

## October is Quality Month

By Mark Bodnarczuk

October is National Quality Month, and this year's theme is "Quality - The Competitive Advantage." In 1984, the American Society for Quality Control (ASQC) initiated the first national campaign designed to capture and direct the attention of business and industry to the strategic imperative of quality improvement. The intent of the campaign was to stimulate, support, and strengthen America's commitment to Quality. The campaign was launched with a Joint Resolution from Congress and a Proclamation by President Reagan naming October National Quality Month. In the proclamation, President Reagan stated that "...foreign competitors have gained ground by adopting a strategy first conceived and carried out in America - the relentless drive to offer high quality at affordable prices. National Quality Month offers a good occasion to rededicate ourselves to this winning strategy." Through focused activities implemented over the last four years, the campaign has sought to stimulate awareness of the importance of quality improvement as the best way to increase productivity and sustain long-term profitability.

Although Fermilab's goal of isolating the fundamental constituents of matter and the forces that interact between them is out of the mainstream concerns of the business world, the Director's Office is committed to assuring the quality of all that is done at the Laboratory. There are a number of ways to define "Quality Assurance" (QA) as is evident by the number of QA theoreticians and consultants in the marketplace today. One of the more notable of them, J. M. Juran, claims that quality means "fitness for use." He claims that all institutions (industrial companies, schools, hospitals, governments, and laboratories) are engaged in providing services to other human beings. The goods and services produced by these institutions must meet the needs of the individuals and corporate bodies that buy them. To the degree that a product or service fully meets the needs of the buyer, it is designated as "fit for use." To the degree that it is "fit for use," Juran claims it is a

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QUALITY

(kwōl'e-tē) n.

*A systematic approach to the search for excellence. (Synonyms: productivity, cost reduction, schedule performance, sales, customer satisfaction, teamwork, the bottom line.)*

## Illinois Sets Sights on SSC

Governor James Thompson and the State of Illinois observed the September 1 deadline for Superconducting Super Collider (SSC) siting proposals by delivering to the Department of Energy a plan calling for nearly \$570 million in "site improvements." Included in the state's bid are \$316 million earmarked for excavation of the 53-mile tunnel which will house the SSC.

According to Illinois planners, Fermilab would serve as a "warmup track" for the SSC at an estimated savings of \$400 million in construction costs and \$60 million per year in operating costs over other site bidders.

Thompson noted that, on scientific merits, Illinois "stands head and shoulders above every state."

Donald S. Perkins, former chairman of Jewel Cos., Inc., and head of the private group, SSC for Illinois, stated that, "If science, cost-consciousness, and equity prevail, an SSC will be built as an extension of Fermilab" and called the possible mothballing of the Lab "a terrible decision."

The final choice of an SSC site will be made in January 1989.

## The Acting Company Brings Five Tennessee Williams Plays to Lab

"Is there no mercy in the world anymore? What has become of compassion and understanding?" The voice of Tennessee Williams, one of America's most significant playwrights, searched for the answers to these questions throughout his notable career. His perceptions about life as it is, and his passion for life as it ought to be, are the themes that will be portrayed by the members of John Houseman's Acting Company when they present *Five by Tenn*, a retrospective of five short plays by Tennessee Williams, at Ramsey Auditorium on Saturday, September 26, 1987, at 8:00 p.m.

Like a painter's sketches for later great works, many of Tennessee Williams' early short plays foretell the masterpieces that would follow. Whether writing about taking leave of an apartment bearing memories of growing up as in *The Long Goodbye*, or of a southern belle unable to face the realities of her life as in *Portrait of a Madonna*, Williams portrays glimpses of life's humor, bravery, tragedy, and love in his one-act plays. The Acting Company's Artistic

Director, Michael Kahn, brings the sensitivity of close staging collaborations with Williams to his cast, leading them through a wide range of characters, switching ages, styles, physicalities, regions, and language throughout this retrospective.

Now in its fifteenth year, The Acting Company has crisscrossed the United States, "performing a repertory of classical and contemporary plays and delivering the highest quality productions throughout the country." Their performance at Fermilab is being supported in part by Arts Midwest's members and friends in partnership with the National Endowment for the Arts.

Admission to this fascinating evening of theater is \$12. For further information or phone reservations, call ext. 3353 weekdays between 10:00 a.m. and 11:30 a.m. or 12:30 p.m. and 4:00 p.m. Phone reservations are held for five days, but due to ticket demand, those not paid for within five days will be released for sale.

- **Tammy Kikta**

## Nancy Carrigan New Chairman of the Auditorium Committee

Nancy Carrigan, a six-year veteran of Fermilab's Auditorium Committee, has recently been appointed Chairman of this active committee which brings entertainment to Ramsey Auditorium.

