

MATERIALS LICENSE

Amendment No. 09

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, 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.

Licensee

1. Sentex Sensing Technology, Inc.
d.b.a. Sentex Systems, Inc.2. 553 Broad Avenue
Ridgefield, New Jersey 07657In accordance with letter dated
September 16, 1992,3. License number 29-20512-01 is amended in
its entirety to read as follows:

4. Expiration date April 30, 1992 (Extended)

5. Docket or
Reference No 030-193536. 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. Hydrogen 3

A. Titanium tritide foils
(Safety Light
Corporation Model 508-3)A. Not to exceed 150
millicuries per foil and
6,000 millicuries total

B. Nickel 63

B. Foil (NRD Model N-1001)

B. Not to exceed 15
millicuries per source
and 600 millicuries total

9. Authorized use

A. and B. For use in research and development of electron capture detector cells and for the manufacture, service and distribution of Model 50319 series detector cells in Sentex instruments, to persons authorized to receive the licensed material pursuant to the terms and conditions of a specific license issued by the Nuclear Regulatory Commission or an Agreement State

CONDITIONS

10. Licensed material may be used at licensee's facilities, 553 Broad Avenue, Ridgefield, New Jersey 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.

11. A. Licensed material shall be used by, or under the supervision of, Amos Linenberg or David Robinson.

B. The Radiation Safety Officer for this license is Amos Linenberg, Ph.D.

12. This license does not authorize commercial distribution to persons generally licensed or persons exempt from licensing.

120150

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number

29-20512-01

Docket or Reference number

030-19353

Amendment No. 09

(Continued)

CONDITIONS

13. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), of 10 CFR Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory.
15. 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.
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.

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SUPPLEMENTARY SHEET

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(15. Continued)

CONDITIONS

- 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.
16. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents foil temperatures from exceeding that specified by the manufacturer.
17. The licensee may transport licensed material in accordance with the provisions of 10 CFR 71, "Packaging and Transportation of Radioactive Material".

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SUPPLEMENTARY SHEET

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(Continued)

CONDITIONS

18. 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 August 31, 1981
- B. Letter dated October 28, 1981
- C. Letter dated May 10, 1983
- D. Letter dated August 9, 1983
- E. Letter dated September 6, 1983
- F. Letter dated October 15, 1983
- G. Letter dated May 31, 1984
- H. Letter dated January 10, 1985
- I. Letter dated January 16, 1986
- J. Letter dated February 20, 1986
- K. Letter dated September 18, 1986
- L. Letter dated June 4, 1987
- M. Letter dated February 4, 1991
- N. Letter dated April 30, 1991
- O. Letter dated November 22, 1991
- P. Letter dated February 13, 1992
- Q. Letter dated September 16, 1992

Date

OCT 18 1992

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

Elizabeth Ulrich

Nuclear Materials Safety Branch
Region I

King of Prussia, Pennsylvania 19406

OCT 18 1992

License No. 29-20512-01
Docket No. 030-19353
Control No. 117201

Sentex Sensing Technology, Inc.
ATTN: Amos Linenberg, Ph.D.
President
553 Broad Avenue
Ridgefield, New Jersey 07657

Dear Dr. Linenberg:

Please find enclosed an amendment to your NRC Material License.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the Region I Material Licensing Section, (215) 337-5093, so that we can provide appropriate corrections and answers.

Please be advised that you must conduct your program involving licensed radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, please note the items in the enclosed, "Requirements for Materials Licensees."

Since serious consequences to employees and the public can result from failure to comply with NRC requirements, the NRC expects licensees to pay meticulous attention to detail and to achieve the high standard of compliance which the NRC expects of its licensees.

You will be periodically inspected by NRC. A fee may be charged for inspections in accordance with 10 CFR Part 170. Failure to conduct your program safely and in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in prompt and vigorous enforcement action against you. This could include issuance of a notice of violation, or in case of serious violations, an imposition of a civil penalty or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions, 10 CFR Part 2, Appendix C.

Sentex Sensing Technology, Inc.

-2-

We wish you success in operating a safe and effective licensed program.

Sincerely,


Original Signed By:
Elizabeth Ullrich




John D. Kinneman, Chief
Research, Development &
Decommissioning Section
Division of Radiation Safety
and Safeguards

Enclosures:

1. Amendment No. 09
2. Requirements for Materials Licensees


RI:DRSS
Brown/gc

10/16/92


RI:DRSS
Kinneman

10/16/92

SENTEX

SENSING TECHNOLOGY, INC.
ACQUISITION CORP.

