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# DUSAF CELEBRATES 6th ANNIVERSARY

NAL and DUSAF recently celebrated the sixth year of their contract for design and completion of conventional facilities for the National Accelerator Laboratory. It was an occasion for DUSAF to recognize the completion of many of its major projects. At the same time, DUSAF re-grouped its forces for one-year extension of portions of the contract, to July of 1974.

It was on January 1, 1968 that the joint venture received authority to proceed with design of these facilities for the National Accelerator Laboratory. Four firms have participated in the joint venture: Daniel, Mann, Johnson, and Mendenhall of Los Angeles; ... E. Parke Rohrer (standing) displays the office of Max O. Urbahn of New York City; Seelye, Stevenson, Value and Knecht, Inc., of New York City; and George A. Fuller Company, a Maryland Corporation, (hence, the acronym DUSAF). William D. Alexander of DMJM has served as Project Director.



farewell gift at DUSAF luncheon. Norman Ramsey, URA President, and W. Alexander, DUSAF Project Director, also attended ...

(Photo by Tony Frelo, NAL)

and DMJM's E. Parke Rohrer, Project Manager. DUSAF operated under a consulting contract with the U.S. Atomic Energy Commission from 1965 on during the most preliminary planning for NAL, including the work done at the Lawrence Radiation Laboratory in Berkeley, California. Offices of the firm are located in the former Phillips Farm on the NAL site on former Batavia Road. DUSAF presently employs about 35 people on its staff.

DUSAF's administrative structure for the next year will be as follows: Project Manager, Richard Payzant; John Trommerhauser remains as Assistant Project Manager. George Doddy will be in charge of Architecture and will serve as Coordinator for Engineering and Architectural Design. Norman Christensen remains as Manager of Construction. Other DUSAF administrators will include: Tom Pawlak, Project Engineer; Fran Johnson, Coordinator of Construction; Rex Reiser, in charge of Contracts; and Fred Nelson, head of Purchasing.

Dick Pages, holds the position of Chief Structural Engineer; William Power, Chief Electrical Engineer; Warren Lahners, Chief Mechanical Engineer; and Homer Branch, Chief Civil Engineer.

E. Parke Rohrer moves to the post of DUSAF Project Director, but returns to the home offices of DMJM in Los Angeles as Deputy Director of regional groups. He will return to NAL each few months in his new supervisory capacity. Known to his associates at NAL as a man of deep integrity and personal commitment, he has been a calm, steady, and dedicated captain of the DUSAF ship since January of 1968.

As he left the NAL area last week, he said, "I'll always remember Dr. Wilson's amos to DUSAF -- 'save the trees and get rid of the port-a-camps.'"

"But," he went on, "this has been the most challenging and rewarding project I have ever worked on -- challenging because there has never been anything like it, and rewarding because we were able to stay long enough to see the accelerator reach 400 BeV. I want to thank all of the contractors, the NAL personnel, and the DUSAF employees who have helped us."

# TRACKING THE NAL BEAM

A peek at the NAL proton beam is possible with the use of a detecting device now installed in a port in the vacuum chamber of the Main Ring at the E48 sector. Designed by Fred Hornstra and Glenn Lee of the NAL Accelerator Division, the detector projects the view shown here onto a TV screen in the Main Control Room from a camera mounted over the port.

Numbered marks on the display are one centimeter apart; the lines between are spaced at two millimeters. The beam in the photo at above right (at an energy of 400 BeV

taken looking down, with the beam travelling from top to bottom), is about three millimeters wide. At injection from the Booster, the beam was 13 mm wide. One can watch the beam narrow rapidly during acceleration, due to adiabatic damping.

A similar detector is also being constructed, which is rotated to give a view of the vertical dimensions of the beam. Being able to determine the size of the beam as it travels in the 2" x 4" chamber is of great help in increasing machine performance.

Hornstra reports that the next step in the development of the detector is to improve the time and spatial resolution by using a novel single line TV system consisting of a linear aray of light measuring diodes. The output of this system may be interfaced to the NAL computer which can calculate and plot the beam size and position during acceleration.

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# JCAE ISSUES ENERGY STUDY

The Joint Committee on Atomic Energy, at the suggestion of Chairman Melvin Price (Congressman from Illinois), has issued a comprehensive report entitled, "Certain Background Information for Consideration when Evaluating the National Energy Dilemma." The report is designed to give the layman an understanding of the size and complexity of the national energy dilemma. Using a concise display system, it shows not only short-range projections of future U.S. energy requirements and supplies, but also displays the effects of various possible longer range energy policy options. The report is available for study at the NAL Library.

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NAL International Film Society presents

LA TERRA TREMA

The Village Barn Friday, July 13th -- 8 p.m.

A 1948 film written and directed by Luchino Visconti, La Terra Trema was an award winner at the Venice Film Festival. Using non-professional actors — fishermen and workers from a Sicilian village — it is the story of men trying to free themselves from exploitation. The advance review notes, "Visconti's vision of man and society is so full and impressive and so beautifully proportioned, that whether one accepts it or is convinced by it or not, it achieves a classic splendor...epic neorealism."

Cookies and punch will be served at the social hour following the movie. Admission is \$1.00 for adults.

