Vol. 2 No. 36

Sept. 10, 1970

88 PROPOSALS RECEIVED FOR EXPERIMENTS AT NAL

The Laboratory's Program Advisory Committee met from August 1 through August 7, 1970 at Aspen, Colorado. The following letter was sent out as a result of that meeting:

"Dear Colleagues:

The response to our call for experiments to be made with the NAL proton synchrotron has been a resounding 88 proposals. The NAL Program Advisory Committee met at Aspen, Colorado, from August 1 through August 7, 1970 to review the proposals for experiments which we have received and to make recommendations to me. The Committee consists of the following:

Owen Chamberlain
T. H. Fields
Val K. Fitch
Murray Gell-Mann
T. B. W. Kirk
T. -D. Lee
W. K. H. Panofsky
D. D. Reeder
Robert Sachs
Nicholas Samios
W. J. Willis

University of California
Argonne National Laboratory
Princeton University
California Institute of Technology
Harvard University
Columbia University
Stanford University
University of Wisconsin
University of Chicago
Brookhaven National Laboratory
Yale University

By dint of hard work, the Committee was able to consider and to make a recommendation concerning every proposal with the exception of those for bubble chamber runs which were treated more generally. We need time to digest these recommendations, to determine where conflicts in space or apparatus might exist, to see if our own

A Program Advisory Committee Seminar At Aspen (Photo courtesy James Sanford)

funding will permit construction of facilities, etc. However, each of you who submitted a proposal will hear from us within a few weeks on its status.

I can say a few things explicitly at this time. Several different types of recommendation were made. In some cases, it was recommended that a certain proposal be accepted; in some cases, even that a proposal be rejected. In some of the cases of similar proposals from two or more groups, it was recommended that NAL might give them a mutual hearing and indeed might create an opportunity for the experimenters to join together to carry out the work. In some cases of experiments requiring a major

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facility, such as a single arm spectrometer or a multiparticle spectrometer, it was recommended that workshops be held at NAL. The intention is that from such workshops there might emerge a general agreement as to what should be provided as a single facility and that someone, not necessarily at NAL, might be identified to be responsible for the design and construction of the facility.

In some cases, there were doubts that the experiment could actually accomplish the aims stated in the proposal, either because of inadequacies of apparatus or because of considerations of physics. In such cases, it was recommended that further technical information be provided by the proposer.

The general plans for experimental beams in Areas I and II were favorably reviewed at the meeting. The following are some specific recommendations that developed from the discussions:

- a. That both broad-band and monochromatic neutrino beams be available in Area I and that NAL investigate the question of whether the broad-band beam is to be quadrupole focused or horn focused.
- b. That the design and construction of a high-intensity muon beam in Area I be pursued.
- c. That there is no urgency in starting work on a conventional rf separator, but that the Laboratory study how to apply its resources to accelerate the development of superconducting rf separators; that in the meantime an unseparated charged particle beam to the 15-foot bubble chamber should be provided.
- d. That a tagged T+ beam be available in the charged-particle beam of Area I.
- e. That the Laboratory continue construction of the spherical 15-foot bubble chamber; that at the same time, the LRL group be encouraged to pursue the development of the proposed quantometer they have proposed. That at a later time, this development can be reviewed and, if promising, consideration can be given to modification of the chamber or to the construction of a new chamber body. That the development of track-sensitive hydrogen targets imbedded in a neon mixture should also be pursued.
- f. That development of electronic neutrino detector installations be encouraged and that space for this be allowed behind the bubble chamber in the Area I layout.
- g. That a small bubble chamber be made available at the time accelerated beams are first available for experiments.
- h. That NAL study the possibilities of a target station in a future experimental area using a transmission target in the full intensity proton beams. The Laboratory will study the possibility of producing charged-particle beams for the bubble chamber from this target.
- i. That NAL pursue the design of a high-energy tagged photon beam.
- j. That NAL examine the future availability of test beams in the experimental areas.

Recommendation g. appears to involve moving either the 30" or the 40" Argonne hydrogen chamber to NAL. I intend to begin negotiations with Argonne immediately

CONTROLLED HOURS AND PARKING PROCEDURES

Announcement has been made by <u>Bill Riches</u> of newly-established Controlled Hours and parking procedures in the "footprint area" of the NAL Main Site -- the area contiguous to the Linac, Booster, Cross Gallery, Transfer Gallery and service roads in that region.

