030-20175

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
F. EDWARD HÉBERT SCHOOL OF MEDICINE
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799

RADIOLOGY AND
NUCLEAR MEDICINE

20 March 1989

TEACHING HOSPITALS
WALTER REED ARMY MEDICAL CENTER
NAVAL HOSPITAL, BETHESDA
MALCOLM GROW AIR FORCE MEDICAL CENTER
WILFORD HALL AIR FORCE MEDICAL CENTER

U. S. Nuclear Regulatory Commission
Region I, Nuclear Material Section B
475 Allen Dale Road
King of Prussia, Pennsylvania 19406

**RE: USNRC By-Product Materials License 19-23344-01**

Dear Sir:

Effective this date please delete Major David P. Alberth, MS, USA and add Commander Laurence P. Parr, MSC, USN as the Radiation Safety Officer on the subject By-Product Materials License. Major Alberth is leaving USUHS. Commander Parr is the Director, Environmental Health and Occupational Safety (EHS) and will serve as Radiation Safety Officer until a replacement for Major Alberth is assigned to USUHS. Commander Parr's Curriculum Vitae and Training and Experience credentials (copy enclosed) have been reviewed by the USUHS Radiation Safety Committee. The RSC approves his serving as the USUHS Radiation Safety Officer.

Sincerely,

KENNETH E. KINNAMON, D.V.M., Ph.D.
Associate Dean for Operations

Encl: (2)

FEE EXEMPT

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# RESUME

NAME: Laurence Fredrick Parr

ADDRESS: work - Uniformed Services University of the Health Sciences

Environmental Health and Occupational Safety
4301 Jones Bridge Road
Bethesda, Maryland 20814-4799

home - 9520 Wallingford Drive
Burke, Virginia 22015

EDUCATION: 1978 - received a Masters of Science Degree in Nuclear Engineering Sciences with a medical physics subspecialty from the University of Florida.

1972 - completed two years of post baccalaureate education in Radiation Biophysics at the University of Florida.

1970 - received a Bachelor of Science Degree with a Chemistry and Zoology major from the University of Florida.

CERTIFICATION: American Board of Radiology
Medical Nuclear Physics (1982).

JOB EXPERIENCE:

1989 - present: Primary job.

Director, Environmental Health and Occupational Safety, Uniformed Services University of the Health Sciences, Bethesda, MD (consisting of Radiation Safety, Occupational Safety and Industrial Health).

Duties:

- all administrative, management and technical aspects of department
- insure compliance with all applicable safety regulations
- actively monitor and document all safety issues to insure environmental and personal security
- draft safety policy for USUHS operations for approval by Dean
- assist researches in experimental design to assure safety
- collection and proper disposal of hazardous wastes
- provide training to employees in radiation, industrial and occupational safety

JOB EXPERIENCE (continued):

1986 - 1989: Primary job.
Senior Physicist for the department of Radiology at the Naval Hospital, Bethesda, MD.
Duties:
- provide physics support to Nuclear Medicine, CT, Ultrasound, Diagnostic Divisions including:
  - equipment specifications
  - acceptance testing
  - radiation safety performance and safety tests
  - quality control testing
  - in-service teaching of technologists, fellows, residents
  - equipment maintenance and "trouble shooting"

Other jobs.

Division Officer, Imaging Division, Radiology Department.
Duties:
- supervise twenty enlisted and six civilian employees
- prepare budgets, purchase documents, personnel actions, etc.
- assign work tasks based on division needs and priorities
- support all administrative needs of the division

Radiation Safety Officer, Naval Hospital, Bethesda, MD.
Duties:
- day to day operation of the radiation safety program
- maintain the Navy Radioactive Material Permit for the hospital
- provide training in accordance with license requirements

Laser Safety Officer, Naval Hospital, Bethesda, MD.
Duties:
- implemented laser safety program in accordance with DOD, DON and ANSI requirements
- maintained and coordinated medical physicals for laser users
- maintained data base of all users and equipment

TAD to U.S. Marine Headquarters as interim RSO.
Duties:
- perform initial operations to implement a unified and coordinated USMC radiation safety program
- draft necessary instructions in support of radiation safety program
- research all existing SOPs and instructions for inclusion or replacement within the program
- identify and contact other elements of Marine Corps impacted and supported by the radiation safety program

Radiology Representative to CHCS Program
Duties:
- Provide technical input to the development of the integrated hospital computer system being developed by DOD
- assist in the development of testing protocols verify functioning of proposed system
- reviewed vendors proposals and provided technical feedback for their use

1985 - 1986: Primary Job.