## ENJOY TWO RAVINIA PROGRAMS

Two evenings at the Ravinia Festival in Highland Park are being arranged by the NAL Visitors Center so that NAL people can enjoy the great Chicago Symphony orchestra. (The Ravinia Festival is an extremely popular form of summer entertainment in the Chicago area. In a delightful outdoor setting, programs ranging from symphony to jazz to pops, mime, theater and films are presented seven nights a week.) The fine classical concerts for which the Visitors Center has secured tickets are:

Concerto Celebration II - Saturday evening, July 21st
Tickets at \$6.00 and \$2.40
(Picnic before the concert - bring your own)

and

Joffrey Ballet Friday evening, August 24th Tickets at \$7.70

The concerto program is considered to be classic perfection. Sergiu Commissiona is conducting and the program includes: Mozart's Piano Concerto No. 20, K. 466; Brahms' Double Concerto, Opus 102, and Beethoven's Triple Concerto, Opus 56. Soloists are: Rudolph Buchbinder, pianist; Franco Gulli, violinist, and Janos Starker, cellist.

The Ballet will perform one of its most interesting programs -- Kettentanz, Jive, and Sacred Grove on Mont Tamalpais.

NALREC is providing bus transportation for these two events; departure times from NAL will be announced later. Those attending the concerto celebration should plan to bring a picnic supper, a tradition before Ravinia concerts. The ballet evening being on the night of a work day, no picnic is planned. To get tickets or for further information, call or stop in at the Visitors Center, 33 Shabbona, Ext. 3560.

## IN THE NAL AREA...

... "The Dark at the Top of the Stairs," the 1957 Broadway success by William Inge is being performed July 5 through 15 at The Summer Place in Naperville. Performances are given in the tent located on Chicago Avenue at Ellsworth in Naperville at 8:30 p.m. each evening, 7:30 p.m. Sunday. Tickets are \$2.50 for adults; \$1.50 students, with special arrangements for groups and families.

...The first of two free concerts by the Wheaton Summer Symphony will be held on Monday, July 9, 8:30 p.m. at the Edman Memorial Chapel of Wheaton College, Washington and Franklin Streets, Wheaton.

## SHUTTLE BUS ON TRIAL RUNS

A small bus is now shuttling between the Central Laboratory Cafeteria entrance and the Neutrino experimental area. The bus travels back and forth along Road "A," making excursions to the Proton Area and the Meson Area. The vehicle will stop anywhere along this route in response to flagging. This is an experiment to see if such a service has use. If it is not used, it will be discontinued, at least for the immediate future.

Over the last week it has averaged 20 minutes per trip, so a prospective rider should be able to catch a ride at least every 30 minutes. The shuttle service operates from 8:30 a.m to 5:00 p.m.



...Donald Alan Hanson, 26, son of Will Hanson, Magnet Facility, received his Ph.D. degree in the June exercises at the University of Illinois, Champaign-Urbana. His field of interest is optimal control theory, the use of computers as applied to economics and urban planning. Dr. Hanson is an assistant professor of urban planning in the School of Architecture at Ohio State University. He is currently on a lecture tour in Europe...



Donald A. Hanson

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# JOIN THE INTERNATIONAL FOLK DANCING GROUP

The International Folk Dancing group meets in The Village Barn at NAL. Music you can't resist, on the 1st and 3rd Friday of each month at 8 p.m., sets the pace for these lively gatherings. Circle, set and couple dances are taught by <u>Jim and Marilyn Griffin</u>. Whole families can join in, or just watch. Refreshments.

Schedule for the summer months: July 6; July 20; August 3 and August 17.

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# CONGRATULATIONS

George and Patricia Davidson, Vehicle Maintenance,

new baby boy, The Davidsons

reside in West Chicago

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# FOR EMPLOYEES' BENEFIT

Regarding medical coverage on your group insurance...Did you know that when you are confined in a hospital, your medical insurance pays semiprivate room in full for a maximum of 120 days? This coverage also includes \$1,000 miscellaneous which can cover X-rays, Lab fees, medication, etc.

If you need more information or have any questions, contact <u>Mildred</u> <u>Meyer, Ext. 3324</u>.

## CLASSIFIED ADS

RIDE NEEDED - From Joliet to NAL (round trip) daily. Call Terri Johnson, Ext. 3387 or 723-1344.

 $\overline{\text{FOR SALE}}$  - 1929 Model "A" Sedan. Restoreable, and runs, \$700; Cedar strip canoe, \$220. Call T.J. Snyder, Ext. 3414 or 557-2214.

FOR SALE - Magnavox console stereo, mediterranean style, 3 yrs. old, \$200 or best offer; ham radio equipment and other miscellaneous items. Call Paul Czarapata, Ext. 3190 or 852-5482.

TO GIVE AWAY - 4 kittens 6 wks. old, 2 male & 2 female (calico). Call Jim Bridges, Ext. 3503 or 879-7684.

FOR SALE - Tube type cathode-ray oscillscope w/spare cathode tube, works fair, \$45; 72" Suzuki GT-380J motorcycle, low miles, clean. Red apx. 4 mpg., \$725; home stereo entertainment center w/AM-FM stereo, 8-track tape player and inputs for turntable \$85. Call R. Doyle, Ext. 3738.

EDITOR'S NOTE - Several NAL visitors have been looking for good used cars for their families' use during their stay at NAL. It is surprising to find how difficult it is to locate such cars quickly when the need arises.

If you have a good used car for sale or know of one/or more, THE VILLAGE CRIER urges you to place an ad in the CRIER and also let the Visitors Center, 33 Shabbona, Ext. 3560, have this information.