New parking area regulations have been made necessary due to the progress of construction in the "footprint area" and the beginning of construction of the central laboratory building.

As of Tuesday morning, September 8, a new policy was instituted — only vehicles displaying the NAL logo will be permitted to park in the footprint parking area. A patrolman will be posted at the access road to the parking area and will direct all other vehicles to the parking lot to the west of the Linac Building.

In addition, Plant Management has asked the co-operation of NAL employees in the establishment of the following procedures at the Main Site in the interest of the safety and protection of the Laboratory and its personnel:

- Monday through Friday, starting at 6:00 p.m., a guard will lock all exterior doors to the Linac, Booster, Cross Gallery, and Transfer Gallery buildings.
- 2. "Controlled access hours" will be established from 6:00 p.m. to 7:00 a.m. Mondays through Fridays. The personnel doors directly west of the control room in the Cross Gallery will be used as the "Controlled Hours access door." A guard will be stationed at this door.
- 3. All personnel desiring entry to this area during Controlled Access Hours will be asked to sign in at the door.
- 4. A roving guard will patrol the area during the Controlled Access Hours period. Your co-operation will be appreciated if you are asked to identify yourself by this guard.

Any questions regarding the above procedures may be directed to Plant Management.

FOR WOMEN ONLY!!!!

At last month's regular meeting of the Director's Office, it was noted that female personnel of the Laboratory seldom have an opportunity to get an "on-the-spot"look at what is going on at the permanent NAL site.

Therefore, it was suggested that in place of the October Director's Office meeting, a tour of the Laboratory be conducted for the girls. Donald Getz, Assistant Laboratory Director, will lead the tour which will start at 3:00 p.m. on Monday, September 14th, from the Curia.

Girls, please contact Doris Ferrell, Ext. 241, by Friday, September 11th (after you have received permission from your supervisor) if you plan to take advantage of this opportunity, so she can make the necessary arrangements. The tour will last approximately one hour.

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in expectation of having an operating chamber at NAL in about a year.

Our next step will be to write letters to each of the proposers, and at the same time to prepare a scenario which will indicate our idea of how the initial experimental program will be run. Of course, this will have to be revised again and again over the next months as the experimenters' and our plans develop.

The question of early experiments, in 'nooks and crannies,' keeps coming up.

I have adopted the attitude that our principal business is to bring the planned experimental areas into operation as soon as possible. We will not know what part of the accelerator enclosure will be available for experiments, either because of radiation levels or because of equipment which may be necessary to make the machine work, until we actually have an operating synchrotron. The Committee agreed that improvised experiments in these spaces should not come under its purview, and I expect to await more definite developments before making any decisions concerning the uses of these areas.

For those of us building the synchrotron, the response to our call for experiments has been encouraging -- there is little doubt that the physics will be exciting. On behalf of my colleagues, may I thank you for the pains you have taken.

Sincerely,

/S/ Robert Rathbun Wilson"

NALites, DUSAFers INVITED TO VISIT ARGONNE

NAL and DUSAF staff members are invited to attend an "Open House" at the Argonne National Laboratory, near Lemont. The Laboratory will be open Saturday, September 19, from from 10:00 a.m. to 4:00 p.m. You may go into most of the buildings to see what's being done there. Someone will be on hand in each open building to assist you, describe equipment and answer questions. Argonne Park will be open for picnics and recreational facilities will be available. You can buy refreshments in the Central Cafeteria from 11:00 a.m. to 2:00 p.m. Movies dealing with some of Argonne's programs will be shown in the Auditorium of Building 200.

NAL STAFF MEMBERS ATTEND MEETING IN U.S.S.R.

Four members of the NAL staff attended the International Conference on High Energy Physics held at Kiev, in the U.S.S.R., from August 25 through September 4.

Those who took part in the meeting in Russia are Arthur Roberts, James K. Walker, and Frank A. Nezrick, all of Experimental Facilities, and Ernest I. Malamud, of Main Accelerator.

CONGRATULATIONS!!!

