

CENTRAL RESEARCH LIBRARY
DOCUMENT COLLECTION

MARTIN MARIETTA ENERGY SYSTEMS LIBRARIES



3 4456 0360604 2

ORNL-1369
Progress

Cy. 1A

HEALTH DIVISION ANNUAL REPORT
COVERING THE PERIOD JULY 1951 TO JUNE 1952

OAK RIDGE NATIONAL LABORATORY

CENTRAL RESEARCH LIBRARY

CIRCULATION SECTION

4500N ROOM 175

LIBRARY LOAN COPY

DO NOT TRANSFER TO ANOTHER PERSON

If you wish someone else to see this
report, send in name with report and
the library will arrange a loan.

UCN-7968 (3 9-77)



OAK RIDGE NATIONAL LABORATORY
OPERATED BY
CARBIDE AND CARBON CHEMICALS COMPANY
A DIVISION OF UNION CARBIDE AND CARBON CORPORATION



POST OFFICE BOX P
OAK RIDGE, TENNESSEE

UNCLASSIFIED

Report Number ORNL 1369

Copy 1 of 33

Series A

This document consists of

30 pages

Contract No. W-8405 eng 26

HEALTH DIVISION

ANNUAL REPORT COVERING PERIOD JULY 1951 THROUGH JUNE 1952

J. S. Felton, M. D.

Date Issued

DEC 2 1952

OAK RIDGE NATIONAL LABORATORY

operated by

CARBIDE AND CARBON CHEMICALS COMPANY

A Division of Union Carbide and Carbon Corporation

Post Office Box P

Oak Ridge, Tennessee

UNCLASSIFIED



3 4456 0360604 2

UNCLASSIFIED

INTERNAL DISTRIBUTION

- 1 - 2. Training School Library
- 3. Health Physics Library
- 4 - 5. Biology Library
- 6 -15. Central Files
- 16-17. Health Division
- 18. C.E. Larson
- 19. K. Z. Morgan
- 20. A. M. Weinberg

EXTERNAL DISTRIBUTION

- 21. A. G. Kammer, M.D., Medical Director, C&CCC, South Charleston, W. Va.
- 22. E. V. Henson, M. D., C&CCC, South Charleston, W. Va.
- 23. R. J. Sexton, M.D., C&CCC, Institute, W. Va.
- 24. C. U. Dernehl, M. D., C&CCC, Texas City, Texas
- 25. J. S. Lyon, M. D., C&CCC, K-25, Oak Ridge, Tenn.
- 26. C. R. Sullivan, Jr., M. D., C&CCC, Y-12, Oak Ridge, Tenn.
- 27. Office of Research and Medicine, AEC, Oak Ridge, Tenn.
- 28. R. J. Hasterlik, M. D., Medical Director, Argonne National Laboratory
- 29. C. L. Dunham, Jr., M. C., Chief, Medical Branch, Division of Biology and Medicine, U. S. AEC, Washington.
- 30. T. L. Shipman, M. D., Medical Director, Los Alamos.
- 31. Merrill Eisenbud, Director, Health and Safety Division, New York Directed Operations, New York.
- 32. W. D. Norwood, M. D., Medical Director, Hanford Engineer Works, Richland, Wash.
- 33. Robert Love, M.D., Brookhaven National Laboratory, Long Island, New York

UNCLASSIFIED

UNCLASSIFIED

HEALTH DIVISION ANNUAL REPORT

July 1, 1951 --- June 30, 1952

Jean S. Felton, M. D., Medical Director

SCOPE OF PROGRAM

An active program in industrial health has been maintained at the Oak Ridge National Laboratory during this period, with the objective in view of maintaining the best possible health status of the employed personnel. The specific component parts of this program are as follows:

I INDUSTRIAL HEALTH PROGRAM AS IT RELATES TO THE INDIVIDUAL EMPLOYEE.

The employee ordinarily is considered from three points of view: A. As a candidate for employment; B. As an employee requiring health maintenance; and C. As a sick or injured employee. The various procedures carried on under these divisions are as follows:

A. As A Candidate for Employment

1. Physical examination or inventory.
2. Visual examination through use of special rating equipment.
3. Audiometric study.
4. Personality appraisal from use of questionnaires, tests, and interviews.
5. Laboratory examinations.
 - a. Complete blood count.
 - b. Chest film.
 - c. Spine films on prospective employees if to be in a craft or laboring position.
 - d. Urinalysis.
 - e. Serodiagnostic test for syphilis.
 - f. Vital capacity (of workers with beryllium).
 - g. Special food handler examination.
 - h. Electrocardiogram.
 - i. Ballistocardiogram.
 - j. Rh factor
 - k. Blood typing.
 - l. Other diagnostic procedures as indicated.

UNCLASSIFIED

UNCLASSIFIED

6. Immunization.
 - a. Smallpox and typhoid fever vaccination.
 - b. Tetanus immunization for employees in laboring or craft occupations.
7. Recommendations regarding:
 - a. Placement by matching physical capacities against physical demands of the job.
8. Fitting and issuing of occupational eyewear.

B. As An Employee Requiring Health Maintenance

1. Repeat physical appraisal
 - a. Annual physical examination (or multiphasic screening).
 - b. Post-sickness absentee examination.
 - c. Periodic examination of workers exposed to special hazards (non-radioactive).
 - d. Job transfer examination and recommendation.
2. Repeat laboratory examination
 - a. Repeat blood count (frequency determined by special physical condition of worker or work assignment).
 - b. Chest film during annual survey (or as indicated by the physical condition or work assignment).
 - c. Serodiagnostic test (frequency determined by worker's physical condition).
 - d. Urinalysis (frequency determined by worker's physical condition or work assignment).
 - e. Vital capacity (frequency determined by worker's job assignment).
 - f. Electrocardiogram (frequency determined by worker's age or physical condition).
 - g. Special bio-assay procedures for beryllium, mercury, lead, etc.
 - h. Ballistocardiogram (frequency determined by worker's physical condition).
3. Health promotion (education).
 - a. Creation (or procurement) and distribution of posters.
 - b. Creation (or procurement) and distribution of pamphlets.
 - c. Procurement and maintenance of moving signs.
 - d. Preparation of three dimensional table-size exhibits.
 - e. Procurement and waiting room use of the American Medical Association health magazine "Today's Health," and other popular health publications such as "Life and Health" and "Child-Family Digest".
 - f. Preparation of a weekly column for the Oak Ridge National Laboratory News.

UNCLASSIFIED

- g. Meeting with supervision or management to clarify job adjustment of the worker.
 - h. Weekly orientation program for new employees.
 - i. Special orientation programs for trainees and other groups.
 - j. Preparation and distribution of special health promotional materials to specific employee groups.
 - k. Talks to employee groups relative to occupational health hazards or non-occupational health conditions, as determined by group choice.
4. Industrial hygiene surveys for occupational hazards control (non-radiation hazards control).
 5. Recommendation for the installation of, and follow-up of local exhaust ventilation systems (industrial hygiene engineering).
 6. Plant sanitation surveys.
 7. Medical rehabilitation.
 8. Procurement of popular medical treatises (bibliotherapy).

C. As A Sick or Injured Employee

1. Medical and/or surgical care of occupational illness or injury, including over-exposure to radiation, under workmen's compensation laws.
2. Emergency medical and/or surgical care for non-occupational illness or injury.
3. Liaison between ill employee and private physician, hospital, Welfare Services Department, American Red Cross, Office of Vocational Rehabilitation, Committee for Crippled Children and Disabled Adults, and the Veterans Administration.
4. Counseling services for workers presenting job maladjustments involving emotional disturbances (mental hygiene procedures).
5. Conference with management or supervision, in order to effect a better work adjustment for the emotionally disturbed employee.