Assistant Head, Navy Nuclear Test Personnel Review Program, Chief of Naval Operations, Washington, D.C.
Duties:
- supervised three civilian and two military personnel
- reconstructed the movement of ships, planes and men who were involved in atmospheric nuclear testing
- performed radiation exposure estimates on involved individuals and units
- researched and answered congressional inquires in connection with atmospheric nuclear testing
- researched personnel involvement and exposures in support of Veteran Administration cases
- interacted with contractors in development of computer simulations for calculating personnel radiation exposures for various test series
- answered inquires by veterans who had questions concerning their involvement and exposure
- maintained a data base on over 250,000 veterans and their units who were involved in atmospheric testing

1982 - 1985: Primary Job.

Radiation Physicist, Naval Hospital, Oakland, CA.
Duties:
- provide equipment specification for new equipment establish, perform and interpret quality control of equipment in nuclear medicine
- maintain and trouble shoot equipment
- assist in establishing imaging procedures
- provide computer programming support for nuclear medicine
- supervise nine clinical nuclear medicine technologists
- provide in-service training to student nuclear medicine technologist
- provide physics training to radiology residents and nuclear medicine fellows
- provide training in nuclear weapons effects to the Preventive Medicine Technologist School

Other Jobs.

Radiation Safety Officer\Regional Radiation Health Officer, Naval Hospital, Oakland, CA.

Duties:

- submit renewal and amendment requests in support of the USNRC Broadscope License
- insure all necessary surveys, reports, records and other documentation were in order in compliance with regulations
- supervise the operation of the radiation dosimeter program
- devise and maintain techniques for counting and monitoring radioactive contamination and radiation exposure
- perform necessary dosimetry calculation in the event of internal radiative contamination
- establish and test annually the hospital's emergency plan for receiving radioactive contaminated injured patients
- provide consultation to all Navy elements within the Northwest Region in radiation safety matters
- advise the Commanding Officer and Regional Commander on radiation issues
- provide required radiation safety training to various staff personnel

Division Officer, Clinical Investigation Center, Naval Hospital, Oakland, CA.

Duties:

- supervise five military and four civilian staff
- perform budget and purchase actions
- coordinate research protocol submissions between the various review committees and final submission to Heath Sciences Education Training Command
- provide assistance to researchers in preparation of protocols

Administrative Officer for the Committee for the Protection of Human Subjects

Duties:

- schedule and review all research protocols that involved human use to insure compliance with applicable regulations
- schedule protocols for committee review
- maintain detailed records of committee action
- assist researchers in preparation of protocols
- insure annual review of human use protocols and audit protocols to verify compliance with regulations

1980 - 1982: Primary Job.

Radiation Safety Officer/Radiation Physicist and Regional Radiation Health Officer for the Naval Regional Medical Center, Pensacola, FL.

Duties:

- write equipment specifications
- establish and perform quality control on equipment
- establish imaging protocols for the nuclear medicine clinic
- prepare radiopharmaceuticals for patient studies
- perform patient studies in the absence of technologists
- provide in-service training to radiology and nuclear medicine technologists
- prepare renewal application for and amendments to the USNRC license
- perform all area surveys and monitoring to insure compliance with license and safe operating practice
- provide radiation safety training to staff

Other Jobs.

Division Officer, Nuclear Medicine Clinic

Duties:

- supervise two nuclear medicine technologist and occasionally one or two junior officers
- prepare annual budget
- execute all necessary personnel actions in support of the clinic
- prepare and keep current all SOPs and instructions pertinent to the nuclear medicine clinic

Regional Radiation Health Officer

Duties:

- provide radiation safety support through out the southeast region
- perform radiation safety and performance surveys on all x-ray equipment in region
- act as a consulting health physicist to the Naval Air Rework Facility
- consult all regional commanding officers on radiation matters as requested
- provide radiation (ionizing and non-ionizing) safety training and nuclear weapons affects training to aviation cadets, air maintenance personnel, emergency personnel, etc.

1977 - 1980: Primary Job.

Radiation Safety Officer, Radiation Physicist, Division Officer for Nuclear Medicine Regional Radiation Health Officer for the Naval Regional Medical Center, Great Lakes, Illinois.