Nancy brings a history of work and interest in the arts to this challenging position. As an artist active in the fields of visual art, dance, and video, her work has been exhibited at the Lill Street Gallery, the Moming Gallery, the Columbia College Dance Center, the Cultural Arts Center of the Chicago Public Library, and the Burpee Museum in Peoria. An individual show of her paintings, sculpture, and drawings was recently shown in the Gallery of the College of DuPage. Further reflections of Nancy's commitment to the active presentation of the arts is demonstrated by her service on the Boards of Directors for both the Chicago Repertory Dance Ensemble and the West Branch Affiliates of the Museum of Contemporary Art.

Nancy and her husband, Dick Carrigan, have been associated with Fermilab since its residency in Oak Brook in 1969. They watched the Batavia site become a reality, and Nancy was a founding member of NALWO.

Nancy succeeds seven-year chairman Jeff Appel, who has resigned from the committee to concentrate more heavily on experiments 769 and 691.

## The Film Society Presents:

*The Seventh Seal*, shown at 8:00 p.m. on Friday, September 11, 1987, is Ingmar Bergman's "allegory of the search for meaning in life. A knight, returning from the Crusades, plays a game of chess with Death."

*Koyaanisqatsi*, directed by Godfrey Regio, will be shown at 8:00 p.m. on Friday, September 25, 1987. The title is "a Hopi word meaning life out of balance. *Koyaanisqatsi* is a stunningly beautiful whirlwind guided tour of man's alienation from nature." The film's score is by Philip Glass.

Both films will be shown in Ramsey Auditorium. Admission at the door is \$2.00 for adults, \$.50 for children under 12.

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## **Benefits Notes**

### **Open Enrollment (Medical Plan Election)**

It is that time of year again when employees have an opportunity to choose which medical plan they want to provide their medical coverage.

This year we continue to offer the Connecticut General Plan, Anchor HMO, Dreyer HMO, HMO Illinois (HAP), Health Chicago, and Maxicare. In addition, CIGNA Health Access is being offered. This new health care option offers the benefits of an HMO combined with the flexibility of a traditional insurance plan. A summary and comparison of the medical options along with costs was mailed to employees' mail stations. Employees should review the information with their family.

The HMO representatives are scheduled to meet with employees in Ramsey Auditorium on Monday, September 14, 1987, at 2:00 p.m. and 4:00 p.m., and on Tuesday, September 15, 1987, at 8:00 a.m., 10:00 a.m., and 1:00 p.m. Employees considering an HMO should attend one of these meetings. Spouses are welcome.

Employees that elect a change in medical coverage must complete and submit the appropriate forms to the Benefits Office no later than September 25, 1987. - Paula Cashin

Average price of an artificial arm (operation included): **\$25,000** - from *Harper's Index*

### **URA Scholarships Require ACT Test**

Candidates for Universities Research Association (URA) scholarships are reminded that the scholarships are awarded on the basis of ACT (American College Testing) scores. Thus, high-school seniors are reminded to *sign up for a fall testing date* if they have not already taken the tests.

URA awards a number of scholarships to full-time employees' children who are currently high-school seniors and who will begin a four-year college degree program next fall. The maximum amount of the scholarship is \$3000 for tuition and fees and is renewable for four years if the student progresses in good academic standing.

Scholarship applications will be available after the first of the year and they are due March 1, 1988.

## **News from NALREC**

### **Cruise News**

NALREC has scheduled a Moonlight Cruise for Friday, September 18, 1987. You will board the paddle boat *Belle Star* in St. Charles and navigate to live music and prerecorded tapes (bring your own personal favorite). Dine on "all you can eat" barbecued beef sandwiches, chips, pickles, cole slaw, and ice cream, washed down with coffee, lemonade, or your favorite cold drink. Walk off your meal with a stroll on the upper deck and sing along with Roaring Twenties music. Cost is \$14.00 per person. The ship sails at 7:00 p.m. and returns at 9:00 p.m. Contact Gary Smith at ext. 3878 or Jesse Guerra at ext. 4305 for reservations.

### **First and Ten in the Motor City**

A deluxe motorcoach tour to Detroit for the Bears-Lions football game is scheduled for September 26-27, 1987. The fee, which ranges from \$119.00 per person to \$169.00 per person depending on occupancy, covers transportation, liquid refreshments en route, one night's deluxe hotel accommodations, a welcome-to-Detroit cocktail, Sunday morning breakfast buffet, transportation to Pontiac Silverdome, and the game ticket, all taxes included. Call Jesse Guerra, ext. 4305, for reservations.