II CONSULTANT SERVICES PROCURED FROM OUTSIDE AGENCIES OR INDIVIDUALS

- A. Consultant services in cardiology.
- B. Consultant services in radiology.
- C. Consultant services in psychiatry.
- D. Consultant services in ophthalmology.
- E. Consultant services in surgery.
- F. Consultant services in orthopedic surgery.
- G. Others as selected.

UNCLASSIFIED

UNCLASSIFIED

III. MISCELLANEOUS

- A. Termination physical examination for all employees.
- B. Maintenance of complete clinical records on all employees, present and terminated, in addition to some records on construction, loan and other Oak Ridge organization employees.

The details of the examination program have been established as follows:

I. Pre-placement physical examination

- A. Routine pre-placement physical appraisal.
 - 1. Physical examination.
 - 2. Complete blood count.
 - 3. Urinalysis.
 - 4. Kahn test.
 - 5. Blood typing.
 - 6. Electrocardiogram.
 - 7. Rh factor.
 - 8. X-ray of chest (P-A)
 - 9. Audiogram.
 - 10. Ortho-Rater examination.
 - 11. Cornell Index Health Questionnaire.
 - 12. Special tests for technical personnel.
 - 13. Immunizations (smallpox, tetanus, typhoid).
- B. For employees of the Metallurgy Division and employees in the Fluid Fuels Group of the Physics of Solid Division (in addition to A, above).
 - 1. Vital capacity determination.
 - 2. Blood beryllium level determination.
 - 3. Urine beryllium level determination.
- C. For employees of the Cafeteria and Canteen (in addition to A, above)
 - 1. Stool examination for ova and parasites.
- D. For lead burners (in addition to A, above)
 - 1. Blood lead level determination.
 - 2. Urine lead level determination.

UNCLASSIFIED

E. For those in heavy jobs, i.e., crafts, labor, etc. (in addition to A, above).

1. X-ray of spine (four views: A-P, lateral, and 2 coned views).

F. Visitors

1. Visitors of 3 weeks or less: These individuals do not report to the Health Division
2. Visitors of 3 weeks to 3 months: Complete blood count, urinalysis, and chest x-ray.
3. Visitors remaining over 3 months: The same procedures as for the pre-placement physical examination without electrocardiogram, unless over age 40. (Trainees from organizations such as E. I. duPont de Nemours and Company, American Cyanamid, Phillips Petroleum, California Research and Development Corp., etc., irrespective of length of stay, to have complete pre-placement examination, as in A above.)

II. Termination physical examination

- A. The same as for the pre-placement physical examination but exclusive of the electrocardiogram or Kahn test.
- B. For those assigned to the Metallurgy Division and Fluid Fuels Group in Physics of Solids Division, the same as listed in IB and IIA, above.
- C. For those who have worked with a specific material (lead, mercury, beryllium, etc.), special examinations as indicated or as requested by physician.

III. Preliminary physical examination:

- A. First visit: Complete pre-placement physical examination, with exception of blood typing and Rh factor determination.
- B. Second visit: i.e., return for employment:
 1. If within 3 weeks following the previous examination, no repeat procedures.
 2. Blood typing and Rh factor determination.

UNCLASSIFIED

UNCLASSIFIED

3. If over 3 weeks since the preliminary examination, the following procedures to be repeated or initiated:
 - a. Complete blood count.
 - b. Urinalysis
 - c. Blood typing and Rh factor determination.
 - d. Chest film.
 - e. Interview with physician.
 - f. Immunizations (smallpox, tetanus, typhoid).

IV. AEC physical examinations.

- A. Same as in IA, above, except that electrocardiogram will be taken only in those over 40 years of age.

V. Multiphasic screening (to be accomplished yearly):

1. Complete blood count.
2. Urinalysis.
3. Audiogram.
4. Ortho-Rater examination.
5. Kahn test.
6. Electrocardiogram (including weight determination and blood pressure recording)
7. Cornell Index Health Questionnaire.
8. Determination of need for stimulating immunizing injections.

If any of these procedures have been accomplished within the month prior to this, they will not be repeated. However, if they have not been accomplished within the month prior, they will be repeated.

VI. Special examination of radiation exposees (L-4):

1. Complete blood count every 6 months.
2. Urinalysis every 6 months.

VII. Special examination of employees in contact with beryllium.

1. Chest film every 3 months.
2. Vital capacity determination every 2 weeks.
3. Weight determination every 2 weeks.

VIII. Special examination of lead workers.

1. Blood lead level determination every 3 months.

UNCLASSIFIED

2. Urine lead level determination every month.

IX. Special examination of employees who have sustained eye injuries

1. Ortho-Rater examination at time of first report of injury and at time of discharge of injury.

X. Special examination of employees who have any tuberculosis contact.

1. Chest film every 3 months.

PERSONNEL SERVED

During this period, the total number of employees at the Laboratory approximated 3300 + and, in addition, the Health Division rendered services to personnel from AEC, American Cyanamide Company, E. I. duPont de Nemours and Company, Phillips Petroleum Company, California Research and Development Corporation, in addition to trainees and summer research participants.

PERSONNEL OF THE HEALTH DIVISION

The Division, headed by a medical director, has two additional physicians and seven nurses. There is one X-ray technician, four clinical laboratory technicians, a statistician, two record clerks, one administrative clerk, one ophthalmic dispenser (in charge of the entire occupational vision program involving safety glasses), one stenographer, one clerk, and one secretary to the medical director. In addition, there have been three members rendering custodial services.

CONSULTANT SERVICES

The Health Division uses regularly the services of a recognized specialist in cardiology for interpretation of electrocardiograms and ballistocardiograms and the services of a radiologist for interpretation of all of the Roentgen studies taken by the X-ray Section of the Division.

The services of a consultant psychiatrist are used during one day a week for the purpose of advice as to desirable care for employees presenting emotional problems. The consultant will aid in selecting the appropriate preventive or therapeutic action to be taken in the form of (a) psychotherapy by outside specialists; (b) environmental manipulation carried on locally, or (c) institutionalization or intensive psychiatric care.

UNCLASSIFIED

UNCLASSIFIED

The consultant in ophthalmology examines, at stated intervals, the employees who have had contact with various accelerators to determine the presence or development of lenticular changes.

Consultant services in surgery and orthopedic surgery are used for complete care of occupational injuries of a scope beyond the type that can be cared for by the Health Division staff.

FACILITIES

The dispensary of the Health Division occupies 7448 square feet in Building No. 2013 in the west end of the present Oak Ridge National Laboratory site. Complete diagnostic facilities exist in the X-ray Section and Clinical Laboratory (exclusive of facilities for tissue examination) and a well equipped minor surgery and treatment room are available for medical care.

SPECIAL ITEMS IN PROGRAM DEVELOPMENT

Medical Records Section

The Medical Records Section currently is housing approximately 3600 active clinical records. These represent charts, not only on ORNL personnel, but those coming for brief periods of training, including representatives of such outside organizations as the E. I. DuPont de Nemours Company, Inc., the Phillips Petroleum Company, California Research and Development Corporation, etc. The files also include records of employees terminated by the J. A. Jones Company. At the present time, the pre-placement physical examination consists of completion of the health questionnaire, the physical examination itself, electrocardiogram, audiogram, chest film (and spine film in employees occupying craft or laboring positions), vision test, with and without glasses, by means of the Bausch and Lomb Ortho-Rater, and complete blood count, Kahn test, and urinalysis. The records for this pre-placement procedure comprise the total clinical record, plus a recording of notes on visits for occupational or non-occupational illnesses or injuries.

