

ATOMIC ENERGY COMMISSION  
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

INSTRUCTIONS.—Complete Items 1 through 16 if this is an initial application. If application is for renewal of a license, complete only Items 1 through 7 and indicate new information or changes in the program as requested in Items 8 through 15. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail three copies to: U. S. Atomic Energy Commission, Washington 25, D. C. Attention: Isotopes Branch, Division of Licensing and Regulation. Upon approval of this application, the applicant will receive an AEC Byproduct Material License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30 and the Licensee is subject to Title 10, Code of Federal Regulations, Part 20.

<p>1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc.)</p> <p>THE UNITED STATES TIME CORPORATION PARK ROAD EXTENSION MIDDLEBURY, CONNECTICUT</p> <p>mailing address: Waterbury, Conn. (06720)</p>	<p>(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1 (a)) Assembly points as follows:</p> <p>Middlebury, Conn. Abilene, Texas Little Rock, Arkansas Pforzheim, Germany</p>
<p>2. DEPARTMENT TO USE BYPRODUCT MATERIAL</p> <p>production</p>	<p>3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>6-8185-2 (K64)</p>
<p>4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of byproduct material. Give training and experience in Items 8 and 9.)</p> <p>See attached Schedule A</p>	<p>5. RADIATION PROTECTION OFFICER (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9.)</p> <p>P. J. McFadden</p>
<p>6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)</p> <p>TRITIUM manufactured by RADIUM CHEMIE Switzerland</p> <p>WESTRO Stuttgart, Germany</p> <p>MESSRS. W. MAIER, RADIUM-CHEMISCHE INDUSTRIE, Schwenningen/Neckar (Siluma-Tri 11/62)</p>	<p>(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYSICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity of source.)</p> <p>See attached Schedule A</p>
<p>7. DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED. (If byproduct material is for "human use," supplement A (Form AEC-313a) must be completed in lieu of this item. If byproduct material is in the form of a sealed source, include the make and model number of the storage container and/or device in which the source will be stored and/or used.)</p> <p>For exempt distribution and sale of luminous timepieces and hands and dials containing Tritium imported by applicant.</p> <p style="text-align: center;">DUPLICATED FOR DIV. OF COMPLIANCE</p> <p style="text-align: right;">A/37 555</p>	

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TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4 (Use supplemental sheets if necessary)

8. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)		FORMAL COURSE (Circle answer)	
			Yes	No	Yes	No
a. Principles and practices of radiation protection			Yes	No	Yes	No
b. Radioactivity measurement standardization and monitoring techniques and instruments			Yes	No	Yes	No
c. Mathematics and calculations basic to the use and measurement of radioactivity			Yes	No	Yes	No
d. Biological effects of radiation			Yes	No	Yes	No

9. EXPERIENCE WITH RADIATION. (Actual use of radioisotopes or equivalent experience.)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE

10. RADIATION DETECTION INSTRUMENTS. (Use supplemental sheets if necessary.)

TYPE OF INSTRUMENTS (Include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mr/hr)	WINDOW THICKNESS (mg/cm <sup>2</sup> )	USE (Monitoring, surveying, measuring)

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE.

12. FILM BADGES, DOSIMETERS, AND BIO-ASSAY PROCEDURES USED. (For film badges, specify method of calibrating and processing, or name of supplier.)

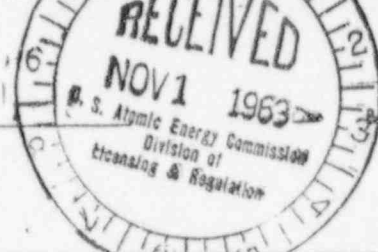
INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS

13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. If a diagram or sketch of facility is attached. (Circle answer) Yes  No  **ventilated storage is provided and work stations use fume hoods.**
14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source. **Pre employment physicals including dental examinations are followed by regular blood counts and expired breath and room air samples.**
15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved. **dials and hands will be disposed of by professional waste disposal contractors recommended by U. S. Radium.**

CERTIFICATE (This form must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PART 30, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

Date October 25, 1963



THE UNITED STATES TIME CORPORATION  
 Applicant named in item 1  
*A. F. Specht, Jr.*  
 A. F. Specht, Jr.  
 Assistant Secretary  
 Title of certifying official

WARNING.—18 U. S. C., Section 1001; Act of June 25, 1948, 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

SCHEDULE A

Tritium paint manufactured either by Radium Chemie, Westro or by Messrs. W. Maier, Radium-Chemische Industrie, will be supplied either to our Feltham, England plant or to vendors in Germany who will be applying it to dials and to hands. Vendors will be certifying to U. S. Time that appropriate AEC quality control specifications have been met and these certifications will become a permanent part of our files in the U.S.A. Based upon production samplings, our Feltham plant and our vendors estimate by calculation that the total amount of Tritium deposited on both hands and dials will never exceed 10 millicuries. Present maximums indicated by calculation range between 3 and 6 millicuries depending upon dial and hand style.



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BY THE  
OFFICE

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