



Unison Industries  
 7575 Baymeadows Way  
 Jacksonville, FL 32256 USA  
 Telephone: 904/739/4000  
 Facsimile: 904/739/4200  
 www.unisonindustries.com

October 1, 2004

Mr. Anthony S. Kirkwood  
 NMSS/IMNS/MSIB  
 United States Nuclear Regulatory Commission  
 11545 Rockville Pike  
 Rockville, MD 20852-2738

To: Strosnider,  
 NMSS

Mail Control No. 022434  
 Docket No. 030-31066  
 License No. 09-23745-01E

cys: EDO  
 DEDMRS  
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 AO  
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Dear Mr. Kirkwood,

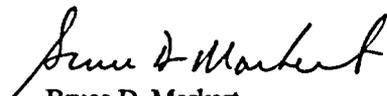
This refers to your letter dated September 14, 2004 in which you requested additional information pertinent to Unison Industries' application for renewal of license.

In response to your request, I submit the following:

- 1) You stated that the transfer reports for the period July 1, 1997 to June 30, 1999 were lost or not filed. Enclosed is a copy of the January 15, 2002 letter, sent to Director Virgilio, reporting the material transfers between 1996 and 2001 for both the Norwich and Jacksonville plants. Copies of this letter are being resent to Mr. Virgilio plus the Region I and II offices today.
- 2) Unison Industries' Radiation Safety Officer has the authority to sign official documents on behalf of Unison Industries.
- 3) In accordance with 10 CFR 30.15(a)(8)(iv), each electron tube manufactured at Norwich and Jacksonville contains less than 30 microcuries of Krypton-85. Also, no electron tube manufactured at Norwich or Jacksonville emits a level of radiation greater than 1 millirad per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber.
- 4) The exciter boxes that house the spark gaps are hermetically sealed aluminum or stainless steel containers that are welded or soldered shut. There is no chance of accidentally opening the housing without destroying the unit. Only an intense and deliberate excessive force could open the exciter housing and cause the release of the Krypton 85 gas. The resulting release of the gas would dissipate readily into the atmosphere. There would be no residual contamination. The exciters are very sturdy and must withstand the rigors of being installed in an operating aircraft engine. Each exciter design is environmentally tested, including thermal cycling and vibration, prior to being released to production

If any additional information is required, please contact me at 904-739-4258, 904-739-4200 (facsimile), or [Bruce.Markert@unison.ae.ge.com](mailto:Bruce.Markert@unison.ae.ge.com).

Sincerely,

  
 Bruce D. Markert  
 Radiation Safety Officer

Template: EDO-001

E-RIDS: EDO-01

January 15, 2002



Unison Industries  
7575 Baymeadows Way  
Jacksonville, FL 32256 USA  
Telephone: 904/739/4000  
Facsimile: 904/739/4200  
[www.unisonindustries.com](http://www.unisonindustries.com)

Mr. Martin J. Virgilio, Director  
Office of Nuclear Material Safety and Safeguards  
United States Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, MD 20852-2738

RE: Report of Transfer pursuant to 10 CFR Part 32.16.c.3  
License No. 31-15292-01E

Dear Director Virgilio,

Please reference the enclosed letter to Mr. Bruce Carrico for the relevance of this communication.

In accordance with 10 CFR Part 32.16.c.3, Unison Industries—Norwich Plant is submitting the following information:

A total of 10,826 tubes, containing Krypton-85 activity of 0.028 curies, were shipped from 07/01/96 through 06/30/97.

A total of 9,029 tubes, containing Krypton-85 activity of 0.024 curies, were shipped from 07/01/97 through 06/30/98.

A total of 6,113 tubes, containing Krypton-85 activity of 0.022 curies, were shipped from 07/01/98 through 06/30/99.

A total of 6,113 tubes, containing Krypton-85 activity of 0.201 curies, were shipped from 07/01/99 through 06/30/00.

A total of 7,620 tubes, containing Krypton-85 activity of 0.020 curies, were shipped from 07/01/00 through 06/30/01.

If any additional information is required, please contact me at 904-739-4258, 904-739-4200 (facsimile), or [markert\\_br@unisonindustries.com](mailto:markert_br@unisonindustries.com).

Sincerely,

A handwritten signature in cursive script that reads "Bruce D. Markert".

Bruce D. Markert, RSO  
Jacksonville Plant

cc: Mr. George C. Pangburn, Region I Director, Division of Nuclear Materials Safety

**UNISON**

UNISON Industries  
Norwich/Oxford Road  
3065 State Highway 17  
PO Box 310  
Norwich, NY 13816 USA  
Telephone: 607/325/5000  
www.unisonindustries.com

July 31, 2001

United States Nuclear Regulatory Agency  
Div. of Fuel Cycle and Material Safety  
Washington, DC 20555

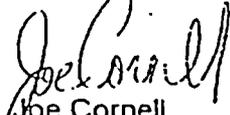
Attention: Radioisotope Licensing Branch  
Reference: Simmonds Precision Engine Systems, Inc.  
License No. 31-15292-01E, Amendment No. 04  
Subject: Annual Report on Tubes Containing Krypton-85

Gentlemen:

In accordance with AEC Act and regulations 10 CFR 30 section 32.14 and CFR Part 32, Unison is submitting the following information as required.