Approximately 10 pre-placement physical examinations are done daily and within this past year, a new system has been initiated to render a better service in the selection of new employees. At the time of the initial interview of the prospective employee, the Personnel and Service Department of the Industrial Relations Division will refer the interviewee to the Health Division for a preliminary physical examination, which consists of all the items normally carried out during the regular pre-placement physical examination. This allows

UNCLASSIFIED

UNCLASSIFIED

the submitting of a recommendation as to physical qualifications prior to the beginning of security clearance or other costly processing procedures. To date, 184 such preliminary physical examinations have been conducted. Within the past year, 14 individuals have been classified as H-4, or "Physically unqualified for position applied for."

Statistical records have been maintained by means of punch cards for the entire year. With these records, we have been able to secure statistical material for the causes, or reasons, for Dispensary visits each month. A compilation and abstracting of this material provides the numerical data for this annual report. Special reports are procured intermittently during the year, and these machine cards have given us lists of employees in various age or other groupings, when such information is desired. Special brief studies on the type of professional person attending our personnel have been secured, and this system has been found to be invaluable in offering a full picture of the clinical activities of the Health Division.

At the present time we have an inactive Medical Records Section of nine Rock-a-File cabinets housing approximately 4080 records of ORNL personnel, visitors, previous employees, and temporary employees. As these records accumulate they require a marked amount of storage space. The records for personnel of the J.A. Jones Company have been put in transfer cases and removed to a storage vault, as this company is not now operating in this area. Termination physical examinations are done on an average of eight to 12 per week, and include a physical examination by a staff physician, laboratory examinations and chest films.

Approximately 200 persons are seen in the Dispensary each day from 8:00 a.m. until 4:30 p.m. In addition to these, about 12 to 15 individuals are called in each day for the multiphasic screening procedures, consisting of the complete blood count, urinalysis, audiogram, electrocardiogram, Ortho-Rater vision examination, health questionnaire, and completion of past medical history sheet. This represents a continuing rapid turnover of clinical records in the files each day, and there has been a temporary clerk added to the Section to assist in the filing of laboratory reports and the clinical records themselves at the end of the day when all notations have been made.

UNCLASSIFIED

UNCLASSIFIED

X-ray Section

The examination facilities have remained essentially the same during the past year.

In October 1951 the annual chest x-ray survey was conducted and approximately 2800 employees received chest films on standard 14 by 17 inch size films. Positive findings were encountered on four employees, consisting of two cases of tuberculosis, one case of cancer of the lung, and one case of possible Hodgkin's Disease. All of these individuals have been referred for medical care and complete diagnostic studies have been undergone and appropriate medical or surgical therapy carried on.

A small room adjacent to the x-ray office, formerly used for audiometry, has been converted into a storage room for x-ray mailing envelopes, filing envelopes, report forms, etc.

The tube of the x-ray machine was changed after 33,936 exposures were made.

The x-ray section participates in the preliminary examinations conducted on prospective employees prior to the beginning of security clearance procedures. Chest films are taken on all such individuals called to the Laboratory for initial interview and in some, spine films are taken whenever a craft or laboring position are contemplated. A group of employees with hypertension had special chest films made for the purpose of determining heart size.

The x-rays on terminated employees are still collecting in considerable quantity and, as per the recommendation of the previous Annual Report, microfilming of these films should be considered. Equipment is now available, manufactured by the Eastman Kodak Company, for the reproduction of x-ray films on miniature film. Positive reproductions are available for inclusion in the clinical record of the employee and the roll of the original microfilm can be maintained in a storage vault. The need for microfilming cannot be over-emphasized.

Currently, interpretation of all films taken is being made by the consultant radiologist of the Acuff Clinic in Knoxville.

Clinical Laboratory

In order to care for the increased work load of the clinical laboratory, one additional technician was employed in October 1951. This allowed an increase in the number of annual multiphasic screening procedures carried out on all

UNCLASSIFIED

UNCLASSIFIED

employees. Gastric analysis, without intubation, was introduced and performed on a group of employees over 40 years of age. This is a screening device that will detect the presence of achlorhydria. Because of the fire hazard attached to the ether extraction method of this procedure, designs have been made for an exhaust hood, which is currently awaiting installation. Because of recent work in connection with determination of the Rh factor, it became necessary to examine blood for Rh sub groups prime and double prime. All previously supposed Rh negative persons were rechecked and a new blood donor file established. The special study on hypertensive employees was being continued, in part, by the clinical laboratory and urea clearance, blood urea nitrogen, creatin, P.S.P., Fishberg concentration, complete blood count and urinalysis have been conducted on certain of these employees.

Special portable equipment has been designed and constructed for the collecting of blood and urine specimens at the work site of the employee, Exhibit 1. This replaces, in part, the system of having employees come to the Health Division building for this routine semi-annual examination. This permits a saving of time on the part of both the employee and the clinical laboratory personnel. A new suction cup type of electrode has proved to be quite satisfactory for use in electrocardiography and the Dock ballistocardiograph is being employed as an additional diagnostic aid on certain employees. Photographs of the portable laboratory equipment are seen as Exhibit 2.

Nursing Service

Additional disaster equipment has been procured and established in stations that will care for approximately 500 people. Currently there are seven disaster sites, located as follows: Building 901, 2500, 2519, 3019, 3038 and two in the 7000 area. Because of Federal regulations, the two pieces of diathermy apparatus were replaced by two new machines manufactured by the Liebel-Flarsheim Company.

Miss Doris B. Scott, staff nurse, was appointed a member of the Industrial Health Panel of the President's Commission on Health Needs of the Nation and attended a meeting of the Commission in Washington, D. C., May 27, 1952. Miss Scott also attended the Institute of Public Health held at Tuskegee Institute, Alabama, in March 1952. While in Washington, lectures were given by Miss Scott to student nurses at Howard University Freedman's Hospital on "Opportunities and Programs in Industrial Nursing." In April 1952, Miss Scott was appointed as the industrial nurse representative for the Committee on Agreements of the Tennessee State Nurses Association.

