment enclosures (one on each tower floor, and one in the auditorium) with a specially designed door having visual indicators for power supply status, polling strobe, and 16 point alarm status. Attached to the back side would be all the electronic hardware used in a FIRUS Mini.

The Mini is the basic building block used in the sitewide FIRUS monitoring system. The Mini is not only a reliable replacement for the existing equipment but provides convenient expansion capability to include additional safety devices.

Another advantage of this replacement approach is cost effectiveness. The new Mini units will utilize existing conduit and wiring. No major electrical modifications are necessary to the existing detector networks for implementation.

Devices monitored by the equipment are smoke detectors located in the air ducts, squibbs (air duct flaps closed by smoke detectors), manual pull boxes, and sprinkler flow switches. With installation of the FIRUS equipment, these devices will be polled for status approximately once a second by the FIRUS computer. Within 5 seconds of a device alarm, a message will be printed in the Communication Center describing the type and location of the The Honeywell system presently in use provides the same information but requires approximately 30 seconds to report a message, and each successive message.

Installation and check-out will be complete by September. With the addition of the Wilson Hall equipment, the FIRUS system will monitor over 130 Mini's throughout the Fermilab site.

AREA EMERGENCY SUPERVISORS COORDINATE PLANS

by Rudy Dorner

Every Spring we hear the warning "Tornado season is here. Be sure to know the proper emergency procedures." We hear it so often and so regularly that we forget to consider just how and who develops these emergency procedures. In our home towns this important work is carried out by the local Emergency Services and Disaster Agency (or ESDA as they are commonly known). At Fermilab, tornado safety plans and other emergency preparedness activities are a joint effort between the Emergency Service Department and a group of employee/volunteers, the Area Emergency Supervisors (AES).

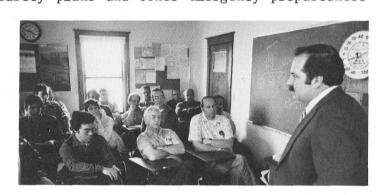
Each major facility or organizational unit at Fermilab has one or more AES's. They are appointed by the Division and Section Heads based upon their knowledge of local administrative and technical conditions and their proven ability to organize group efforts of various types.

After appointment, the AES undergoes a series of familiarization and training courses to acquaint him/her with both the site-wide and local emergency plans and procedures. Some are established by the professional emergency response groups such as the Fire Department, Security, Safety Section, or Emergency Services. Other courses are organized within the local group by the Senior Safety Officers and their staffs. A good example of such a locally sponsored program is the recently completed AES Training Course run by the Technical Support Section.

Organized by Art Streccius, TS Safety, the six-session, three-day course drew upon various disciplines throughout the Laboratory to train over 35 TS section AES's and alternate AES's. The subjects covered ran from fire extinguisher theory and use to emergency planning and response.

Evacuation of employees, personnel accountability, facility shutdown, safe reentry, start-up, accident evaluation, and post-emergency critique are all part of the AES's responsibilities as outlined in the Fermilab Emergency Plan. The extra effort and time involved in their additional assignment as AES's are what eventually allows the Laboratory to respond to and recover from the many emergency situations which inevitably occur.

To find out who your AES is, call your Division/Section Office or Emergency Services, ext. 3494.



-Rudy Dorner discusses emergency procedures with an Area Emergency Supervisors Class from the Technical Support Section.

DRILLS PREPARE FOR FAST RESCUE by Ralph Kramp

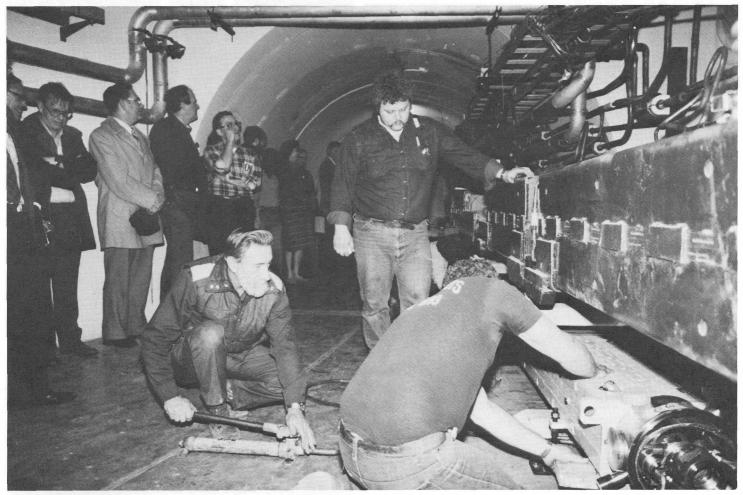
Installation and testing of the cryogenic magnets is progressing rapidly. The system is carefully engineered and contains many safety factors to protect both the system and workers. Murphy's Law, however, dictates that mishaps can occur.

