

## RADIATION PHYSICS SECTION DEVELOPS "WALLFLOWER" GEIGER COUNTERS

The NAL Radiation Physics Section has completed another milestone with the development of the first ten "Wallflower" geiger counter units for use at NAL.

These radiation detectors were conceived by Miguel Awschalom and Harry Howe, designed by Bob Shafer, and built by John Milford.

They will be mounted at exits of the various accelerator enclosures. They will be used to check whether items such as beampipes, magnets or even tools which have been in the accelerator enclosure during acceleration of a beam have become radioactive. If such items have become "hot," they must be labeled accordingly, and handled with a degree of caution appropriate to the amount of induced radioactivity.

Because such measurements will be made mainly by technicians whose primary duties are not in the radiation safety field, the Wallflower units have been designed to be simple and easy to use. Persons using the instrument only have to move the geiger counter probe over the surface of the object being surveyed, at a distance of one foot.

If the radiation level of the object is high enough to require that a warning label be attached, the Wallflower will sound an audible alarm. Illuminated panel indicators specify one of three levels of detection by three different colored light signs: Green ("OK"); amber ("Attach label"); red ("Call a Radiation Safety Officer").

In response to the amber light, an operator who is, for example, checking tools, before leaving the accelerator, will attach a Label 1 or Label 2 to the "hot object," the choice depending on the radiation level registered on a dial at the top of the Wallflower.

If the Wallflower's red light appears for the operator, he immediately should call for a Radiation Safety Officer who will take over reading and labeling the object with the use of a more sensitive detector.



....John Milford, NAL Radiation Physics Section, checks a section of beampipe for induced radioactivity with the "Wallflower" probe....

Photo by Tony Freló, NAL



## ARTHUR ROBERTS AUTHORS RECORDED COMPUTER MUSIC FOR BATTELLE

Written by a physicist from the National Accelerator Laboratory, played on an Argonne National Laboratory computer, a unique musical recording is serving a third major scientific institution -- Battelle Memorial Institute in Columbus, Ohio.



ARTHUR ROBERTS

Battelle is using the recorded computer music as the theme for "The Scientists," a series of programs on today's problems being shown on Columbus commercial television. The music was composed by NAL Physicist Arthur Roberts and played through an audio amplifier attached to one of Argonne's scientific computers.

The theme of "The Scientists" is that the capabilities for solving contemporary problems brought about by pollution and population growth are available in America's research laboratories. The first program, on air pollution, was shown in October; the second, on water pollution, in November; the third, on air transportation, will be shown in January. Recordings of the series will be made for future showings.

Roberts holds a degree from the Manhattan School of Music in addition to a Ph.D. in physics from New York University. Now on the staff at NAL, he also finds time to serve as Professorial Lecturer in Physics at The University of Chicago. There, he has instructed a class in, "The Physical Basis of Music," which explores sound, music, and the physiology of hearing in both musical and scientific terms.

Active in the Hyde Park Music Theater, he has written a number of musical compositions. Among his compositions is, "An Overture for the Dedication of a Nuclear Reactor," performed by the Rochester, N.Y. Philharmonic in 1952.

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## TB X-RAY UNIT TO VISIT NAL VILLAGE

The DuPage Tuberculosis Association X-Ray Unit will be at the NAL Village on Wednesday, February 3, from 8:30 a.m. to 1:30 p.m. Employees who have not had an X-Ray for a year or longer are urged to take advantage of this free service. The X-Ray will show any heart, TB, cancer or other chest abnormalities. It will only take a few seconds of your time and is well worth the time. The X-Ray unit will be parked near the First Aid house on Sauk Boulevard in the NAL Village. For further details, please call Mrs. Dorothy Poll, R.N., at Ext. 232.

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## AT HOME

Ann Erickson, Construction, became the bride of Richard Utt, Construction, at a wedding in September. They are residing in Naperville.

Ray and Sherry Yarema, of LaGrange Park, announce the birth of a daughter, Kristin Anne, on November 24. She weighed in at six pounds, 10½ ounces. Ray is a member of the Technical Services staff at NAL.

On January 5, 1971, Carol and Donald Olson, became the proud parents of a new baby boy, Christopher Patrick. Christopher weighed 7 lbs. and arrived at the Geneva Community Hospital. Donald is a member of the Main Ring Section.

Chuck Andrie, Instrument Facilities and his wife, Arline, are happy to announce the birth of a new baby girl, Lynne Michelle. Lynne was born on December 29, 1970 and weighed 8 lbs., 5 ozs. Chuck, Arline and Lynne make their home in Downers Grove.

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### NAL FAMILY "SKATE AND HAY RIDE" NIGHT JANUARY 16TH

A family "Skate and Hay Ride" night will be held Saturday, January 16, in the NAL Village. The skating will take place in a newly-flooded area on the tennis courts near the Village Barn. The skating portion will begin at 5:00 p.m. and run until 9:00 p.m. The hay rides will leave the Village Barn area at intervals between 6:00 p.m. and 8:00 p.m.

Hot dogs and marshmallows cooked on a bonfire will be served. In addition, there will be baked beans, potato chips, hot chocolate and coffee. There will be music outside the Barn for the skaters and the downstairs portion of the Barn will be used as a warming house for all.

All employees and their families are welcome. Plans are being made to accommodate about 230 persons.

For further details, call Marilyn Paul at Ext. 453. Please note the change in date from last week's Village Crier which showed Friday, January 15.

