

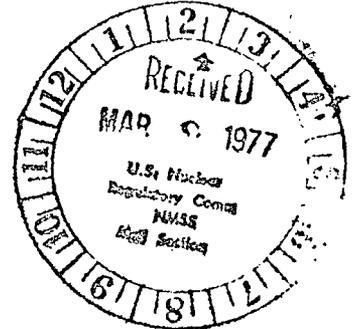


DEPARTMENT OF THE ARMY
HEADQUARTERS US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND
5001 EISENHOWER AVE., ALEXANDRIA, VA. 22333

DRCSF-P/77-0025

7 March 1977

Director
Nuclear Material Safety and Safeguards
US Nuclear Regulatory Commission
ATTN: Radioisotopes Licensing Branch
Washington, DC 20555



Gentlemen:

Forwarded is a request from US Army Electronics Command, Fort Monmouth, New Jersey to amend the following licenses:

- BML 29-01022-06
- BML 29-01022-07
- ✓ BML 29-01022-10
- SNM 1323
- SMB 1183

Changes requested are to delete Bartholmew Savignec and replace with Clifford Watson as Alternate Radiation Protection Officer. Delete J. M. Garner, Horst H. Kedesdy, CPT W. Chambers, Louis Kaplan and J. A. Robertson from membership on ECOM Ionizing Radiation Control Committee and add Steven A. Horne as member.

The experience and training in radiation of Messrs. Watson and Horne is submitted in Inclosure 1.

Please acknowledge receipt of correspondence in inclosed NRC Form (I-75) Reply Card.

Sincerely,

DARWIN N. TARAS
Chief, Health Physics
Safety Office

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3 Incl
as

Cy Furn:

HQ DA (DASG-HCH-E) WASH DC 20310
Dir, DARCOMFSA, Charlestown, IN 47111

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CHANGES IN ECOM IONIZING RADIATION CONTROL COMMITTEE

ADD:

Steven Horne

DELETE:

J. M. Garner
Horst H. Kedesdy
CPT W. Chambers
Louis Kaplan
J. A. Robertson

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Incl 1

Resume of Training and Experience
of Clifford R. Watson

1. Educational background:

Nuclear Weapons School	8 wks	1973	Compl Nuclear Weapons EOD
Sandia Laboratories	4 wks	1973	Compl Safeguard System Training
US Army Facilities Engineer- ing Support Agency School	50 wks	1975	Compl Nuclear Power Plant Operator (Health Physics - Process Control Specialty)

2. Vocational experience with radiation:

1973-1974 With 259th Ordnance Detachment, Savanna Army Depot, Ill., as Senior Nuclear Weapons Disposal Technologist.

1976 (5 wks) With Jersey Central Power & Light Company, Forked River, NJ as Consulting Health Physicist.

1975-Present US Army Electronics Command, Fort Monmouth, NJ as Health Physics Technologist.

3. Formal training in radiation:

a. Principles and practices of radiation protection.

<u>Where Trained</u>	<u>Duration of Training</u>
US Navy Nuclear Weapons School	8 weeks
Sandia Laboratories	4 weeks
Nuclear Power Plant Operator School	50 weeks

b. Radioactivity measurement, standardization, and monitoring techniques and instruments.

<u>Where Trained</u>	<u>Duration of Training</u>
US Navy Nuclear Weapons School	8 weeks
Sandia Laboratories	4 weeks
Nuclear Power Plant Operator School	36 weeks

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Encl 2

c. Mathematics and calculations basic to the use and measurement of radioactivity.

<u>Where Trained</u>	<u>Duration of Training</u>
US Navy Nuclear Weapons School	8 weeks
Sandia Laboratories	4 weeks
Nuclear Power Plant Operator School	50 weeks

d. Biological effects of radiation.

<u>Where Trained</u>	<u>Duration of Training</u>
US Navy Nuclear Weapons School	8 weeks
Sandia Laboratories	4 weeks
Nuclear Power Plant Operator School	20 weeks

4. On-the-job training in radiation.

a. Principles and practices of radiation protection.

<u>Where Trained</u>	<u>Duration of Training</u>
Savanna Army Depot	1 yr - 1973-1974
Jersey Central Power & Light Co.	5 wks - 1976
Ft Monmouth, NJ	10 mo - 1975-1976

b. Radioactivity measurement, standardization, and monitoring techniques and instruments.

<u>Where Trained</u>	<u>Duration of Training</u>
Savanna Army Depot	1 yr - 1973-1974
Jersey Central Power & Light Co.	5 wks - 1976
Ft Monmouth, NJ	10 mo - 1975-1976

c. Mathematics and calculations basic to the use and measurement of radioactivity.

<u>Where Trained</u>	<u>Duration of Training</u>
Savanna Army Depot	1 yr - 1973-1974
Jersey Central Power & Light Co.	5 wks - 1976
Ft Monmouth, NJ	10 mo - 1975-1976

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5. Experience with radioisotopes.