1. There were a total of 7,620 tubes shipped from 07/01/00 to 06/30/01 that contained Krypton-85.
2. The total Curies shipped in these tubes was 0.0201

Sincerely,

  
Joe Cornell  
HS&E Manager

**UNISON**

UNISON Industries  
Norwich/Oxford Road  
EMS State Highway 12  
P.O. Box 310  
Norwich, VT 05416 USA  
Telephone: 802/222/5000  
www.unisonindustries.com

July 31, 2000

United States Nuclear Regulatory Agency  
Div. of Fuel Cycle and Material Safety  
Washington, DC 20555

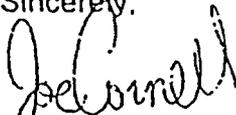
Attention: Radioisotope Licensing Branch  
Reference: Simmonds Precision Engine Systems, Inc.  
License No 31-15292-01E, Amendment No. 04  
Subject: Annual Report on Tubes Containing Krypton-85

Gentlemen:

In accordance with AEC Act and regulations 10 CFR 30 section 32.14 and CFR Part 32, Unison is submitting the following information as required.

1. There were a total of 6,113 tubes shipped from 07/01/99 to 06/30/00 that contained Krypton-85.
2. The total Curies shipped in these tubes was 0.0205

Sincerely,

  
Joe Cornell  
HS&E Manager

**UNISON**

UNISON Industries  
Norwich/Oxford Road  
6345 State Highway 17  
PO Box 310  
Norwich, NY 13815 USA  
Telephone: 607/335/5000  
www.unisonindustries.com

July 31, 1999

United States Nuclear Regulatory Agency  
Div. of Fuel Cycle and Material Safety  
Washington, DC 20555

Attention: Radiosotope Licensing Branch

Reference: Simmonds Precision Engine Systems, Inc.  
License No. 31-15292-01E, Amendment No. 04

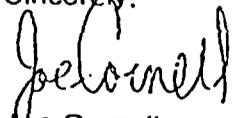
Subject: Annual Report on Tubes Containing Krypton-85

Gentlemen:

In accordance with AEC Act and regulations 10 CFR 30 section 32.14 and CFR Part 32, Unison is submitting the following information as required.

1. There were a total of 6,113 tubes shipped from 07/01/98 to 06/30/99 that contained Krypton-85.
2. The total Curies shipped in these tubes was 0.022

Sincerely,



Joe Cornell  
HS&E Manager

August 28, 1998

United States Nuclear Regulatory Agency  
Attn: Radioisotope Licensing Branch  
Div. of Fuel Cycle and Material Safety  
Washington, D.C. 20555

Re: Annual Report on Tubes Containing Krypton-85

Reference: Simmonds Precision Engine Systems, Inc.  
License No. 31-15292-01E, Amendment No. 04

Gentlemen:

In accordance with AEC Act and regulations 10 CFR 30 section 32.14 and 10 CFR Part 32, we are submitting the following information as required.

1. There were a total of 9,029 tubes shipped from 07/01/97 to 06/30/98  
Which contained Krypton-85
2. The total Curies shipped in these tubes was 0.024

Sincerely,



Joe Cornell  
HS&E MGR.

August 6, 1997

U. S. Nuclear Regulatory Commission  
ATTENTION: Radioisotope Licensing Branch  
Division of Fuel Cycle and Material Safety  
Washington, D.C. 20555

SUBJECT: REPORT ON TUBES CONTAINING KRYPTON 85

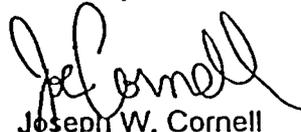
REFER: SIMMONDS PRECISION ENGINE SYSTEMS, INC.  
LICENSE NO. 31-15292-01E, AMENDMENT NO. 04

Gentlemen:

In accordance with AEC ACTS 10 CFR 30 and Section 32.14, 10 CFR Part 32, we are submitting the following report as required.

1. There were a total of 10,826 tubes shipped form 07/01/96 to 06/30/97, which contained Krypton 85.
2. Total curies of Krypton 85 shipped in these tubes were .0277.

Sincerely,

  
Joseph W. Cornell  
HS&E Manager

cc: G. Cummings, General Operations Manager  
W. Varcasio, NYS Dept. Of Envir. Cons.  
N. Tom  
R. Swift

January 15, 2002



Unison Industries  
7575 Baymeadows Way  
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Mr. Martin J. Virgilio, Director  
Office of Nuclear Material Safety and Safeguards  
United States Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, MD 20852-2738

RE: Report of Transfer pursuant to 10 CFR Part 32.16.c.2  
License No. 09-23745-01E

Dear Director Virgilio,

Please reference the enclosed letter to Mr. Bruce Carrico for the relevance of this communication.