Employees in the NAL Radio Frequency section congratulated Peter Zamie on his marriage on August 29 to a fellow RFer, Janelle Quesenberry, who joined the RF section last December. After their honeymoon, Pete, who has worked as a technician in the RF section since August, 1969, will return to classes full-time at Northern Illinois in DeKalb. Janelle will return to her work as a programmer in the RF computer section.



NAL CHAMPIONS: Here are the members of the 1970 Physics Research 16-inch softball team which won the NAL intramural league championship during the last two months. The team, which won 8 games and lost 2, was entered under the name of "Physics Research" although the roster included players from other sections of the Laboratory. In this photo are: Front row, (L to R) -- Ed Stitts (Booster), Roy Justice, Team captain, (Physics Research), Elbert Smith (Radiation Physics); back row (Standing L to R) -- Bobby McNeal (Booster), Robert Knowles (Linac), Jeff Gannon, pitcher, (Booster), Jeff Ruffin (Booster), Theo Gordon (Beam Transfer), Jim Pellebon (Experimental Facilities), Clarence Bowling (Main Ring).

BOWLING SEASON OPENS FRIDAY NIGHT AT TWO SITES

The NAL bowling season will open Friday evening, September 11, with more than 72 men and women taking part in two leagues.

Sixty NAL employees have signed up for bowling at the Bowling Green alleys, on Alt. 30 west of Highway 59. The 12 teams will start there at 8:00 p.m. each Friday during the season.

In addition, 36 NAL and DUSAF employees have signed up for mixed league bowling from 5:30 to 7:30 p.m. Friday nights at the Warrenville Bowl, Highway 59 and Batavia Road.

Persons interested in signing up for possible openings on the bowling teams should communicate with Marilyn Paul, Ext 453, or Gerry Reid, Ext. 246, for further information. Miss Paul is scheduling the Bowling Green league teams; Mr. Reid is scheduling the bowlers who will compete at Warrenville.

REMINDER: "Happy Hours" for NAL employees will be held in the NAL Village on Thursday, September 10 and Tuesday, September 29.

NALWO BULLETIN FOR SEPTEMBER (Mrs. Nancy Teng, Editor)
Music Group. 8:00 p.m. For information call Mary Ann Ryk, 968-8651.
Literature Group, 1:00 p.m. White Farm. Ibsen's A DOLL HOUSE will be read.
Hand Arts. 1:00 p.m. White Farm
Bon Vivant. Korean dinner, Sam-Mee Restaurant, 3370 N. Clark St., Chicago. 8:00 p.m. \$5.00 per person. For reservations call Rosemary Billinge, 469-9093.
First regular monthly meeting of NALWO, Kuhn Barn, October 20, 1:00 p.m.
Gourmet group will sponsor an Old English dinner in October. Details to come.

VILLAGE CRIER DISTRIBUTION

Beginning with this issue, the Village Crier will no longer be sent to employees' homes. It had initially seemed to be a good idea to give as wide a distribution as possible to the Crier to make sure that wives of employees, as well as employees themselves, would see the publication. However, it has, and does, cost money to mail it to employees' homes. We hereby suggest that, in the future, employees pick up copies to take home, either at their lab, or office, or at the Public Information Office. We will try to distribute adequate quantities throughout the Laboratory.

CLASSIFIED ADS

FOR SALE - Returning to school - must sell. 1966 Harley Davidson Electra-Glide. Full Dress, mileage in low 8's, over-all perfect cond. First \$1,300 takes it. Call Dottie, Ext. 307.

RIDE WANTED - Tues. and Thurs. eve. after 5:00, to Ramada Inn. Call Ray Hanft, Ext. 342.

FOR SALE - 1967 BSA Lightning 650. Good condition. \$950. 469-4944, Glen Ellyn.

FOR RENT - Townhouse, 2 bedroom, basement finished, full carpeting, air conditioning, swimming pool and club house. Car pool available. Call 879-2900, Ext. 237. Located Brandywine

FOR SALE - Shorthand machine w/case, 2 books included. \$70.00. Ext. 401.

FOR SALE - Seal Point Siamese kittens - male and female - 7 wks. old, \$35. Call Fran, Ext. 351.

FOR SALE - 1965 Mustang, black; radio, new auto. trans., tires. \$700 or best offer. Contact Mark at the NAL pool, or 629-0717 after 4 p.m.

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