



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

East Building, PHH-23  
1200 New Jersey Ave, SE  
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0647/S-96, REVISION 5

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Models X224 and AX224 (Both models manufactured on or after October 14, 1980).
2. Source Description - Cylindrical double encapsulations made of stainless steel and tungsten inert gas or laser seal welded. Approximate exterior dimensions are 9.42 mm (0.371 in.) in diameter and 38.1 mm (1.5 in.) in length. Minimum wall thickness of the outer encapsulations are 0.71 mm (0.028 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA62435, Rev. C.
3. Radioactive Contents - No more than 60.0 GBq (1.62 Ci) of Californium-252. The Cf-252 is in the form of a metal wire or an oxide solid ceramic.
4. Management System Activities - Records of Management System activities required by Paragraph 306 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

**CERTIFICATE USA/0647/S-96, REVISION 5**

5. Expiration Date - This certificate expires on November 30, 2022. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the November 2, 2017 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



December 13,  
2017

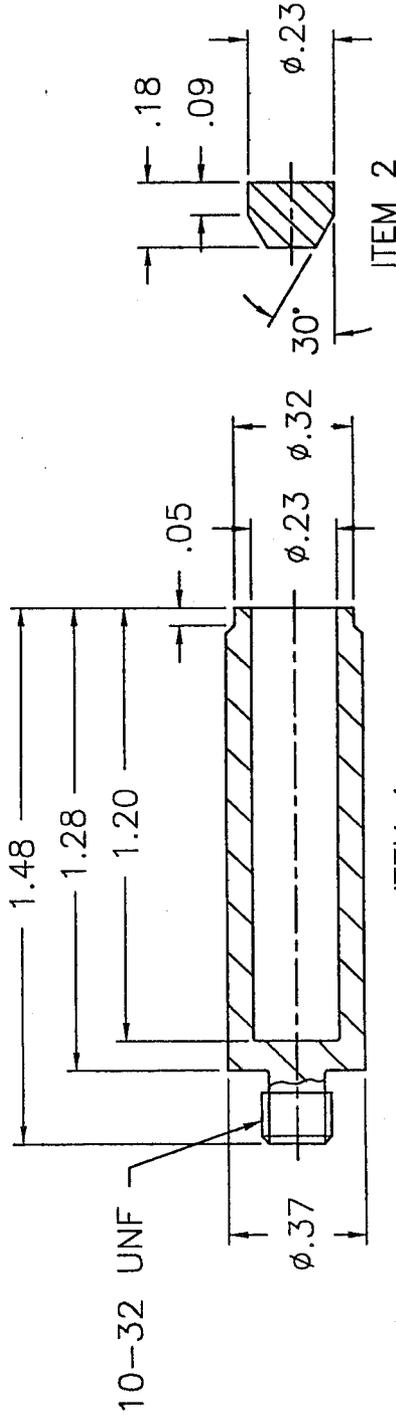
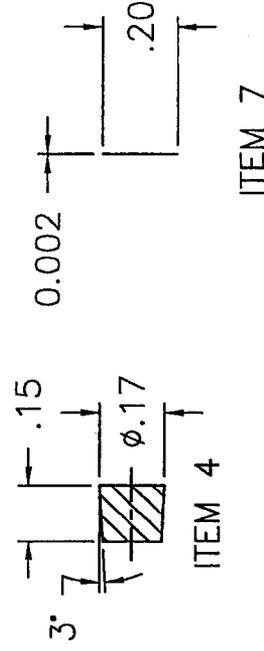
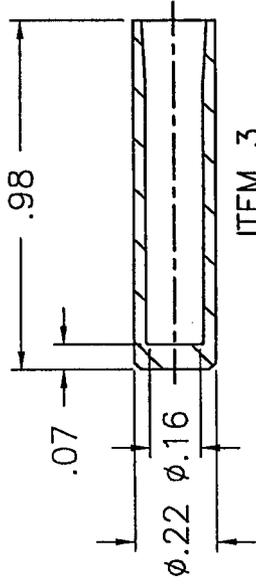
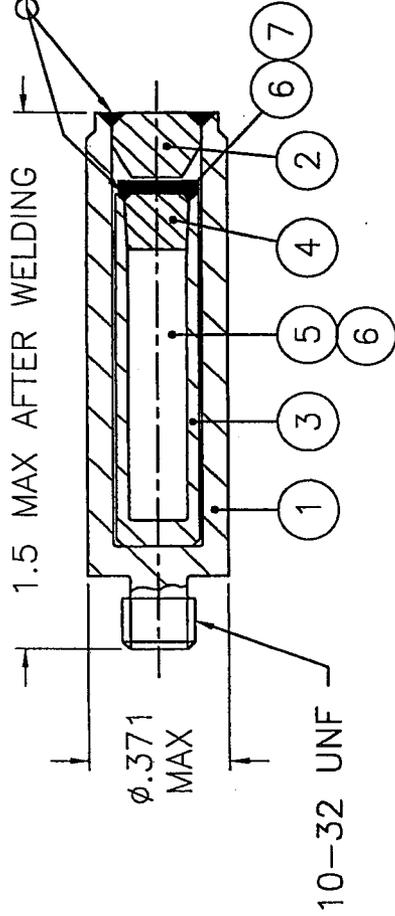
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William Schoonover  
Associate Administrator for Hazardous  
Materials Safety

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(DATE)

Revision 5 - Issued to extend the expiration date.

ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL	1
2	SHEATH LID STAIN.STL	1
3	CELL BODY STAIN.STL	1
4	CELL LID STAIN.STL	1
5	ACTIVE MATERIAL	AR
6	CERAMIC FIBER(OPTIONAL)	AR
7	SPACER(OPTIONAL) STAIN STL	AR

TIG OR LASER WELD TO SEAL



APPROVALS	DATE
<i>R. J. Munn</i>	17 Oct 03
<i>S. P. Diller</i>	19 Oct 03

DIMENSIONS IN INCHES  
UNLESS OTHERWISE STATED TOLERANCES:

XX ±0.1  
XXX ±0.01  
XXXX ±0.005  
ANGULAR ±5°

INTERNAL ✓  
EXTERNAL ✓

**AEATECHNOLOGY**  
QSA  
40 NORTH AVE. BURLINGTON, MA 01803

**DESCRIPTIVE DRAWING**

TITLE X224 & AX224 CAPSULE ASSY

SIZE A DWG. NO. RBA62435

SCALE: NONE SHEET 1 OF 1

REV C

ERF # 688



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**CERTIFICATE NUMBER:** USA/0647/S-96

**ORIGINAL REGISTRANT(S) :**

QSA Global, Inc.  
30 North Avenue  
Burlington, MA, 01803  
USA