

## MATERIALS LICENSE

Amendment No. 59

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

## OFFICIAL RECORD COPY

## Licensee

1. LFE Industrial Systems Corporation

2. 55 Green Street  
Clinton, Massachusetts 01510In accordance with the letter dated  
July 24, 1996,3. License Number 20-01382-02 is amended in  
its entirety to read as follows:

4. Expiration Date November 30, 2000

5. Docket or  
Reference No. 030-045986. Byproduct, Source, and/or  
Special Nuclear Material7. Chemical and/or Physical  
Form8. Maximum Amount that Licensee  
May Possess at Any One Time  
Under This License

A. Strontium 90

A. Sealed sources

A. Not to exceed 150  
millicuries per source,  
total not to exceed 50  
curies

B. Krypton 85

B. Sealed sources

B. Not to exceed 1.5 curies  
per source, total not to  
exceed 200 curies

C. Americium 241

C. Sealed sources

C. Not to exceed 1 curie per  
source, total not to  
exceed 30 curies

D. Cobalt 60

D. Sealed sources

D. Not to exceed 1 curie per  
source, total not to  
exceed 2 curies

E. Cesium 137

E. Sealed sources

E. Not to exceed 1 curie per  
source, total not to  
exceed 3 curies

F. Promethium 147

F. Sealed sources

F. Not to exceed 150  
millicuries per source,  
total not to exceed 1  
curie

## 9. Authorized use

A. through F. For use and/or possession incident to:

- (1) Research, development, manufacture, and testing of gauging devices.
- (2) Installation into or removal from gauging devices.
- (3) Installation, relocation, repair, and servicing of LFE Industrial Systems Corporation devices and other gauging devices of the same basic design as LFE devices manufactured by the following companies: ABB Process Automation, Accuray, Advanz, Aeonics, Barber Colman, Betacontrol, Eurotherm, FAG, Fife, Indev, Mahlo, Measurex, NDC Systems, Ohmart, and Yokogawa. Leak Testing of sealed sources and radiation surveys of devices are included.
- (4) Calibration of radiation survey and measuring instruments. 0/1

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- (5) Pick-up, storage, and transfer of sealed sources and devices manufactured by LFE Industrial Systems Corporation and other devices manufactured by the companies listed in (3) above received from customers for disposal.
- (6) Distribution in the gauging devices specified in Condition 10 of this license or other gauging devices (e.g., custom devices to persons authorized to receive the licensed material pursuant to terms and conditions of specific licenses issued by the Nuclear Regulatory Commission or any Agreement State.
- (7) Instruction and training of individuals in the use of gauging devices.

## CONDITIONS

10. Except for custom-made devices, each device distributed under this license shall be in accordance with the following table:

Device Model Number	Type	Source Model Number	Isotope	Maximum Activity per source (millicuries)
A. BGL-1	"O" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	50
B. BGL-1C	"C" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	50
C. BGL-7	"O" Frame	S-6	Kr 85	500
D. BGL-7A	"O" Frame	S-6	Kr 85	750
E. BGL-7C	"C" Frame	S-6	Kr 85	500
F. SC-1A through SC-1F	"C" Frame	S-10	Sr 90	100
G. SC-7A through SC-7C	"C" Frame	S-70	Kr 85	1200
H. SC-7D through SC-7E	"C" Frame	S-6	Kr 85	750
I. SCL-1A and SCL-1B SCL-1B	"O", "MO", or "C" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	50
J. SCL-7A or SCL-7B or SCL-7C or SCL-77A	"O", "MO", or "C" Frame	LFE S-6A or LFE S-70A or Amersham KAC.D1 or Amersham KAC.D3	Kr 85 Kr 85 Kr 85 Kr 85	500 (S-6A) 1200 (S-70A) 1000 (KAC.D1) 750 (KAC.D3)
K. SN-1A through SN-1F	"N" Frame	S-10	Sr 90	100
L. SN-1A through SN-1F	"N" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	50
M. SN-7A through SN-7C	"N" Frame	S-70A	Kr 85	1200
N. SN-7D and SN-7E	"N" Frame	S-6A	Kr 85	750
O. SNP-7B	"N" Frame	S-70A	Kr 85	1200
P. SO-1A through SO-1C	"O" Frame	S-10	Sr 90	100
Q. SO-7A and SO-7C	"O" Frame	S-70	Kr 85	1200
R. SO-7D and SO-7E	"O" Frame	S-6A	Kr 85	750
S. SN-P7A4	"N" Frame	S-4	Kr 85	450
T. FSB-76	FAB	S-76	Kr 85	500
U. HUB-76A	FAB	S-76A	Kr 85	500
V. HUB-77A	FAB	S-77A	Kr 85	1200
W. HUB-SS-1	FAB	SS-1	Sr 90	20