September 16, 1992

Mr. Keith Brown, Ph.D
US Nuclear Regulatory Commission
Region I
Nuclear Material Safety Branch
475 Allendale Road
King of Prussia, Pa. 19406

375 SYLVAN AVENUE
ENGLEWOOD CLIFFS, N.J. 07632
(201) 568-7079
(201) 568-7081 (FAX)

030-19353

Re: Amendment for USNRC Licenses
1) License No. 29-20512-01
2) License No. 29-20512-02G

NAME
CHANGE

Dear Mr. Brown:

This letter shall confirm that Sentex Systems Inc., a wholly owned subsidiary of SENTEX SENSING TECHNOLOGY, INC. intends to merge into its parent company and the surviving corporation will be Sentex Sensing Technology

This is a change of name only. The company 1 facilities, personnel and all other terms and of our licenses shall remain the same. Accor hereby request, an amendment of our licenses that the licensee is Sentex Sensing Technolog

KEEP TOGETHER *
(117201/117202)

* CHECK FOR BOTH
ACTIONS ATTACHED
TO 117201.

In addition, we shall, after our merger is con applying to the State of New Jersey for authorization to use the name "Sentex Systems Inc." (DBA). To forestall confusion we would also request that both corporate names, Sentex Sensing Technology, Inc. and Sentex Systems Inc. appear on the amended license. We have enclosed \$590.00 and \$420.00 as the fees for this amendment.

Thank you for your attention to this matter and, certainly, if there is additional information required please contact me directly.

SENTEX SENSING TECHNOLOGY, INC.

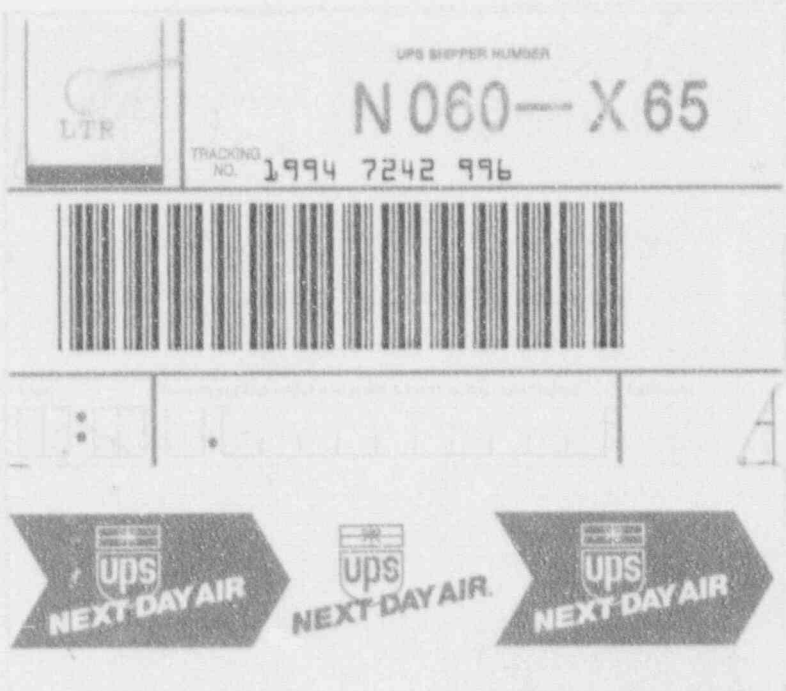
Joanne M. Bianco
Vice President

Log	117201-3
Remitter	
Check No.	1008
Amount	\$1010.00
Fee Category	203N
Type of Fee	AMC
Date Check Rec'd	10/1/92
Date Completed	10/1/92
By	[Signature]

117201

OFFICIAL RECORD COPY ML 10

SEP 25 1992



BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03
STATUS CODE: 2
FEE CATEGORY: 3B 3N
EXP. DATE: 19920229
FEE COMMENTS: 3B & SERV 7/2/90
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: SENTEX SENSING TECHNOLOGY, INC.
RECEIVED DATE: 920925
DOCKET NO: 3019353
CONTROL NO.: 117201
LICENSE NO.: 29-20512-01
ACTION TYPE: AMENDMENT

2. FEE ATTACHED

AMOUNT: \$1010.00
CHECK NO.: 1308

3. COMMENTS

03 & 07 approved for
10/11

SIGNED
DATE

Rebecca J. Brown
9/28/92

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

1. FEE CATEGORY AND AMOUNT:

3B 3N

\$570

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

AMENDMENT
RENEWAL
LICENSE

3. OTHER

SIGNED
DATE

Brown
11/12/92