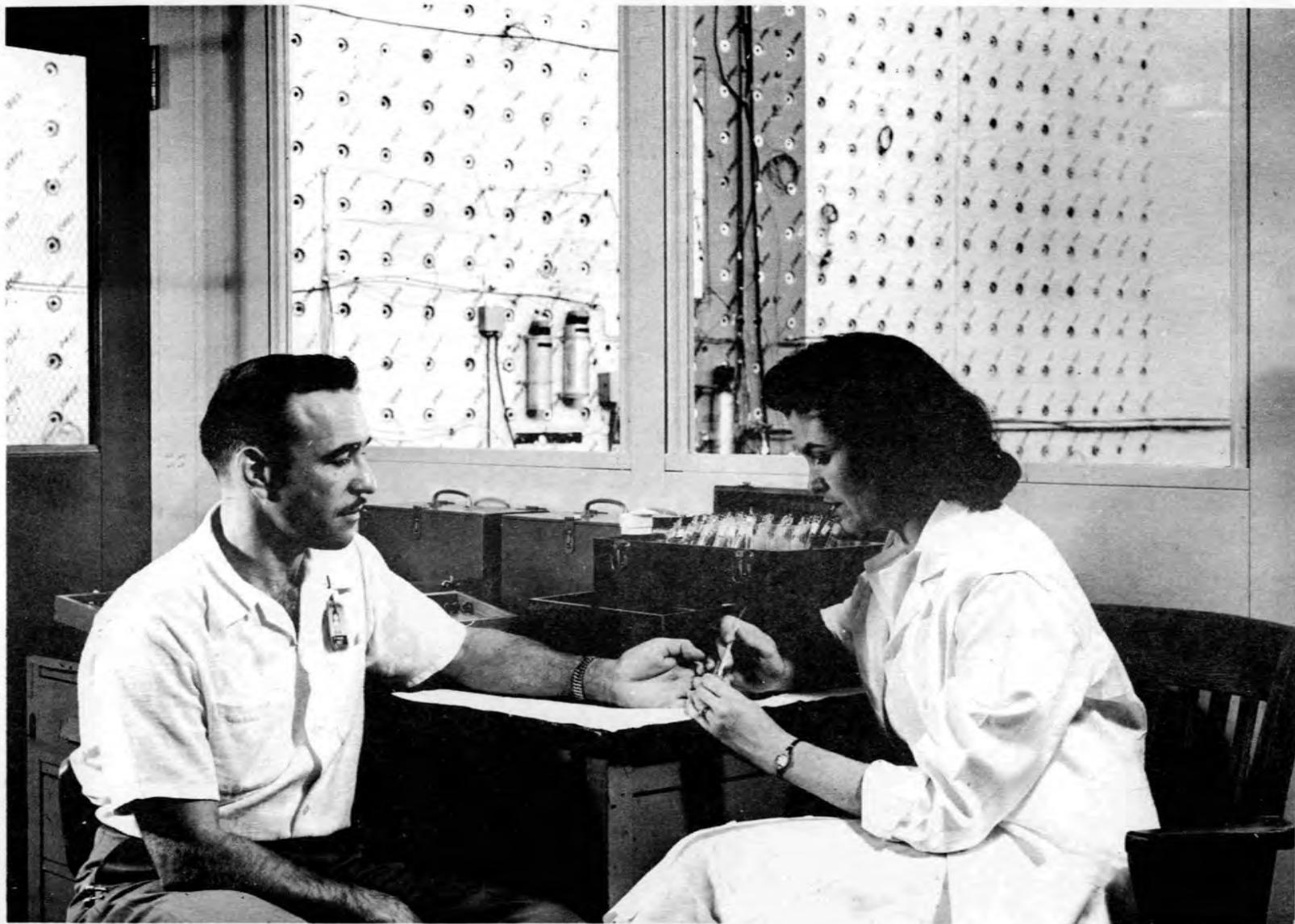


EXHIBIT 1



EXHIBIT 2

UNCLASSIFIED

Mrs. A. K. Hipshire, Chief Nurse, attended the annual meeting of the American Association of Industrial Nurses in Cincinnati, Ohio, April 1952 and the United States Atomic Energy Commission Meeting on Industrial Health, which also was held in Cincinnati in April 1952.

Papers published during the year by personnel of the Nursing Service included:

Scott, Doris B.: A Negro Nurse in Industry. American Journal of Nursing 52:170 (Feb.) 1952.

_____ : A Bird's-Eye View of the Nurses at the O.R.N.L.
Bulletin of the Tennessee State Nurses Association
18:20 (Dec.) 1951.

Health Education

The activities of this Section have continued and health education materials have been prepared in the form of exhibits, posters, and columns for the ORNL News. Some of these may be seen in Exhibits 3 and 4.

Occupational Vision Section

The program in the procurement and issue of occupational eyewear continues. Currently the following types of safety glasses are being issued:

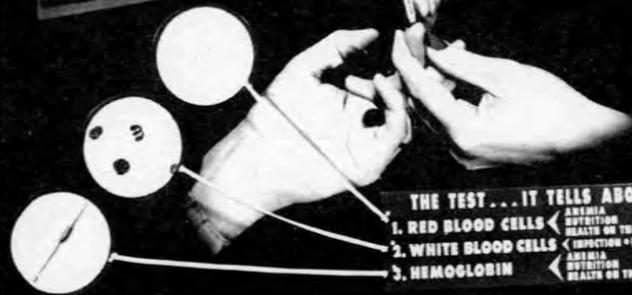
1. Types of glasses -- spectacle and goggle types, face and eye shields, masks, respirators, and clip-ons.
2. Types of frames -- plastic and metal, with and without side shields, all plastic (including lenses), opaque and clear goggle frames, special frames inserted in filter masks, respirators, and clip-ons.
3. Lenses -- hardened, white, plano or prescription; tinted, pink, on prescription only; green sun lens type; glass blowers, cobalt and didymium; and welders, all sizes and shades.

A stamping machine was procured for the imprinting of the name of the employee on safety spectacles in an effort to reduce replacements resulting from loss of unidentified patient eyewear.

Prescription plastic lenses were secured for three employees in diverse jobs in an effort to see if these lenses are practicable with employees whose glass lenses would be extremely heavy, because of strong correction. Results of the worth of this have not been determined as yet.

THE PICTURE OF HEALTH

Why a...
BLOOD COUNT?



THE TEST... IT TELLS ABOUT

- 1. RED BLOOD CELLS ← ANEMIA, DEFICIENCY OF IRON, DEFICIENCY OF THE JOB
- 2. WHITE BLOOD CELLS ← INFECTION, LEUKEMIA
- 3. HEMOGLOBIN ← ANEMIA, DEFICIENCY OF IRON, DEFICIENCY OF THE JOB

You will be called if your
blood count is not normal.

Review Of Accidents In Athletic World

By J. Feltz '20.

When our 7 p. m. athletes report in the morning to our Nightclosets in the Dispensary with their baseball fingers, or strawberries, or their golf-torn backs, we wonder if anyone is actually prepared for the onslaught on the playing fields of ORNL.

Others have been mutilating this thought a bit, and just recently Dr. Thomas A. Gonzales of the New York City medical examiners office (the fatal injuries which result from sports over a 1950 season) has written:

"The most common injuries produced in sports are those which result from sliding, falling, and collisions with hemorhage, lacerations, and 'blood poisoning.' One-third of the field after being hit on the chest by a batted ball.

In football, the fatal injuries followed direct violence in line play, blocking, and tackling. Ten of the 22 deaths resulted from infections, and in one, lockjaw (tetanus) developed fatally in a broken finger. Boxers died as a result of blows on the head or in a knockdown when the head of the boxer contacted the ring floor. There were hemorrhages following head injury in 13.

Among the hardest sports, five of the seven deaths resulted from infections complicating relatively minor injuries. The two deaths in the grunt-and-grow group were ascribed to complications following spinal and abdominal injuries. The death reported from the links was in a caddy who was hit by a golf ball and succumbed from a fractured skull and intercranial injuries.

Commenting on the demands in some quarters that boxing as a sport be abolished because it is potentially dangerous and unnecessary in the development of desirable attributes in young men, Dr. Gonzales said:

"Thirty- to two years of boxing competition have produced fewer deaths in proportion to the number of participants, than occur in baseball or football and far fewer deaths than result daily from accidents. From these facts it can be seen that the moral and physical benefits derived from boxing far outweigh the dangers inherent in it or any of the other competitive sports."

What are the lessons to be learned? Get early attention for any injury—no matter how trivial—and no matter where it was sustained. Know the game and its demands—this was pointed out by the preponderance of baseball deaths in the amateur and semi-professional ranks.

One need not be especially luxurious at this time of year, but with baseball almost finished, and the porcine ovids being inflated, we can prepare for the fewest possible injuries in this gridiron season to come.

What are the lessons to be learned? Get early attention for any injury—no matter how trivial—and no matter where it was sustained. Know the game and its demands—this was pointed out by the preponderance of baseball deaths in the amateur and semi-professional ranks.