Duties:

- equipment specification and purchase for the Nuclear Medicine Clinic
- radiopharmaceutical preparation and quality control
- assignment of tasks to staff technologist
- quality control and maintenance of equipment
- all other supervisory and management functions of the Nuclear Medicine Clinic
- implemented and assisted in the preparation of imaging protocols
- prepared and maintained the USNRC License
- supervised the radiation safety program for the hospital
- assisted the Occupational Health Department in radiation matters
- performed radiation safety surveys of x-ray equipment within the [illegible]ion

1978: Three-[illegible] deployment to the Pacific Nuclear Test Range, Marsha[illegible]slands to assist in the radiological surveys of the atoll[illegible]d for the United States' atmospheric nuclear testing abo[illegible]e USNS WHEELING. Was responsible for the ship boar[illegible]tion safety including insuring items returned to the shi[illegible]e not contaminated, that the ship did not become contaminated, decontamination of ship, equipment and personnel if necessary and providing personnel exposure monitoring as needed.

1976 - 1977: Attended the University of Florida to obtain Master's Degree.

1972 - 1976: Primary Job.

Assistant Radiation Safety Officer for the National Naval Medical Center, Bethesda and Personnel Dosimetry Specialist for the Bureau of Medicine and Surgery.

Duties:

- assisted the radiation safety officer in the maintenance of the Broadscope License issued to Naval Hospital Bethesda
- supervised the photodosimetry section consisting of three enlisted personnel
- coordinated the implementation of the Navy's new TLD neutron dosimeter
- performed studies into the characteristics of the new dosimeter
- performed radiation safety and equipment performance test on x-ray equipment
- taught radiation safety in the Officer's Nuclear Medicine Course

SHORT COURSES:

16-week course "Advanced Topics In Nuclear Magnetic Resonance Imaging" at George Washington University, 1987

4-day Nuclear Magnetic Resonance Review Course at University of California, San Francisco, 1984 Correspondence course in basic electronics

2-week External Beam Dosimetry - Principals and Calibration course at the M.D. Anderson Cancer Research Institute, University of Texas, 1983

2-week Navy Reactor Health Physics Course at the Navy's Nuclear Prototype Facility, 1975

Navy correspondence course in Environmental Health in 1975.

4-week Navy school on Nuclear, Biological and Chemical Warfare training at the Navy's Damage Control School, 1972

2-week Navy Radiation Health Course at the Navy Undersea Medical Institute, 1972

Correspondence course in digital electronics

Correspondence course in CMOS digital electronics

Numerous CMEs in medical physics and diagnostic imaging from professional meetings

TEACHING EXPERIENCE:

Staff Lecturer on radiological physics in support of the residency program, Department of Radiology, Naval Hospital Bethesda, 1986-1989

Instructor in basic sciences, imaging equipment, imaging computer and quality control in the Medical Officers Course on Nuclear Medicine Imaging and Radioisotope Techniques, 1986-

Guest Lecturer on licensing and radiopharmaceutical production for the Clinical Nuclear Medicine Technologist School, Naval School of Health Sciences, 1986-

Staff Lecturer in radiologic physics in support of the radiology residency program, Department of Radiology, Naval Hospital Oakland, 1982-1985

Guest lecturer to the Environmental Health Technologist School, HSETC, Oakland, CA on nuclear weapons effects and general radiation safety, 1982-1985

RESEARCH EXPERIENCE:

Collaborated with nuclear medicine clinicians in clinical research in the nuclear medicine clinic, Naval Hospital, Bethesda providing computer programming and statistical analysis, physics and equipment support (1986-1989)

"Comparison Of Radiation Exposure and Resolution Between Magnification And Normal Radiography Of The Kidneys", Masters Thesis, University Of Florida, Gainesville, Florida, 1977

Assisted in the development and evaluation of the use of thermoluminescent dosimeters for the detection of gamma and neutron radiation in a reactor environment. (Radiation Safety Department, National Naval Medical Center, Bethesda, 1972 - 1976)

Performed preliminary research into the development of a radioimmunoassay technique for the detection of native DNA in the blood in an effort to correlate this level to the cure rate or tumor regression rate in radiation therapy patients (Dr. DeLand, VA Hospital, Gainesville, Florida, 1972)

ADDITIONAL EXPERIENCE:

Worked as a consultant for the H.B. Robinson Nuclear Power Plant as a health physicist during that plant's refueling and maintenance cycles.

