GENERAL (ELECTRIC

SPACE DIVISION

GENERAL ELECTRIC COMPANY VALLEY FORGE SPACE CENTER (MAIL: P. O. BOX 8555, PHILADELPHIA, PENNSYLVANIA 19101), Phone (215) 962-2000

August 5, 1980

Ms. Lynn O'Rielly U. S. Nuclear Regulatory Commission Office of Nuclear Materials Safety & Safeguards Materials Licensing Branch Washington, D. C. 20555

Dear Ms. O'Rielly:

Enclosed, per your request, are 4 copies of a resume detailing my radioactive material experience and training.

As in Mr. T. P. Handley's letter of April 4, 1980, we are again requesting that the name of Alfred W. Kobylinski replace the name of Richard G. Oesterling as Radiation Safety Office for the following licenses:

| #37-02006-05 | Control | number | 03-364 |
|--------------|---------|--------|--------|
| #37-02006-09 | Control | number | 04-101 |
| #SMB-1005 | Control | number | 15-997 |
| #SNM 1199 | Control | number | 15-998 |

One copy of this radioactive material experience summary should replace Attachment #3 of our application for bi-product material license #37-02006-05 (Control #03-364) December 19, 1978, one copy should be included with our application for the materials license that covers our Gammacell 220 irradiator, license #37-02006-9 (Control #04-101) July 26, 1977. One copy should replace Attachment #3 of our Application for Source Material license #SMB 1005 (Control #15-997) August 23, 1979, and one copy should be included with our application for Special Nuclear Material license #SNM 1199 (Control #15-998) May 19, 1975.

Information in this record was deleted in accordance with the Freedom of Information Act, exemptions

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August 5, 1980

I hope this resume answers your questions about my qualifications and allows prompt action on the other license amendments we have requested. If there are any further questions, please contact me at (215) 962-1085.

Sincerely,

A. W. Kobylinskí Industrial Hygienist

Radiation Safety Officer

/aab Enc.

CC: T. P. Handley

Alfred W. Kobylinski, Industrial Hygienist

Education

(b)(6).

B.S. (Biology)

Delaware Valley College, Doylestown, Pa and Pennsylvania State University, University Park, Pa

Several courses in chemistry, physics and biology that covered the physical properties of radioactive materials as well as the effects of different types of radiation on living tissue.

M.S. (Occupational Health) 1980 Drexel University, Philadelphia, PA

Courses in Radioisotope Methodology, Industrial Hygiene, Environmental Health, Epidemiology, Physiology, Toxicology, and Industrial Ventilation. The above courses contained formal lectures and supervised lab work covering (at least in part) all of the following topics:

- a) Principles and practices of radiation protection.

 A large variety of methods used to protect people from exposure to radiation and the principles behind those methods were thoroughly covered.
- b) Radioactivity measuring, standardizing, and monitoring techniques were covered using a variety of detection instruments such as G.M. tubes, proportional flow detectors, scintilation counters, neutron probe and detectors and alpha air monitors. Also methods for using and developing passive dosimeters such as TLD's and film badges were thoroughly covered.
- c) Mathematics and calculations basic to the use and measurement of radioactivity. This included (but not limited to) all mathematical and statistical calculations necessary to evaluate the decay rates of isotopes and to evaluate the efficiency of counting instruments, calculations necessary to determine required shielding thicknesses, and all calculations necessary to convert different units used for radiation measurements.
- d) Biological effects of radiation. The systemic and genetic effects of all types of radiation, ionizing and non-ionizing on biological tissue were thoroughly covered in most of these courses.
- e) Principles and practices of protection against the toxicity of source materials. As an occupational health major, practices necessary to protect personnel from the harmful effects of toxic materials, including source material, was a major portion in my training.

I have also attended several refresher courses and research study presentations dealing with radiation safety presented by the American Industrial Hygiene Association.

Experience

Summer 1974-1976 Toxicology Technician Ayerst Laboratories Animal Health Division Chazy, NY 12921

Assisted in the operation of diagnostic x-ray equipment used for the examination of laboratory animals.

