



LEAR SIEGLER, INC.
INSTRUMENT DIVISION

RECEIVED

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June 18, 1979

U.S. Nuclear Regulatory Commission
License Management Branch
Washington, D.C. 20555

Attention: Mr. Nathan Bassin

Dear Mr. Bassin:

Expanding the items discussed in our telephone conversation on June 15, 1979, I am hereby submitting a detailed reply to your letter of May 22, 1979.

We have just received a reply from U.S. Radium (copy attached) concerning their application of tritiated paint to our parts. They have requested that you pull their license file (#37-00030-07E) and obtain the information you need.

As has been mentioned in earlier correspondence, our production build has been low for the past several years. Recently (May 4) some units were assembled for the first time in about a year. At that time, I witnessed the assembly and performed some table top smear surveys for potential tritium contamination using filter paper wiped over an area about 100 cm². The papers were sent to the University of Michigan, Radiation Control Service, for analysis. The results are attached. The highest value is about 1/3 of that cited in the U.S.N.R.C. Regulatory Guide 8.23 for an unrestricted area.

Future surveys will depend on build activity. Painted components are left packaged until they reach the assembly area. If for some reason they must be examined, handling is done per our specification SB1443 (attached).

Surveys will be done in the build area every time units are assembled. We will monitor this area to assure that the contamination limits do not exceed those for an unrestricted area as shown in Table 2 of Regulatory Guide 8.23. Surveys will be performed using the smear technique and the filter paper then sent to the University of Michigan for analysis. If higher than desired levels of radioactivity are found, decontamination will be performed by wiping the affected surfaces with wet paper towels soaked with a suitable solvent. Personnel will wear protective gloves during this operation.

After clean-up, the towels and gloves shall be deposited in a marked container provided for radioactive waste. The area will then be re-surveyed to insure that complete clean-up has been accomplished.

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21-07265-01 PDR

AUG 08 1979

Mr. Nathan Bassin
June 18, 1979
Page 2

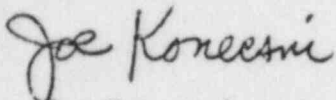
We will avoid shipment of units or painted components to American Avitron. These will be shipped only to freight forwarders for overseas customers.

After reassessing our activity over the past year and estimating future needs, our request is that we wish to possess not more than 10 curies of tritium at any one time, with any one component not to exceed 150 millicuries.

We trust that this information is sufficient, and look forward to your reply.

Very truly yours,


LEAR SIEGLER, INC.



Joe Konecsni
Section Head
Materials Engineering

JK/fk
Encls.

1785



4150 OLD BERWICK ROAD / BLOOMSBURG, PENNSYLVANIA 17815 / (717) 784-3510

June 1, 1979

Re: Your letter dated
March 20, 1979

Lear Siegler, Inc.
Instrument Division
4141 Eastern Avenue, S. E.
Grand Rapids, MI 49508

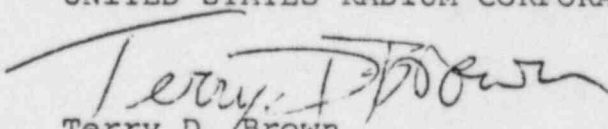
Attention: Mr. Joe Konecsni
Section Head
Materials Engineering

Dear Mr. Konecsni:

You may inform the Nuclear Regulatory Commission (NRC) that we use the types of radioluminous paint authorized in our NRC license number 37-00030-07E, amendment number 4, and that our quality control program is in accordance with conditions 1, 2, and 4 of the license. This information should be sufficient for the NRC since they have merely to pull our license file to retrieve the specific information that they request.

Very truly yours,

UNITED STATES RADIUM CORPORATION



Terry D. Brown
Nuclear Operations Manager

TDB
jrn

ENGINEERING SPECIFICATION

CC: Jan 1786
 Paul J. ...
 Jack ...
 Lee ...

HANDLING OF RADIOACTIVE MARKED PARTS



1. SCOPE

1.1 Scope - This procedure establishes acceptable methods of handling parts painted with radioactive self-luminous paint.

1.2 Purpose - This procedure applies only to material on which activated self-luminous paint is specified on the engineering drawing.

2. APPLICABLE DOCUMENTS

2.1 The following specifications and documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

LSI Specification

SM 2055 Paint, Self Luminescent, Radioactive

(Applications for copies should be addressed to the Purchasing Department of Lear Siegler, Inc., 4141 Eastern Avenue, SE, Grand Rapids, Michigan 49508.)

Publication

U. S. Atomic Energy Commission Regulations, Title 10, Chapter I

(Applications for copies should be addressed to the Director of Publications, U. S. Atomic Energy Commission, Oak Ridge, Tennessee.)

				NAME	DATE	LEAR SIEGLER, INC. INSTRUMENT DIVISION GRAND RAPIDS, MICHIGAN, US TITLE HANDLING OF RADIOACTIVE MARKED PARTS SPEC. NO. SB 1443 CODE IDENT NO. 35351 SH 1 OF 6
			STDS.			
C	E1108	L.C.	5-4-70	SYS PROJ	F. B. ...	
B	E1102	L.C.	6/18/70	DESIGN PROJ		
A	Rev	L.C.	11/24/69	CHK BY	M. ...	
SYM	CHG ORDER	CHK	DATE	APPD BY	R. ...	
REVISIONS				PREP BY	D. ...	