One need not be especially luxurious at this time of year, but with baseball almost finished, and the porcine ovids being inflated, we can prepare for the fewest possible injuries in this gridiron season to come.

Commenting on the demands in some quarters that boxing as a sport be abolished because it is potentially dangerous and unnecessary in the development of desirable attributes in young men, Dr. Gonzales said:

"Thirty- to two years of boxing competition have produced fewer deaths in proportion to the number of participants, than occur in baseball or football and far fewer deaths than result daily from accidents. From these facts it can be seen that the moral and physical benefits derived from boxing far outweigh the dangers inherent in it or any of the other competitive sports."

What are the lessons to be learned? Get early attention for any injury—no matter how trivial—and no matter where it was sustained. Know the game and its demands—this was pointed out by the preponderance of baseball deaths in the amateur and semi-professional ranks.

One need not be especially luxurious at this time of year, but with baseball almost finished, and the porcine ovids being inflated, we can prepare for the fewest possible injuries in this gridiron season to come.

Commenting on the demands in some quarters that boxing as a sport be abolished because it is potentially dangerous and unnecessary in the development of desirable attributes in young men, Dr. Gonzales said:

"Thirty- to two years of boxing competition have produced fewer deaths in proportion to the number of participants, than occur in baseball or football and far fewer deaths than result daily from accidents. From these facts it can be seen that the moral and physical benefits derived from boxing far outweigh the dangers inherent in it or any of the other competitive sports."

What are the lessons to be learned? Get early attention for any injury—no matter how trivial—and no matter where it was sustained. Know the game and its demands—this was pointed out by the preponderance of baseball deaths in the amateur and semi-professional ranks.

One need not be especially luxurious at this time of year, but with baseball almost finished, and the porcine ovids being inflated, we can prepare for the fewest possible injuries in this gridiron season to come.

Commenting on the demands in some quarters that boxing as a sport be abolished because it is potentially dangerous and unnecessary in the development of desirable attributes in young men, Dr. Gonzales said:

"Thirty- to two years of boxing competition have produced fewer deaths in proportion to the number of participants, than occur in baseball or football and far fewer deaths than result daily from accidents. From these facts it can be seen that the moral and physical benefits derived from boxing far outweigh the dangers inherent in it or any of the other competitive sports."

What are the lessons to be learned? Get early attention for any injury—no matter how trivial—and no matter where it was sustained. Know the game and its demands—this was pointed out by the preponderance of baseball deaths in the amateur and semi-professional ranks.

One need not be especially luxurious at this time of year, but with baseball almost finished, and the porcine ovids being inflated, we can prepare for the fewest possible injuries in this gridiron season to come.

Commenting on the demands in some quarters that boxing as a sport be abolished because it is potentially dangerous and unnecessary in the development of desirable attributes in young men, Dr. Gonzales said:

"Thirty- to two years of boxing competition have produced fewer deaths in proportion to the number of participants, than occur in baseball or football and far fewer deaths than result daily from accidents. From these facts it can be seen that the moral and physical benefits derived from boxing far outweigh the dangers inherent in it or any of the other competitive sports."

Sixteenth Century Author Has Some Timely Health Tips

By J. Feltz '20.

Those of us who are engaged in an historically important activity here at Oak Ridge sometimes wear in a rather near-sighted fashion, not realizing that things have come before us which the dusty pages of the history books have failed to reveal to us.

For those of us moderns who consider that no one before us had certain specific information at his disposal, your attention is directed to the following paragraphs written by Francis Bacon entitled "Of Regimen of Health," and it is of particular importance to know that Bacon lived between the years 1561-1626. Preventive medicine, geriatrics, and psychiatry were thought of even then.

"There is a wisdom in this beyond the rules of physic: a man's own observations, what he finds good of, and what he finds hurt of, is the best physic to preserve health; but it is a safer conclusion to say, 'This agreeth not well with me, therefore I will not eat it.' than this, 'I find no offence of this, therefore I may use it'; for strength of many youth passes over many which are owing a man.

Discern of the nature of the exercise, is one of the best precepts of long lasting. As for the passions and affections of the mind, avoid envy, ambition, fears, anger, fretting, inward, subtle and knotty inquisitions, loves, and exaltations in excess, sadness not communicated. Entertain hopes, mirth rather than joy, variety of delights, rather than surfeit of them; wonder and admiration, and therefore novelties; studies that fill the mind with splendid and illustrious objects; as histories, fables, and contemplations of nature.

"If you fly physic in health altogether, it will be too strange for your body when you shall need it; if you make it too familiar, it will work no extraordinary effect when sickness cometh. I commend rather some diet, for certain seasons, than frequent use of physic, except it be grown into a custom; for those diets alter the body more, and trouble it less.

"Despite no new accident in your body, but ask opinion of it. In sickness, respect health principally; and in health, action; for those that put their bodies to endure in health, may, in most sicknesses which are not very sharp, be cured only with diet.

and tending. Celsus could never have spoken of it as a physician, had he not been a wise man without, when he gives it for one of the great precepts of health and lasting, that a man do vary and interchange contraries, but with an inclination to the more benign extreme; as fasting and full eating, but rather full eating; watching and sleep, but rather sleep; sitting and exercise, but rather exercise, and the like; so shall nature be cherished, and yet laugh mysteries.

"Physicians are some of them so pleasing and conformable to the humour of the patient, as they press not the true cure of the disease, and some other are so regular in proceeding according to the art for the disease, as they respect not sufficiently the condition of the patient. Take one of a middle temper; or, if it may not be found in one man, combine two of either sort; and forget not to call as well the best acquainted with your body, as the best reputed for his faculty.

"There is a wisdom in this beyond the rules of physic: a man's own observations, what he finds good of, and what he finds hurt of, is the best physic to preserve health; but it is a safer conclusion to say, 'This agreeth not well with me, therefore I will not eat it.' than this, 'I find no offence of this, therefore I may use it'; for strength of many youth passes over many which are owing a man.

Discern of the nature of the exercise, is one of the best precepts of long lasting. As for the passions and affections of the mind, avoid envy, ambition, fears, anger, fretting, inward, subtle and knotty inquisitions, loves, and exaltations in excess, sadness not communicated. Entertain hopes, mirth rather than joy, variety of delights, rather than surfeit of them; wonder and admiration, and therefore novelties; studies that fill the mind with splendid and illustrious objects; as histories, fables, and contemplations of nature.

"If you fly physic in health altogether, it will be too strange for your body when you shall need it; if you make it too familiar, it will work no extraordinary effect when sickness cometh. I commend rather some diet, for certain seasons, than frequent use of physic, except it be grown into a custom; for those diets alter the body more, and trouble it less.

"Despite no new accident in your body, but ask opinion of it. In sickness, respect health principally; and in health, action; for those that put their bodies to endure in health, may, in most sicknesses which are not very sharp, be cured only with diet.

A Publication by and for the ORNL Employees of Carbide and Carbon Chemicals Company, Union Carbide and Carbon Corporation

OAK RIDGE INTERNATIONAL LABORATORY

OAK RIDGE, TENNESSEE

Friday, February 1, 1952

Safety Scoreboard

Your Laboratory Has Operated 30 Days Without a Lost Time Injury Through September 23

U. S. Navy Band To Give Concerts in Oak Ridge

A 100-piece U. S. Navy band, now on duty at the Naval Air Station, will give a concert in Oak Ridge on Friday, February 1, 1952. The concert will be given at the new Oak Ridge High School auditorium. The music program will include a variety of popular and classical music. Tickets will be \$1.00 for adults, 50¢ for children, and 25¢ for students.