In accordance with 10 CFR Part 32.16.c.2, Unison Industries—Jacksonville Plant is submitting the following information:

A total of 29,412 spark gaps, containing Krypton-85 activity of 0.030 curies, were shipped from 01/01/97 through 12/31/97.

A total of 26,742 spark gaps, containing Krypton-85 activity of 0.028 curies, were shipped from 01/01/98 through 12/31/98.

A total of 21,924 spark gaps, containing Krypton-85 activity of 0.026 curies, were shipped from 01/01/99 through 12/31/99.

A total of 27,165 spark gaps, containing Krypton-85 activity of 0.027 curies, were shipped from 01/01/00 through 12/31/00.

A total of 32,711 spark gaps, containing Krypton-85 activity of 0.035 curies, were shipped from 01/01/01 through 12/31/01.

If any additional information is required, please contact me at 904-739-4258, 904-739-4200 (facsimile), or [markert\\_br@unisonindustries.com](mailto:markert_br@unisonindustries.com).

Sincerely,

A handwritten signature in cursive script that reads "Bruce D. Markert".

Bruce D. Markert, RSO  
Jacksonville Plant

cc: Mr. Douglas M. Collins, Region II Director, Division of Nuclear Materials Safety

Jacksonville Plant Only

SPARK GAP PART NUMBER	ACTIVITY PER EACH SPARK GAP (Millicuries)	NUMBER OF DEVICES TRANSFERRED											
		1997		1998		1999		2000		2001		5-YEAR TOTAL	
		Quantity	Millicuries	Quantity	Millicuries	Quantity	Millicuries	Quantity	Millicuries	Quantity	Millicuries	Quantity	Millicuries
10-187610	3.16E-04	44	1.39E-02	8	2.53E-03	4	1.26E-03	0	0.00E+00	1	3.16E-04	57	1.80E-02
10-348779	3.27E-04	700	2.29E-01	503	1.64E-01	222	7.26E-02	654	2.14E-01	541	1.77E-01	2620	8.57E-01
10-248780	2.24E-04	816	1.83E-01	614	1.38E-01	622	1.39E-01	1043	2.34E-01	584	1.31E-01	3679	8.24E-01
10-348784	9.77E-05	82	8.01E-03	6	5.86E-04	0	0.00E+00	0	0.00E+00	53	5.18E-03	141	1.38E-02
10-348785	8.74E-05	1690	1.48E-01	1380	1.21E-01	786	6.87E-02	1696	1.48E-01	3273	2.86E-01	8825	7.71E-01
10-369529	8.41E-05	370	3.11E-02	572	4.81E-02	401	3.37E-02	499	4.20E-02	361	3.04E-02	2203	1.85E-01
10-370882	1.96E-04	0	0.00E+00	0	0.00E+00	56	1.10E-02	33	6.47E-03	252	4.94E-02	341	6.68E-02
10-374105	1.01E-04	9981	1.01E+00	8327	8.41E-01	6412	6.48E-01	7645	7.72E-01	7853	7.93E-01	40218	4.06E+00
10-374121	2.91E-03	7603	2.21E+01	7464	2.17E+01	6752	1.96E+01	6944	2.02E+01	9086	2.64E+01	37849	1.10E+02
10-374199	1.21E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
10-387429	2.87E-03	814	2.34E+00	596	1.71E+00	649	1.86E+00	623	1.79E+00	904	2.59E+00	3586	1.03E+01
10-387431	4.03E-03	424	1.71E+00	471	1.90E+00	536	2.16E+00	606	2.44E+00	962	3.88E+00	2999	1.21E+01
10-397128	4.03E-03	459	1.85E+00	244	9.83E-01	68	2.74E-01	1	4.03E-03	46	1.85E-01	818	3.30E+00
10-397599	9.87E-05	311	3.07E-02	5	4.94E-04	0	0.00E+00	0	0.00E+00	4	3.95E-04	320	3.16E-02
10-516521	1.01E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
10-614860	1.01E-04	515	5.20E-02	875	8.84E-02	86	8.69E-03	1451	1.47E-01	972	9.82E-02	3899	3.94E-01
10-614902	9.77E-05	0	0.00E+00	14	1.37E-03	0	0.00E+00	0	0.00E+00	77	7.52E-03	91	8.89E-03
10-621055	9.87E-05	5603	5.53E-01	5663	5.59E-01	5330	5.26E-01	5970	5.89E-01	7742	7.64E-01	30308	2.99E+00
<b>TOTALS:</b>		<b>29412</b>	<b>3.03E+01</b>	<b>26742</b>	<b>2.83E+01</b>	<b>21924</b>	<b>2.55E+01</b>	<b>27165</b>	<b>2.66E+01</b>	<b>32711</b>	<b>3.54E+01</b>	<b>137954</b>	<b>1.46E+02</b>

*Bruce D. Markert* 1/15/02  
Bruce D. Markert, RSO



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**UNISON**

Mr. Martin J. Virgilio  
Office of Nuclear Material Safety and Safeguards  
United States Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, MD 20852-2738

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