3. RESPONSIBILITY

- 3.1 Materials Engineering - The responsibility for proper handling of radioactive materials in any situation is delegated by the Atomic Energy Commission license to the Section Head of Materials Engineering. This person or his designated alternate is also known as the Radiological Safety Officer.
- 3.2 Supervision - Supervisors are responsible for supplying the Section Head of Materials Engineering with the names and clock numbers of the personnel who will be handling radioactive material. Supervisors are also responsible for reporting to the Section Head of Materials Engineering all or any abnormal conditions such as: chipped paint, scratched paint, etc.
- 3.3 Production Control - Production Control is responsible for notifying Receiving and the storage area which parts will have radioactive paint.
- 3.4 Manufacturing Engineer - The cognizant manufacturing engineer is responsible for updating and maintaining processes in compliance with this procedure.
- 3.5 Quality Engineer - The cognizant quality control engineer is responsible for updating and maintaining check lists in compliance with this procedure.
- 3.5.1 The P.D.C. for purchased materials must show "Radioactive Parts".

4. PROCEDURE

- 4.1 Receiving - Receiving personnel may open and remove contents of containers labeled "CAUTION RADIOACTIVE MATERIAL" per normal unpacking procedures, except where:

- (a) Individual parts are not labeled "Caution Radioactive Material".
- (b) Individual parts are not packaged in a polyethylene bag.

When either or both the above conditions exist, the material is to be held until the manufacturing engineer responsible for the part is notified and corrective action is taken to properly package and label the material. The Section Head, Materials Engineering, must be notified when containers or parts labeled "Caution Radioactive Parts" are received.

LEAR SIEGLER, INC.



INSTRUMENT DIVISION
GRAND RAPIDS, MICHIGAN, US

TITLE

HANDLING OF RADIOACTIVE
MARKED PARTS

SPEC. NO. SB 1443

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SH 2

4.2

Incoming Inspection - Material labeled "Caution Radioactive Material" may be handled or removed from the container and/or polyethylene bag for inspection purposes by authorized personnel only. In such cases:

- (a) The inspector must wear disposable latex or surgical gloves when handling unpackaged material.
- (b) At completion of inspection the material must be repackaged as received with radioactive caution label attached.
- (c) Any person making direct skin contact with radioactive painted surfaces during inspection handling must cleanse the affected skin area thoroughly with soap and water and prior to inserting anything into his mouth, such as cigarettes, pencils, food, etc., if contact with any part of the hand is made.
- (d) After use, disposable gloves must be placed in an identified closed container for pickup and disposal by Materials Engineering. The container shall be furnished by Manufacturing Engineering.

4.2.1

Radioactive parts, awaiting inspection in the receiving area, shall be segregated and isolated from Receiving Inspection personnel.

4.3

Storage Area - Radioactive parts must be stored in an isolated area of the present stockroom or an enclosed cabinet within the present stockroom. The storage area must:

- (a) Be identified "CAUTION RADIOACTIVE MATERIAL".
- (b) Have access to the area restricted to authorized personnel only whose name and clock number is registered with Materials Engineering per Para. 3.2.
- (c) Not accept radioactive parts improperly labeled or packaged, in which case the cognizant manufacturing engineer must be notified.
- (d) Withhold radioactive painted parts from assembly kits until the parts are required for assembly at which time they will be requisitioned on a daily basis.

LEAR SIEGLER, INC.



INSTRUMENT DIVISION

GRAND RAPIDS, MICHIGAN, US

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HANDLING OF RADIOACTIVE
MARKED PARTS

SPEC. NO. SB 1443

CONFIDENT NO. 35351 SH 3

- 4.5 Inspection - Inspectors who inspect radioactive self-luminous painted parts may perform inspection operations per standard procedures, except:
- (a) They must wear disposable latex or surgical gloves whenever direct skin contact with the radioactive material is inherent or possible during the inspection process.
 - (b) They must have eye protection, such as glasses or magnifying lamp, when inspecting the radioactive material, subassemblies or final assemblies within ten inches of the eye.
 - (c) If direct skin contact is made with the parts, inspectors must cleanse the affected skin area as in 4.2(c).
- 4.6 Shipping Area - The shipping departments must assure the following is completed for radioactive parts in addition to standard packaging:
- (a) Identify all shippers and accompanying papers a note stating "Radioactive Devices - No Label Required".
 - (b) Place into each container having a completed assembly containing radioactive parts an information sheet indicating the extent of radioactive material, the precautions in handling and directions to be followed in case of damaged hermetic seals. See Attachment I.
 - (c) Notify the Section Head of Materials Engineering when shipment is to be made.
- 4.7 Salvage - Material labeled "Caution Radioactive Material" received into the salvage area for scrap shall not be disposed of without direction from the Section Head of Materials Engineering.

LEAR SIEGLER, INC.


 INSTRUMENT DIVISION
 GRAND RAPIDS, MICHIGAN, US

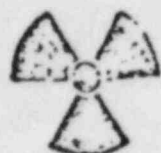
TITLE

HANDLING OF RADIOACTIVE
MARKED PARTS

SPEC. NO. SB 1443

CODE IDENT NO. 35351

SH 5




CAUTION



RADIOACTIVE MATERIAL

This product contains _____ of RADIOACTIVE

* To be filled in for each part number.

LEAR SIEGLER, INC.	 INSTRUMENT DIVISION GRAND RAPIDS, MICH.	UNLESS OTHERWISE SPECIFIED DIMS ARE IN INCHES. TOL. ARE: 2 PLACE DEC \pm 02 ANGLE 3 PLACE DEC \pm 005 \pm 5°	SIZE	CODE IDENT NO.	DRAWING NO.
			A	35351-	3B1443
			SCALE		SHEET 6