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X. HUB-SS-3	FAB	SS-3	Am 241	1000
Y. SCL-1C	"O", "MO", or "C" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	150 (S2-A2) 100 (NER-592 or S1F.D1)
Z. SNP-1B	"N" Frame	S2-A2 or NER-592 or S1F.D1	Sr 90	100
AA. SSL-3	"C" Frame	SS-3	Am 241	1000
BB. SU-S3	"O", "MO", or "C" Frame	SS-3A	Am 241	1000
CC. SU-P77A and SU-77A	"O", "MO", "C" Frame	LFE S-70A or Amersham KAC.D1, or Amersham KAC.D3, LFE S2-A2 or New England Nuclear NER-592 or Amersham S1F.D1	Kr 85 Kr 85 Kr 85 Sr 90 Sr 90	1200 (S-70A) 1000 (KAC.D1) 750 (KAC.D3) 100 (S2-A2) 100 (NER-592) 100 (S1F.D1)
DD. SU-S7	"O", "MO", or "C" Frame	SS-7A	Kr 85	1200
EE. SCL-1D	"O", "MO", or "C" Frame	S2-A2; NER-592 or S1F.D1	Sr 90	100

USER LEAK TEST INTERVAL: 6 months for all sealed sources except Krypton 85 sources.

11. Licensed material may be used at 55 Green Street, Clinton, Massachusetts, and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
12.
  - A. Licensed material shall be used by, or under the supervision of W. R. Prendergast, or individuals who have completed the training described in licensee letters dated April 14, 1995 and August 10, 1995.
  - B. The Radiation Safety Officer for this license is William R. Prendergast.
13.
  - A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed 3 years.
  - B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.

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- C. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen 3; or
  - (ii) they contain only a gas; or
  - (iii) the half-life of the isotope is 30 days or less; or
  - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
  - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
14. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material".



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15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated December 15, 1993
- B. Letter dated February 27, 1995
- C. Letter dated April 14, 1995
- D. Letter dated August 10, 1995
- E. Letter dated September 18, 1995
- F. Letter dated October 2, 1995
- G. Letter dated November 3, 1995

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

John R. McGrath

Nuclear Materials Safety Branch  
Region I

King of Prussia, Pennsylvania 19406

Date

SEP - 7 1996

SEP - 7 1996

Mr. William R. Prendergast  
Radiation Safety Officer  
LFE Industrial Systems Corporation  
55 Green Street  
Clinton, MA 01510

Dear Mr. Prendergast:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

As you requested, we have deleted the names Eakman, Dias and Cashes from Condition No. 12.A. We have not, at this time, added Hansen, Schartner and Shatos, since you indicated in your July 24, 1996 letter that their training has not yet been completed. Please note that if their training is in conformance with Condition 12. (training described in letters dated April 14, 1995 and August 10, 1995), their names would not have to be listed on the license.

Thank you for your cooperation.

Sincerely,

**ORIGINAL SIGNED BY:**

John R. McGrath  
Senior Health Physicist  
Division of Nuclear Materials Safety

License No. 20-01382-02  
Docket No. 030-04598  
Control No. 123495

DOCUMENT NAME: R:\WPS\MLTR\L2001382.02

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI				
NAME	McGrath						
DATE	08/12/96		08/ /96		08/ /96		08/ /96

OFFICIAL RECORD COPY **ML 10**

July 24, 1996

030-04599

Director, Region 1  
U. S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406-1415

ATTN: Nuclear Materials Safety Branch

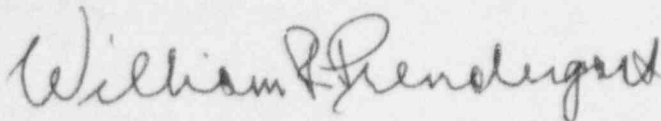
SUBJECT: License Number 20-01382-02  
Docket 030-04598

Dear Sir/Madam:

This letter pertains to paragraph 12.A of license number 20-01382-02. I must advise you that S. Eakman, A. Dias, and R. Cashes will no longer be supervising the use of licensed material at LFE Industrial Systems Corporation. In their place will be P. Hansen, R. Schartner, and R. Shatos. P. Hansen is a Principal Engineer, R. Schartner is a Field Service Technical Specialist, and R. Shatos is a Systems Engineer. I have been providing training for these employees for several months, and their training will continue for an additional several months.