Turkey With Trimmings

Most turkey with savory dressing, giblet gravy, and cranberry sauce will be served at the ORNL Christmas Dinner on Wednesday, October 3. The dinner will be served at the ORNL Cafeteria. Tickets will be \$1.00 for adults, 50¢ for children, and 25¢ for students.

ABE, USA To Meet Locally

Members of the Oak Ridge Section of the American Society of Beer and Beverage Technicians will meet on Wednesday, October 2, at the Nightclub of the Oak Ridge Hotel. The program will include a presentation on the latest developments in beer and beverage technology. The meeting will be held from 7:00 to 9:00 p.m.

Members of the Oak Ridge Section of the American Society of Beer and Beverage Technicians will meet on Wednesday, October 2, at the Nightclub of the Oak Ridge Hotel. The program will include a presentation on the latest developments in beer and beverage technology. The meeting will be held from 7:00 to 9:00 p.m.

UNCLASSIFIED

In an effort to strengthen the vision program, a special exhibit was created, see exhibits 5 and 6, showing common, correctible faults present in safety glasses. The exhibit was backed by a special column in the ORNL news, exhibit 7, and the response to these materials was extremely favorable.

Clinical Photography Section

During the year a Bausch and Lomb retinal camera was acquired, which is being used for the taking of external photographs of the eye and for photographs of the fundus. These have been taken in both black and white and color and are being procured in order to improve the clinical record, and secondly, in connection with the special study being done on hypertensive employees. The Coreco color camera is being used for the taking of clinical photographs of prospective employees, new employees, or old employees who have sustained certain changes by virtue of occupational illness or injury. In employees demonstrating varicose veins, a limited number of infra-red photographs have been taken to record the extent and severity of this condition.

Research Section

Studies of the incidence of hypertension in certain employees is continuing and physical examination, clinical photographs, laboratory procedures and interviews have been carried on in this group. Interviews were held with approximately 130 employees presenting physical disabilities. This material will be incorporated into a paper which will point out the specific contribution being made by the physically handicapped to atomic energy. The paper currently is being readied for publication.

Approximately 5000 electrocardiograms, which have been taken over the past several years by the Health Division, have been coded by findings and work sheet results have been forwarded to the IBM Section for sorting and tabulating. During the annual chest survey conducted in 1951, the height and weight, age and sex of approximately 3000 employees were noted for the purpose of determining the weight status of Laboratory personnel. Currently these data are being evaluated statistically and publication will follow:

Administrative Section

On December 1, 1951, sub-contracts were entered into with Dr. Wade H. Boswell, Dr. Gerald R. Pascal, and Mr. Howard B. Hurt, for the purpose of providing screening and guidance facilities for emotionally marginal

THE PICTURE OF HEALTH



-15a-

EXHIBIT 5

Safety Glasses

**GIVE YOU PROTECTION
AND CORRECTION
ON THE JOB**



DO THEY FIT?

**ARE THEY
COMFORTABLE?**

**ARE THE
LENSES SCRATCHED?**

Report To
**OCCUPATIONAL
VISION SECTION
HEALTH DIVISION**



OAK RIDGE NATIONAL LABORATORY

A Publication by and for the ORNL Employees of Carbide and Carbon Chemicals Company, Union Carbide and Carbon Corporation

Vol. 4—No. 41

OAK RIDGE, TENNESSEE

Friday, April 25, 1952

Occupational Vision Display Emphasizes Need of Correctly Fitted Safety Glasses

Friday, April 25, 1952

By *J. Felt*

Currently decorating the lobby of the Health Division Building is a new exhibit on safety glasses. Depicted are three characters who demonstrate some of the difficulties encountered with the wearing of occupational eyewear, or protective safety spectacles.

It has been the experience of James R. Role, who handles the Occupational Vision Section in the Health Division, that there are a number of occupational vision problems that appear among wearers of the protective glasses issued at the Laboratory.

Of primary importance is the fact that many of our employees tend to allow their glasses to get out of adjustment. This is shown in the first figure in the exhibit, where a pair of safety glasses do not fit quite askew across the bridge of the nose. If the glasses do not fit with the face, on which they are usually placed, for readjustment, they should be brought back into a simple matter of adjusting the frames so that wearing them is as comfortable as all times.

Speaking of comfort, the while to the second figure, the white round fellow whose glasses are set and chisel, whose glasses are set aside the lip of his nose. This again is a problem in adjustment and whereas some glasses that are out of adjustment may be comfortable, there are others distinctly uncomfortable to wear. If they are not in proper position on the wearer's face, this can be corrected.

The next item mentioned by Mr. Role is that the lenses of the safety glasses frequently get fitted or scratched in for replacement as quickly as possible. There is a danger in wearing lenses that have been damaged like this—first, of course, one's vision is slightly blurred, and secondly, there may be scratches or pits that may blind one temporarily. The replacement of these lenses by new ones—either by prescription or should not be accomplished and should not be postponed.

Very frequently, an individual will receive a new prescription for glasses, and it may be some time before he stops by the Occupational Vision Section for his safety glasses. It is extremely important that an attempt be made to wear glasses of two different corrections—one pair at work and another kind at home.

Basic of protecting your eyes is the fact that in order to work a pair of safety glasses must have authorization by your supervisor. He will approve the issue of glasses to you, if the prescription is such as to require eye protection. If this is so at your work, he will give you a Storage ticket, appropriately filled out, which will allow Mr. Role to issue the correct kind of glasses for the job and for your eye needs. With summer coming on—it is typically here now—there will be a greater number of requests for green absorptive lenses (sun glasses). Mr. Role would like to point out that the control of this Department and for issue of this kind of protective eyewear, some authorization will hold true, but it will require counter signature by a representative of the Safety Department.

You are cordially invited, next time you are in the exhibit, which is take a look at the heading "The Displayed under the heading "The safety glasses, they are here for issue to you in the Occupational Vision Section, Room 19, between the hours of 8:00 AM and 1:00 PM, and if you need them at work, wear them, for they give you PROTECTION AND CORRECTION.

Dr. G. E. Boyd Awarded Two Special Honors

Dr. George E. Boyd, associate director of the Oak Ridge National Laboratory's Chemistry Division, and one of the nation's pioneers in the field of radiochemistry, has recently received two outstanding awards—a Guggenheim Fellowship to study for a year abroad, and an invitation to give Notre Dame's annual Reilly Lectures.

Dr. Boyd plans to take advantage of the Guggenheim Fellowship this fall to study the physical chemistry of ion exchangers. He also plans to prepare a monograph on the subject for the American Chemical Society. He hopes to complete plans soon to give Reilly Lectures after his return next year.

The Guggenheim Fellowships are each year to scholars, writers, artists, and composers. Dr. Boyd's award is one of the highest honors in the United States, and it is given to those who have made a significant contribution to the advancement of knowledge in their field.

The Reilly Lectures are given annually to a distinguished chemist. Dr. Boyd's lectures will be on the subject of "Radiochemistry and the Atomic Energy Commission."

Dr. Boyd's work at ORNL has been primarily in the field of radiochemistry, and he has made many important contributions to the development of new methods for the study of chemical reactions.

Operation of New Low Intensity Test Reactor at ORNL Announced by AEC



Announcement that Oak Ridge National Laboratory has put a new nuclear reactor of advanced design into operation was made today by the Atomic Energy Commission. The new reactor, known as the Low Intensity Test Reactor (LITR) is being used to make high-priority tests of radiation effects on certain construction materials of possible use in future nuclear reactors. It will also produce limited quantities of rare radioisotopes such as chromium-51.