### MISEK'S TEAM LEADS IN NAL BOWLING LEAGUE

The twelve teams in the NAL Bowling League ended Round I of their current season with Team V, captained by Joel Misek (Main Ring) as high team scorers, followed by Team VII, Gary Scott (DUSAF), captain, and Team III, Barb Schluchter (Main Ring), captain.

Jack Jagger (Main Ring), holds highest game score for men (245) as well as high series (647).

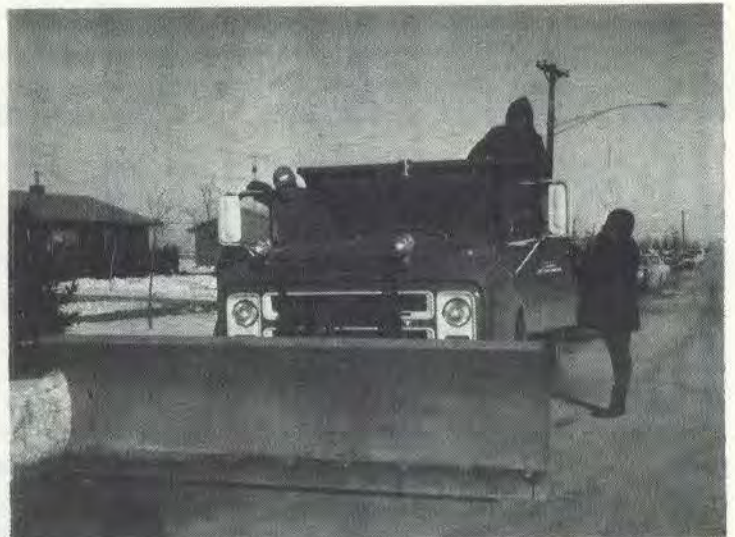
In the women's division, Marge Carter (wife of Bill Carter, Machine Shop), scored 212 for a high game score and Joy Thomas (Purchasing) tallied a 492 in the high series.

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### NAL CREWS READY FOR FIRST SNOW

*NAL's maintenance trucks were ready for the season's first major snowfall over the New Year's holiday weekend. When employees returned for work on Monday, they found the NAL Village and Main Site streets and parking places plowed and ready for their autos. Maintenance crew members shown in the photo are (L to R) Carl Martens, Bill Byrd, and George Doyle.*

Photo by Fran Pisarek, NAL



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DUPLICATE BRIDGE GROUP meets twice during January. The second and fourth Thursday of every month are duplicate bridge nights at the Laboratory. Mark your calendars NOW for January 14th and January 28th and plan to be at the Cafeteria at 7:45 p.m. for an enjoyable evening. Please call Spike on Ext. 351 if you plan to be there.

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## NAL VISITORS DURING DECEMBER

NAL's Public Information Office has been receiving an increasing number of requests for tours of the Laboratory and the month of December, in spite of the holidays and the weather, was no exception.

A group of 48 students, members of the Science Club and other science students from West Senior High School, Aurora, came to the Laboratory on December 22nd, during their Christmas vacation. Kaneland Future Scientists Club, Kaneland High School, Maple Park, visited December 10th. Forty-eight fifth graders from McWayne School, Batavia, shepherded by their teachers, were very much interested in what's going on "in their own backyard." Donald R. Getz, Assistant Director of the Laboratory, spoke to a group of elementary school teachers from West Chicago, who are interested in the plans and progress of the Laboratory.

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### NALWO CALENDAR

Mrs. Nancy Teng, Editor

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| January 19 | Literature group. 1:00 p.m. at the White Farm. Reading of Inge's "Bus Stop."   |
| January 21 | Hand Arts. 1:00 p.m. at the White Farm. Nancy Hanft will demonstrate the advanced art of "batiking." Bring a piece of silk if you wish to try your hand at it.                         |
| January 22 | Bon Vivant. 8:00 p.m. Atlantic Fish and Chip Restaurant, 7115 W. Grand, Chicago, featuring English-Irish-Scottish foods. For reservations call Rosemary Billinge, 469-9093 by Jan. 20. |
| January 28 | Sewing. 1:00 p.m. at Greta White's house, 27 River Lane, Geneva.   |

## PORTER BROTHERS IN FOX VALLEY COUNTRY MUSIC SHOW

The three Porter Brothers will entertain every Sunday afternoon at 3:00 p.m. at the Fox Valley Country Music Show, to be held at 407 Hill Avenue, Aurora, next to the water tower. Two of the Porters are NAL employees -- Franklin (Farm Management) and Norman (Transportation), and Norm's wife, Shirley, works in the NAL Cafeteria.

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## CLASSIFIED ADS

FOR SALE - Custom built ranch located in lovely wooded area. Living room 15' x 29' with wall to wall carpeting and drapes. Also stone fireplace. Built in appliances, central air. 3 large bedrooms, 2 ceramic baths, breeze-way to two car garage. Priced low \$40,000. Call 355-1366.

FOR SALE - Irish Setter pups. 5 mos. old, AKC, Field dog stud book. \$75 and \$125. Call 879-3339.

FOR SALE - 2 yr. old G.E. ref-freezer. 2 snow tires and rims. 15" for G.M. cars. Blk & white console T.V. (used) Call J. Klen, 815-725-1258.

**National Accelerator Laboratory**  
**P.O. Box 500**  
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