If you have any questions, please call me at (508) 365-3438 or fax me at (508) 365-3455. I will be on vacation until August 12, 1996.

Very truly yours,



William R. Prendergast  
Radiation Safety Officer  
LFE Industrial Systems Corporation

WRP/ddl

123495

# LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH  
DIVISION OF ACCOUNTING AND FINANCE  
OFFICE OF THE CONTROLLER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, DC 20555-0001

LFE INDUSTRIAL SYSTEMS CORPORATION  
ATTN: WILLIAM R. PRENDERGAST  
RADIATION SAFETY OFFICER  
55 GREEN STREET  
CLINTON, MA 01510

## TYPE OF ACTION

- ☐ NEW LICENSE  
☐ RENEWAL OF LICENSE  
☐ AMENDMENT TO LICENSE

REQUESTED DATE

7-24-96

LICENSE NUMBER

20-01382-02

CONTROL NUMBER

123495

## I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
3N	\$	\$	\$ 590.00
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE \$ 590.00  
PAYMENT RECEIVED \$ 0.00  
AMOUNT DUE \$ 590.00

☒ Your request was received without the prescribed application fee.

☐ We received your Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_. Payment of the additional fee noted above is required.

☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

## II. FEE NOT REQUIRED

- ☐ Enclosed is Check No. \_\_\_\_\_ which accompanied your request. The fee is not required because:
- ☐ We received your Check No. \_\_\_\_\_ in payment of the fee.
- ☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated \_\_\_\_\_, Control No. \_\_\_\_\_.
- ☐ Your request was combined, prior to review, with your request, Control No. \_\_\_\_\_.

## III. CHECK RETURNED

- ☐ Enclosed is Check No. \_\_\_\_\_ which was returned to us by the bank for:
- ☐ INSUFFICIENT FUNDS  
☐ ACCOUNT CLOSED  
☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

## IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

- ☐ License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, issued on \_\_\_\_\_, was issued without the required fee being collected. The fee required is noted in Section I of this form.
- ☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).
- ☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

SIGNATURE -- LICENSE FEE ANALYST

BRENDA BROWN

LFDCB

BB BB

8/7/96

LFDCB

Distribution:

MAP Correspondence

LFDCB Chief

Invoice File w/encl

PENDING FILE

LFDCB Analyst

LFDCB R/F

DAF R/F

DATE

8-7-96



(FOR LFMS USE)  
INFORMATION FROM LTS

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM  
AND  
REGIONAL LICENSING SECTIONS

PROGRAM CODE: 03214  
STATUS CODE: 0  
FEE CATEGORY: 3B 3N  
EXP. DATE: 20001130  
FEE COMMENTS: 3B 3N 7/2/90 RULE  
DECOM FIN ASSUR REQD: N  
.....

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: LFE INDUSTRIAL SYSTEMS CORPORATION  
RECEIVED DATE: 960726  
DOCKET NO: 3004598  
CONTROL NO.: 23495  
LICENSE NO.: 20-01382-02  
ACTION TYPE: AMENDMENT

2. FEE ATTACHED

AMOUNT: -----  
CHECK NO.: -----

3. COMMENTS

SIGNED  
DATE

M. a. Perkins  
7/22/96

1996 AUG - 1 AM 10:55

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED 1/1)

1. FEE CATEGORY AND AMOUNT: 3B (3N) \$590

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:

AMENDMENT -----  
RENEWAL -----  
LICENSE -----

3. OTHER -----  
-----

SIGNED  
DATE

-----  
-----

Log Aug 5  
Remitter 34055525  
Check No. 5570  
Amount 3B 3N  
Category Amo  
No of Fee 8/22/96  
Check Rec'd 62  
Completed