- performed in plant radiation area surveys during refueling and during steam generator eddy current testing
- maintained radiation exposure records on all workers to insure limits were not exceeded
- evaluated dosimeters to determine radiation exposure of workers, operated reactor entry control point
- performed personnel contamination monitoring

Experience in micro and minicomputers and computer programing including Fortran, Basic, "C" and MS-DOS Assembly

SOCIETIES:

American Physics Institute
American Association of Physicist in Medicine Society of Nuclear Medicine
Alpha Epsilon Delta Honorary Society

# TRAINING AND EXPERIENCE

NAME: Laurence F. Parr

CERTIFICATION: Medical Nuclear Physics by American Board of Radiology in June 1982

TRAINING:

| SUBJECT | LOCATION | Lecture/lab Courses (hours) | Supervised Laboratory (hours) | On the Job Train. (months) |
|---|---|---|---|---|
| Radiation Physics and Instrumentation | Univ of FL<br>MD Anderson | 250<br>60 | 150<br>10 | 12 |
| Radiation Protection | Univ of FL<br>Navy | 100<br>80 | 40<br>3 | 12 |
| Mathematics pertaining to use and measurement of radiation | Univ of FL<br>MD Anderson | 155<br>20 | 60<br>5 | 12 |
| Radiation Biology | Univ of FL | 150 | 30 | |
| Radiopharmaceutical Chemistry | Univ of FL | 30 | 10 | 12 |
| | Total | 930 | 308 | 48 |

EXPERIENCE:

| ISOTOPE | AMOUNT | LOCATION | DURATION | TYPE OF USE |
|---|---|---|---|---|
| Co-60 | 10,000 Ci | Nav. Hos. Great Lakes<br>Nav. Hos. Oakland | 100 hrs | Calibration, Therapy |
| Mo-99/ Tc-99m | 5 Ci | Nav. Hos. Great Lakes, Pensacola, Oakland, Bethesda | 300 hrs | Radiopharmaceutical production |
| Ga-67<br>Tl-201<br>I-131<br>I-123<br>In-111<br>I-125 | 15 mCi<br>10 mCi<br>200 mCi<br>5 mCi<br>2 mCi<br>1 mCi | Nav. Hos. Great Lakes, Pensacola, Oakland, Bethesda and Univ. of Florida's Shands Hospital. | 200 hrs | Imaging studies, Radioimmunoassay, research |

EXPERIENCE: (Cont.)

| ISOTOPE | AMOUNT | LOCATION | DURATION | TYPE OF USE |
|---|---|---|---|---|
| Cs-137 | 6000 Ci | Nav. Hosp. Bethesda | 10 hrs | Calibration, therapy |
| Cs-137 | 10 Ci | Nav. Hosp. Bethesda | 100 hrs | Calibration of film and instruments |
| Cs-137 | 1 Ci | Nav. Hosp. Oakland<br>Nav. Hosp. Bethesda<br>Nav. Hosp. Great Lakes | 30 hrs | Bracytherapy treatment |
| PuBe | 10 Ci | Nav. Hosp. Bethesda | 100 hrs | Calibration of TLD's and instruments |
| P-32 | 10 mCi | Nav. Hosp. Oakland | 10 hrs | Therapy of patient |
| H-3<br>C-14 | 1 mCi<br>1 mCi | VA Hospital<br>Gainesville, Florida | 200 hrs | Research |
| Xe-127<br>Xe-133 | 20 mCi<br>1 Ci | Nav. Hosp. Bethesda,<br>Oakland | 50 hrs | Lung imaging |

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BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03610
STATUS CODE: 2
FEE CATEGORY: EX 3M
EXP. DATE: 19890131
FEE COMMENTS: _____

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: UNIFORMED SERVS. UNIV. OF HEALTH SC
RECEIVED DATE: 890323
DOCKET NO: 3020775
CONTROL NO.: 110455
LICENSE NO.: 19-23344-01
ACTION TYPE: AMENDMENT

2. FEE ATTACHED
AMOUNT: $0
CHECK NO.: 0

3. COMMENTS

SIGNED R. J. Brown
DATE 89-03-27

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /__/)

1. FEE CATEGORY AND AMOUNT: _____

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT _____
RENEWAL _____
LICENSE _____

3. OTHER _____
_____

SIGNED _____
DATE _____