### **Coming Soon:**

Arrangements are moving ahead for the NALREC "Day at the Races." We will probably be going to Maywood Park near the end of September. Please watch for more information in the next edition of *FermiNews*.

Another outing with plans not quite completed is our Road Rally. We intend to have the Rally sometime around Halloween and we are trying to bribe the Bruise Brothers to make a return engagement. Watch these pages for more info. - Trudy Kramer

**REMINDER:** 1987-1988 fiscal-year gym memberships may be purchased at the Activities Office, Wilson Hall 1E, only during the week of September 14-18, 1987. After that week, memberships must be purchased at the Recreation Office in the Recreation Building.

Chances that a bride or fiancée whose picture appeared in the Sunday *New York Times* in June wore pearls: **3 in 5** - from *Harper's Index*



## The Sports Item

The Sunday Night Doubles Tennis League will be moving indoors for the winter season. If you are at least of intermediate playing ability and enjoy doubles tennis, this may be a fun way to spend your Sunday evenings during the coming cold months. Gym membership is required. For more information, please call Linda Even at ext. 4847 between 12:00 noon and 1:00 p.m.

Summer tennis results, tournament and league, will be in the next *FermiNews*. - Linda Even

## Barnstormers Rally Aloft

The Fermilab Barnstormers will host the fourth annual Giant Scale Rally fun fly on Sunday, September 13, 1987. The event will be held at the Barnstormers' flying field, north of the Pioneer Cemetery. Some of the largest radio-controlled aircraft, flown by some of the most experienced people in the Midwest, will be featured. Pilot registration opens at 8:30 a.m., flying begins at 9:00 a.m. Spectators are welcome, refreshments will be served.

### "Quality" continued from page 1

"quality" item or service. Another notable quality theoretician named Phil Crosby claims that a product is a quality product when it "conforms to specifications." In other words, if you send a job to the machine shop and specify that the tolerances must be plus or minus an eighth of an inch and it comes back with a measurement of plus or minus one inch, the product does not conform to the specifications of the purchase order, and this non-conformance is defined as a lack of quality.

Although Fermilab has always been committed to producing the highest quality physics data with the best possible physics tools and support systems, within the last year a more formalized QA program has been instituted on a Lab-wide scale. The Director's Office has developed and issued a QA program to all Division and Section Heads which defines the position of the Laboratory on matters of QA and establishes the structure and standards by which work done at Fermilab should proceed. Each Division and Section then is responsible to establish a QA program that conforms to the specifications from the Director's Office and is specially tailored to the needs of that particular Division or Section. Dick Lundy has nominated a QA Officer for each Division and Section to serve on the Fermilab Quality Assurance Committee (QAC). The QAC oversees

the QA program for the entire Laboratory. The QA officers are Sam Baker (Safety Section), Don Beatty (Business Services), Mark Bodnarczuk, who is Chairman of the QAC and also represents the Research Division and Physics Section, John Crawford (Accelerator Division), Roger Dixon (Director's Office), Richard Fenner (Laboratory Services Section), Greg Kobliska (Technical Support), and Vic Kuchler (Construction Engineering).

A few of the initial goals of the QA program at Fermilab are to increase the awareness of all employees at the Laboratory about quality-related issues by encouraging them to reflect on how they do their jobs and ways to improve the quality of the work performed. Also, it is important to decrease the frequency of errors that cause a job to be done two or more times along with increased documentation about proper procedures for jobs. Quality and integrity in one's work along with doing the job right the first time are the responsibility of each individual at the Laboratory.

According to one of the foremost quality theoreticians in Japan today, Genichi Taguchi, the cost of poor quality is not just the monetary loss incurred by the factory producing a defective product (say toasters), but the total loss is defined as "the losses a product imparts to *the society* from the time a product is shipped." In other words, a single defective toaster imparts a loss to the entire society in which it is produced. Initially, this may sound ridiculous, but imagine how many man-hours in salaries, etc., are lost in designing, building, packaging, shipping, displaying, buying, then returning a toaster that doesn't work properly. The cumulative effect of this type of "value loss" is staggering when multiplied by the total number of defective products produced annually in a given country. In a similar way at Fermilab, when an employee receives defective parts from a vendor or has to do a job two or more times in order to get it right, each of these things, when multiplied by over 2000 employees, has a significant cumulative effect on the entire Laboratory. It is important to remember that what one person does really can affect the Laboratory. During Quality Month, each of us should try to reflect on the intent of the campaign, to stimulate, support, and strengthen Fermilab's commitment to quality in all that we do.

Paces at which a pickle's crunch should be audible, per the Pickle Packers International: 10 - Harper's