The LITR "went critical" early in the spring of 1950 as a nuclear mock-up of the Materials Testing Reactor (MTR) now in operation at the AEC's national reactor testing station at Arco, Idaho. It was then improved to operate at a higher power, and in the spring of 1951 was put into service for training MTR operators. Research facilities were added and the power further increased in the fall of 1951.

The LITR was designed and constructed by Oak Ridge National Laboratory; its total cost was approximately \$1,000,000. The primary use of the LITR will be to assist engineers and scientists in learning more about the behavior of materials under radiation.

Portions of this material, which is to be given by division heads and their assistants, will be adapted to the appropriate interests or needs of the given division.



BILL EBERLY, Information and Reports Division, stands beside the display which he designed for a safety exhibit in the ORNL Health Division Building. At right, Fred Covey, also of the Information and Reports Division, puts finishing touches on a poster for the display. Dr. Feltton discusses what this exhibit means to ORNL personnel in his column on this page.

Lab Personnel Discuss Duties

"Areas of ORNL Staff Responsibility" is the fifth subject of Unit 1 in the Laboratory Staff Conferences which began Wednesday, April 18, and will extend through Thursday, May 1. These conferences, presented to divisional groups, will give a survey of the over-all responsibilities held by members of the ORNL staff in "getting the job done."

Portions of this material, which is to be given by division heads and their assistants, will be adapted to the appropriate interests or needs of the given division.

Central Staff

The Central Staff is responsible for the coordination and management of the laboratory's administrative and support functions. This includes the work of the Information and Reports Division, the Health Division, and the Safety Division.

EXHIBIT 7

UNCLASSIFIED

- Tennessee Section, American Industrial Hygiene Association, Nashville, November.
American Association of Medical Clinics meeting, Los Angeles, December.
Interim Session of the American Medical Association, Los Angeles, December.
American Academy of Occupational Medicine meeting, Pittsburgh, January.
Industrial Health Conference, Wilson Dam, Alabama, March.
AEC Industrial Physicians meeting, Rochester, N. Y., May.
Annual Scientific Assembly of the American Medical Association, Chicago, June.
- T. A. Lincoln, M.D. Industrial Hygiene Foundation meeting, Pittsburgh, November.
Industrial Health Meeting of AEC personnel and the Industrial Medical Association meeting, Cincinnati, Ohio.
- Mrs. A. K. Hipshire Industrial Health Meeting of AEC personnel and the American Association of Industrial Nurses meeting, Cincinnati, April.
- Miss Doris Scott Institute of Public Health, Tuskegee Institute, Alabama, March.
President's Commission on Health Needs of the Nation, Washington, May.
- Mrs. Jane Weeks Southern Sociological Society meeting, Atlanta, March.

Papers were read by staff members at the following meetings:

J.S. Felton, M. D.:

- "The Unusual in Health Education Activities at an Atomic Energy Research Laboratory," presented before the 10th International Congress on Industrial Medicine, Lisbon
"Industrial Medicine and the Group Clinic - A Mutually Advantageous Relationship" presented before the American Association of Medical Clinics meeting, Los Angeles.

UNCLASSIFIED

Missouri,
 Catherine, attending
 Oak Ridge High School. The
 Gingriches live at 635 West Van-
 derbilt Drive in Oak Ridge.

**WANTED:
 30 MEN ***

who are overweight, who have always
 really wanted to shed those extra
 pounds, but who haven't learned the
 whys and wherefores of weight reduc-
 tion. If you're interested and honestly
 enthusiastic about reducing, call 6681
 today. RESULTS GUARANTEED!
 *Straight-day ORNL people, that is.

being
 Jones,
 Collins
 P. S.
 ington
 special
 ist
 L
 is to be built to provide an
 additional means of launching at-
 tacks with atomic bombs.

CAFETERIA SPECIAL

The Cafeteria Special for Wed-
 nesday, April 1, will feature braised
 sirloin steak tips with mushrooms,
 choice of two vegetables, choice of
 salad or dessert, hot rolls and
 butter, tea or coffee for 75 cents.

TEAM STANDING

- First Place
- Second Place
- Third Place

Writers	10	12	11
Stuffs	11	12	11
Single Eyes	9	12	11
	9		

WE STILL NEED

a few overweight men to join
 our club. Won't you reduce
 with us? Call 6681 by 4:30 PM
 Monday, March 10.



atulations to the following
 Mrs. Charles Blake, 107
 Road, have a son, born
 who weighed seven
 ree ounces.
 Harold B.



TEAM 1 TEAM 2 TEAM 3

DAYS 1 2 3 4 5 6 7 1 2 3 4 5 6 7 8 1 2 3 4 5 6 7

% OVERWEIGHT		14.7%	15.0	30%	31.5	33	41.5	10.5		17.5	19.5	21.0	23.5	53.5	68	13	15	19	20	26	30	32	30	12			
TEAM 1	MON	172				203				MON																	
	TUE					203				TUE							174										
	Wed	172	186	198	211	202	215	192		Wed	189	173		192	244	267		156	111						172		
	THUR	171	179	196	214	202	215	192		THUR	189	173		192	244	266		156	171	187	207	204	219	219	174		
	FRI	170	173	196	214	202	215	192		FRI	190	172	187	195	248	263		172	155	169	187	205	204	218	218	172	
	SAT									SAT				186													
	SUN									SUN																	
% OVERWEIGHT		12.0	14.5	28.2	30.5	33%	46.5	11%	5	18	19.5	23.0	53%	60.5	12	14	15.5	14.5	24			21	26	13	1		
% LOST		2.2	5.2	1.2	1.5	0.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	5.5	1.0		3.5	1.5	2.0			4.0	4.0	0.0			
TEAM 2	1	168	179	193	213	200	210	190		188	186	177	247	259	170	159	169	187	-	260	218	217	170				
	2	167	178	192	213	200	210	192		172	186	196	246	260	170	153	163	187	-	197	218	217	171				
	3	167	177	192	211	200	209	192		187	172	187	195	245	259	170	153	169	186	209	200	217	215	170			
	4	167	177	191	211	200	208	192		187	178	185	195	246	259	170	153	167	186	209	199	217	215	170			
	5	168	177	190	213	199	205	190		171	183	195	246	258	170	152	169			203	201	216	214	170			
	6				213																						
	7																										
% OVERWEIGHT		8.5	13	24.5	25.5	29	34.5	9%	3.7	14	14	14	23.5	32.5	10	10.5	14	13	23	24	-	11	12				
% LOST		3.7	2	5.5	6.0	4	7.0	3.5	3.5	3.5	5.5	7.0	0	1.0	7	3	4.5	5	2	3	6	5	6	1			
TEAM 3	1	165	176	187	213	199	206	192		185	172	192	195	245	256	168	152	162	186	-	202	215	212	-			
	2	165	176	187	213	199	205	189		171	180	195	245	256	168	152	165	186	-	201	215	212	-				
	3	165	175	187	213	-	205	198		184	170	192	195	245	256	168	151	164	185	-	198	215	212	-			
	4	165	174	188	213	-	200	187		185	171	190	194	244	255	168	151	164	183	-	197	214	212	-			
	5	165	174	187	213	198	205	188		184	171	179	194	243	254	167	150	163	182	-	197	214	210	-			
	6																										
	7																										
% OVERWEIGHT																											
% LOST																											
TEAM 4	1	162	174	185	211	-	204	189			169	182	192	243	253	166	150	162	192	199	197	214	212	-	180		
	2	163	174	186	211	199	203	185		182	169	181	193	242	253	166	150	163	182	199	196	213	211	-	180		
	3	162	173	185	210	-	203	189		183	169	180	193	242	253	166	150	163	181	197	193	212	210	161	180		
	4		173	184	212	-		187		184	169	180	193	241	253	166	150	163	181	-	192	212	209	169	180		
	5	162	172	184	212	196	-	187		183	169	179	193	241	252	166	149	162	180	-	192	211	209	165	180		
	6				184	204											149	150			192	211	210		180		
	7																										
% OVERWEIGHT																											
% LOST																											

T. A. Lincoln, M. D.:

"A New Approach to a Weight Reduction Program in Industry,"
presented before the U S. Atomic Energy Commission
meeting on Industrial Health, Cincinnati.