An accidental rupture of the system could release quantities of nitrogen and helium in the tunnel. Oxygen deficiency and temperature drop are two troublesome features that have to be dealt with in such an accident. A vapor cloud may also form restricting visibility in the tunnel. Technicians always work in pairs to assist each other in such an event. Escape oxygen masks are carried, but in an injury situation, walking away from the accident location may not be possible. A rescue attempt would then have to be made by the fire department and accelerator personnel.

Howard Casebolt, Senior Safety Officer for the accelerator, and Bob Mau, accelerator operations group leader, recognized this problem and the necessity for a variety of emergency drills to be held on all three work shifts of both the accelerator and the fire departments. These two groups must work in unison during a rescue situation.

(cont'd. on pg. 4)

SAVER SAVORS MAGNET INSTALLATION COMPLETION



R. DeKing with other Belding personnel, Ken Meisner (standing) and Wally Peterson (kneeling), fit the last quadrupole as Fermilab staff and well-wishers gather to view the installation of the last Saver magnet. Elsewhere, celebrants gathered in the Atrium to mark the occasion.

SCHWARTZ RATES RISKS AND SCRUTINIZES SAFETY

by Jane Green

Emotion, common sense, and values all play a role as we face our modern technological world. The presence of food additives, pesticides, toxic chemicals, and radiation cause us to ask, "How risky is risk? How safe is safe?" This is also the title of the next Fermilab Lecture Series program to be given by Professor Sorell L. Schwartz on Friday, April 29, at 8 p.m. in Ramsey Auditorium.

Professor Schwartz will discuss "risk assessment," the attempt to attach numbers to the various hazards around us. His discussion will center on the judgments which we, the non-experts, can and should make in the face of incomplete information and the confusions of numbers outside our daily experience. Dr. Schwartz is Professor of

Pharmacology at Georgetown University Medical Center. He and a number of his colleagues have been particularly active in helping the public understand risk issues and in emphasizing the response and responsibility of the individual citizen.

Admission to Professor Schwartz' lecture is \$2, \$1 for senior citizens. Tickets are now available at the Information Desk in the atrium of Wilson Hall. For further information or phone reservations, call ext. 3353. Phone reservations are held for five days, but due to ticket demand, those reservations not paid for within five working days will be released for sale.

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Key accelerator people were instructed by the fire department and approved by medical for use of Scott self-contained breathing equipment. This would enable them to accompany and to give technical information to the firemen during a rescue procedure.

Drills were designed to duplicate emergency incidents that might occur. Prior to drills, simulated victims were placed in the Main-Ring tunnel. These were to be searched out by the fire department, given emergency medical treatment and removed up the stairway at the nearest Main-Ring service building.

Excellent cooperation was experienced between the drill participants. Critiques were held immediately after each drill for the purpose of exchanging ideas and improving response to a real emergency. Because of experience gained in the drills, operational procedures will be revised for both the accelerator group and the fire department. These revisions will be coordinated so there will be no conflict of action during an emergency.

In an actual incident, success would also depend on several other people and groups. The emergency dispatch center must relay accurate information to the fire department. Security, safety, and radiation also have response duties at the scene. Most important is fast action and good communication from the accelerator operation and control room group.

We do not anticipate safety problems with the cryogenic magnet ring. However, we do feel well prepared to handle any unusual emergency situation that may occur.

1983 GOLF LEAGUE SIGN-UP

Employees interested in signing up for the Fermilab Golf League may do so in the lW conference room of Wilson Hall on Wednesday, April 6, at noon. For more information contact Gene Dentino, ext. 3838.

PROPERTY CHECKS SENSITIVE ITEMS

The Property Office is engaged in its required annual inventory of sensitive items. Please help by completing and returning your Sensitive Item Form to the Property Office.



TAX INFORMATION IN LIBRARY

A selection of IRS publications and forms is available in the Library along with the 1983 CCH Master Tax Guide.

STOCKROOM UPDATES CATALOGS

Due to the many changes in stockroom inventories, the old red three-ring binders labeled **Stores Catalog** are now obsolete. The binders can be returned to Gene Guyer's office, WH4W, or a stockroom. Departments needing copies of the new **Stores Catalog** should contact the Supply Office, WH4NE, or ext. 3808. Updated catalogs are also available for reference at the stockrooms.