1976-1978

Research Technician
Physiology Department
Thomas Jefferson University
Philadelphia, PA

Performed cardiovascular physiology studies utilizing radioactive tracer microspheres labeled with $\rm Sr85$, $\rm Ce^{147}$ and $\rm I^{125}$. These studies were designed to trace blood flow through the blood vessels of mammals by determining the quantity of labeled microspheres lodged in the particular tissues of interest. I was also responsible for conducting radiation surveys to determine the levels of gamma radiation in the lab area and for the determination of, and safe disposal of, all contaminated materials.

12-1979 Present Industrial Hygienist General Electric Company Space Division King of Prussia, PA

Under supervision of Mr. R. G. Oesterling (Certified Health Physicist) and Mr. T. P. Handley (Chairman, Ionizing Radiation Advisory Group), I have administered all aspects of the radiation protection and licensing program for a major aerospace facility. The radioactive materials I am responsible for are covered by NRC licenses which include a byproduct, source, and special nuclear material.

Radiation Protection Training

| Type of Training | Where Trained | <u>Duration</u> | On the | <u>Formal</u> |
|--|---|--|-------------------------------------|---------------------------------------|
| A. Principles and Practices of Radiation Protection | Delaware Valley College Penn State University Drexel University Thomas Jefferson University Ayerst Labs General Electric Co. | 2 years 2 years 1 year 1.5 years 6 months 6 months | no no no yes yes yes | yes yes yes yes no yes |
| B. Radioactivity measurement standardization and monitor- ing techniques and instruments | Penn State University Drexel University Thomas Jefferson University General Electric Co. | 2 years 1 year 1.5 years 6 months | no no yes yes | yes yes yes yes |
| C. Mathematics and calculations basic to the use and measurement of radioactivity | Delaware Valley College Penn State University Drexel University Thomas Jefferson University General Electric Co. | 2 years 2 years 1 year 1.5 years 6 months | no no no yes yes | yes yes yes yes yes |
| D. Biological effects of radiation | Delaware Valley College Penn State University Drexel University Thomas Jefferson University General Electric Co. | 2 years 2 years 1 year 1.5 years 6 months | no no no yes yes | yes yes yes yes |
| E. Principles and practices of protection against the toxicity of source materials | Drexel University General Electric Co. | 1 year 6 months | no yes | yes yes |

Experience with Radiation

| <u>Isotope</u> | Maximum Amount | Location | Duration | Type of Use |
|----------------------------|-----------------|-----------------------------|-----------|-----------------------------|
| Cerium-147 | 4 millicuries | Thomas Jefferson University | 1.5 years | Medical Research |
| Strontium-85 | 4 millicuries | Thomas Jefferson University | 1.5 years | Medical Research |
| Iodine-125 | 4 millicuries | Thomas Jefferson University | 1.5 years | Medical Research |
| Cobalt-60 | kilocuries | General Electric Company | 6 months | Gamma Irradiation |
| Krypton-85 | 18 curies | General Electric Company | 6 months | Leak Tests |
| Strontium-90 | 10 curies | General Electric Company | 6 months | Irradiation Source |
| Plutonium-238 | 90 millicuries | General Electric Company | 6 months | Calibration |
| Plutonium 239 | microcuries | General Electric Company | 6 months | Calibration |
| Cesium 137 | 100 millicuries | General Electric Company | 6 months | Calibration Source |
| Americium-241 | millicuries | General Electric Company | 6 months | |
| Uranium-235 | microcuries | General Electric Company | 6 months | Research |
| Uranium 238 | microcuries | General Electric Company | 6 months | Research |
| Other By-product materials | 30 curies | General Electric Company | 6 months | Research and Development |
| Other Source materials | kilograms | General Electric Company | 6 months | Shielding and Research |

| NRC FORM 218 (4-76) NRCM 0240 | U.S. NUCLEAR REGULATORY COMMISSION | DATE 6/18/82 | | |
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| L.A. O'REilly | | ! | | |
| PERSON CALLED | OFFICE/ADDRESS | PHONE NUMBER EXTENSION | | |
| Alferd Kobylinski | 3 18 | 215-962-1085 | | |
| SUBJECT | CONVERSATION | | | |
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| SUMMARY Amendments to Sie | Nos. 37-02006-09 | | | |
| | 37-02006-05 | | | |
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