PUBLICATIONS

The following papers were published during the fiscal year 1951 - 1952:

J.S. Felton, M. D.:

- "The AMA Section on Preventive and Industrial Medicine and Public Health: Atlantic City Meeting - A Report." Industrial Medicine and Surgery 20:468 (Oct.) 1951.
- "Introduction and Summary in the First Tennessee Regional Industrial Health Conference: 1. Can Medicine in Industry Meet the Needs of the American Worker; and 2. Services Available for a Health and Medical Program in Industry." Nashville, Industrial Hygiene Service, Tennessee Department of Public Health, 1951, pp. 54-55.
- "Space and Labor Saving Devices in the Industrial Dispensary: IV. Clinical Record Distribution Box for Physician's Office; V. Optical Dispensing Unit, and VI. Multipurpose Central Clerical Desk for Treatment Room." AMA Archives of Industrial Hygiene and Occupational Medicine. 4:426; 4:432, and 4:437, (Nov.) 1951.
- "Emotional Factors in Atomic Age Nursing." American Journal of Nursing. 51:733 (Dec.) 1951.
- "Athletic Programs in Industry," editorial, J.A.M.A. 148:555 (Feb. 16) 1952.
- "Industrial Medicine and the Group Clinic - A Mutually Advantageous Relationship." American Association of Medical Clinics Newsbulletin No. 6 (condensation) (Feb. 15) 1952.
- "Orientation of the New Employee by the Health Division of an Atomic Energy Research Laboratory - A Four Year Review." Industrial Medicine and Surgery 21:107 (March) 1952.
- "Health Education at an Atomic Research Laboratory." Health Education Journal 10:53 (April) 1952.
- "Visual Health Maintenance at an Atomic Energy Laboratory." The NICO Alumnus 4:19 (March-April) 1952.

Doris B. Scott, R.N.:

- "A Negro Nurse in Industry." American Journal of Nursing 52:170 (Feb.) 1952.
- "A Bird's-Eye View of the Nurses at the O.R.N.L." Bulletin of the Tennessee State Nurses Association 18:20 (Dec.) 1951.

UNCLASSIFIED

STATISTICS

Number of visits to the Dispensary for fiscal year 1951-1952		43,456
Total number of visits by ORNL employees	40,444	
Total number of visits by American Cyanamid Co. employees	299	
Total number of visits by Bechtel Corp. employees	4	
Total number of visits by DuPont Co. employees	1,004	
Total number of visits by Foster-Wheeler Co. employees	36	
Total number of visits by Phillips Petroleum Co. employees	156	
Total number of visits by AEC employees	369	
Total number of visits by other employees	1,144	
Average number of patients visiting the Dispensary monthly		1,656
Average number of ORNL employees on payroll per month		3,079
Average percent of all ORNL employees visiting the Dispensary		56.9%
Number of visits per employee per year		15.0
Number of illness-absences per employee per year		1.2
Average monthly severity rate (days lost per illness-absence)		4.1
Average monthly disability rate (days lost per 1000 days scheduled)		17.6
Average monthly frequency rate (absence per 1000 days scheduled)		4.3
Average monthly ratio of occupational to non-occupational procedures		1:0.8
Total number of procedures accomplished for the fiscal year, 1951 - 1952		59,343
Non-occupational injury	1,308	
Non-occupational injury, revisit	1,100	
Non-occupational illness	10,829	
Non-occupational illness, revisit	5,035	
Occupational injury or exposure, chemical	145	
Occupational injury or exposure, chemical, revisit	300	
Occupational injury or exposure, chemical, alleged or questionable	5	
Occupational injury or exposure, chemical, alleged or questionable, revisit	1	
Occupational injury or exposure, not otherwise classified	1,883	
Occupational injury or exposure, not otherwise classified, revisit	3,571	
Occupational injury, not otherwise classified, alleged or questionable	9	
Occupational injury, not otherwise classified, alleged or questionable, revisit	11	

UNCLASSIFIED

Occupational injury or exposure, radiation	0
Occupational injury or exposure, radiation, alleged or questionable	1
Occupational injury or exposure, radiation, alleged or questionable, revisit	1
Occupational illness, not otherwise classified	22
Occupational illness, not otherwise classified, revisit	107
Absence due to illness or injury, non-occupational	3,297
Absence due to illness or injury, occupational	69

Physical Examinations

Industrial hygiene	1,272
Job transfer	155
Periodic health	957
Preplacement	664
Rehire	69
Termination	621
Food handler	56
Other	472
Audiogram	3,061
Blood donation	70
Clinical laboratory procedures	5,875
Electrocardiogram	2,487
Ballistocardiogram	3
Pheochromocytoma test procedure	3
Field clinical laboratory procedures	256
Occupational Vision Section procedures	4,758
X-ray Section procedures	5,467
Special study interview	262
Clinical photograph	107
Dispensary visit, patient not seen	169
Psychodiagnostic test	111
Consultation, occupational condition	71
Consultation, non-occupational condition	2,367
Consultation, without patient, occupational	81
Consultation, without patient, non-occupational	755
Home visit	9
Pre-marital serodiagnostic test	40
Immunizations	6,654
Diagnostic procedure for private physician	473

UNCLASSIFIED

Disposition following dispensary visit:

Number of visits followed by a return to regular work	56,589
Number of visits followed by a return to modified work	3,639
Number of employees instructed to remain off work following illness-absence	4,894
Number of deaths among employees during the year	11
Total number of applicants for employment accepted	699
Total number of applicants for employment accepted conditionally	20
Total number of applicants for employment rejected	14
Number of employees referred to a private physician or sent to a hospital	241

Personnel attending patients:

Number of visits where care was rendered by nurse alone	31,228
Number of visits where care was rendered by nurse and physician	2,715
Number of visits where care was rendered by physician alone	8,702
Number of visits where service was rendered by technician	22,575
Number of visits where service was rendered by psychologist	85
Number of visits where service was rendered by psychiatrist	90

RECOMMENDATIONS

1. It is requested that a solution be reached for the permanent storage of clinical records of personnel having terminated employment at the Oak Ridge National Laboratory.
2. Microfilming of roentgenograms taken by the X-ray Section of the Health Division of ORNL should be accomplished as soon as deemed feasible by the Division of Biology and Medicine, U. S. AEC, Washington.

NOTE: It is to be noted that these two recommendations are the same as those made for the Annual Report, ORNL-1065, covering the period July 1950 to June 1951.

EXHIBITS

1. Portable laboratory equipment for use in the field.

UNCLASSIFIED

2. Special portable equipment used in the collecting of blood and urine specimens at the work site of the employee.
3. Special Exhibit created for display during the year by the Health Education Section of the Health Division.
4. Special health news columns created for the ORNL News during the year.
5. Special Exhibit featuring common, correctible faults present in safety glasses.
6. Special Poster, distributed throughout the Laboratory, while the special exhibit (number 5) was on display in the lobby of the Health Division.
7. Health column in ORNL News discussing the special exhibit (number 5).
8. Photograph showing advertisement in ORNL News concerning the weight reducing program.
9. Photograph of score sheet used during the special weight reducing program.

UNCLASSIFIED