<u>Isotope</u>	<u>Maximum Activity</u>	<u>Place of Experience</u>	<u>Duration of Experience</u>
Am ²⁴¹	Millicuries	Nuclear Reactor School Ft Monmouth, NJ	50 weeks 10 months
C ¹⁴	Millicuries	Nuclear Reactor School Ft Monmouth, NJ	50 weeks 10 months
Co ⁵⁷	Millicuries	Nuclear Reactor School Ft Monmouth, NJ	50 weeks 10 months
Co ⁶⁰	125 Kilocuries	Ft Monmouth, NJ	10 months
Cs ¹³⁷	Hundreds of curies	Ft Monmouth, NJ	10 months
Tritium	Curies	Ft Monmouth, NJ	10 months
KR ⁸⁵	Millicuries	Ft Monmouth, NJ	10 months
Pu ²³⁸	Curies	Nuclear Reactor School Ft Monmouth, NJ	50 weeks 10 months
Pu ²³⁹	Hundreds of curies	Sandia Labs	4 weeks
Ra-Be	Curies	Ft Monmouth, NJ	10 months
Pu-Be	Curies	Nuclear Reactor School	50 weeks
Sr ⁹⁰ , Y ⁹⁰	Curies	Ft Monmouth, NJ	10 months
U ²³⁸	Curies	Sandia Labs	4 weeks
I ^{125,131}	Millicuries	Ft Monmouth, NJ	10 months

6. Experience with devices equivalent to that of actual use of radioisotopes.

<u>DEVICE</u>	<u>PLACE OF EXPERIENCE</u>	<u>DURATION</u>
Van de Graaff Accelerator	Fort Monmouth, NJ	10 months
X-Ray Diffraction	Fort Monmouth, NJ	10 months
Positive Ion Accelerator	Fort Monmouth, NJ	10 months
Radiographic X-Ray System	Fort Monmouth, NJ	10 months
Medical X-Ray Unit	Fort Monmouth, NJ	10 months

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Steven A. Horne, Health Physicist, US Army Electronics Command, Fort Monmouth, New Jersey

a. Education:

- (1) 1964 - AAS Nucleonics, Old Dominion University, Norfolk, Virginia.
- (2) 1975 - BSE Nuclear Science & Engineering, Catholic University of America, Washington, DC.
- (3) 1975 - 3 semester hours graduate work in Nuclear Science and Engineering, Catholic University of America, Washington, DC.

b. Radiation Experience:

- (1) 1964-1965 - Virginia Associated Research Center, NASA, Langley Station, Virginia, Twelve months of training, which include the use of such items as Van-De-Graff Accelerators, Neutron Generator, Dynamitron Accelerator, Linear Electron Accelerator, and a Synchrocyclotron Accelerator. Radioactive sources used include 100 mCi ^{60}Co , 10 mCi ^{241}Am , and micro quantity check sources. The above mentioned include all aspects of Health Physics.
- (2) 1965-1966 - E. R. Squibb, New Brunswick, New Jersey. The production and manufacturing of radio-pharmaceuticals and Health Physics. This includes the use of such radioactive material as ^{198}Au , ^{57}Co , ^{60}Co , ^{51}Cr , ^{59}Fe , ^3HTO , ^{197}Hg , ^{203}Hg , ^{125}I , ^{131}I , ^{192}Ir , ^{85}Kr , ^{22}Na , ^{32}P , ^{75}Se , ^{85}Sr , ^{99}Tc and ^{199}Tc .
- (3) 1967-1968 - Nuclear Division of Flow Corporation, Fort Belvoir, Virginia. Two months of formal training which includes radiation safety, radiation detection instrumentation, isotopic handling equipment, and pertinent Federal regulations. Experimental programs were performed by the use of radioactive sources ranging from 0.1 to 1200 Ci of ^{60}Co to determine the nuclear shielding effectiveness of real and ideal structures.
- (4) 1968-1976 - US Army Mobility Equipment Research and Development Command, Fort Belvoir, Virginia. As health physicist responsible for the accomplishment of the USAMERADCOM and USANVL Radiation Protection Program. Performed research studies basic and applied on complete projects or on major phases of long and/or short term projects in the field of health physics.
- (5) 1976-Present - US Army Electronics Command, Fort Monmouth, New Jersey. As health physicist responsible for the accomplishment of the Electronics Command radioactive commodity program. Responsibility includes development, initiates and administering programs to assure life cycle management control of numerous radioactive commodities.

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c. Radiation training:

(1) 1961-1975 - 56 semester hours in formal courses pertaining to radiation, including College Physics, Environmental Aspects of Nuclear Power Plant Management, Environmental Radioactivity, Nucleonic Fundamentals, Nuclear Properties and Interactions, Nuclear Physics, Nuclear Radiation Detection, Nuclear Reactor Physics, Radiation Biology, Radioisotope Techniques, and Radiological Physics.

(2) August 1969 - Radiological Safety Course pertaining to Nuclear Density Instrumentation. Sema Nuclear Corporation, Milwaukee, Wisconsin.

(3) September 1969 - 80 hours Occupational Radiation Protection Course 212 covering principles and practices of radiation protection, evaluation of external and internal exposure to radionuclides and methods for protection against these hazards. Public Health Service, Las Vegas, Nevada.

(4) November 1969 - 40 hours Fundamentals of Non-Ionizing Radiation Protection Course 264, consisted of technical principles essential to the control of non-ionizing radiation. Also included were concepts and techniques for minimizing exposure to personnel operating lasers and microwave generators and established protection standards. Public Health Service, Rockville, Maryland.

(5) June 1970 - 40 hours, DARCOM Field Safety Activity Laser Safety Course, covered laser theory, laser systems, effects on skin and internal organs, ocular effects, threshold levels for MRD safe exposure criteria, measurement of laser radiation, hazard evaluation of military laser installations, secondary hazard evaluation, medical surveillance, and survey methods and evaluation. University of Cincinnati, Cincinnati, Ohio.

(6) October 1970 - 80 hours Radionuclide Analysis by Gamma Spectroscopy Course 208 covering principles and practices of qualitative and quantitative analysis of environmental samples by gamma spectroscopy. Public Health Service, Winchester, Massachusetts.

(7) November 1971 - 80 hours Radiation Guides and Dose Assessment Course 272, consisted of radiation protection guides, internal dose calculations, and comparison of dosimetry data with appropriate guides for radiation protection. Environmental Protection Agency, Las Vegas, Nevada.

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