U.S. Department of Transportation

Research and Special Programs Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0080/S, REVISION 3

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency and the United States of America for the transport of radioactive materials.

1. Source Identification - Monsanto Research Corporation capsule identified by MRC Drawing No. SK195-2A0 (a prototype of Model No. 24132).

2. Source Description - The source described by this certificate is a TIG-welded, doubly encapsulation constructed of Type 304 stainless steel, and measures 3.175 cm (1.25 in) in diameter by 10.80 cm (4.25 in) in length.

3. Radioactive Contents - This neutron source consists of not more than 0.395 TBq (10.67 Ci) of Am-241 as americium oxide powder, mixed with lithium hydride powder.

4. Restrictions -

   a. This certificate does not apply to any source manufactured according to MRC Drawing No. SK195-2A0 after January 1, 2000.

   b. This certificate remains valid only insofar as no object is ever inserted in the tap hole at the base of the capsule.

5. Expiration Date - This certificate expires June 30, 2005.

This certificate is issued in accordance with paragraph 803 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated September 20, 1999 submitted by Lockheed Martin Energy Systems, Oak Ridge, TN, and in consideration of other information on file in this Office.

Certified by:

Robert A. McGuire
Acting Associate Administrator for
Hazardous Materials Safety

JUN 23 2000
(DATE)

Revision 3 - Issued to restrict the sources and to extend the expiration date.

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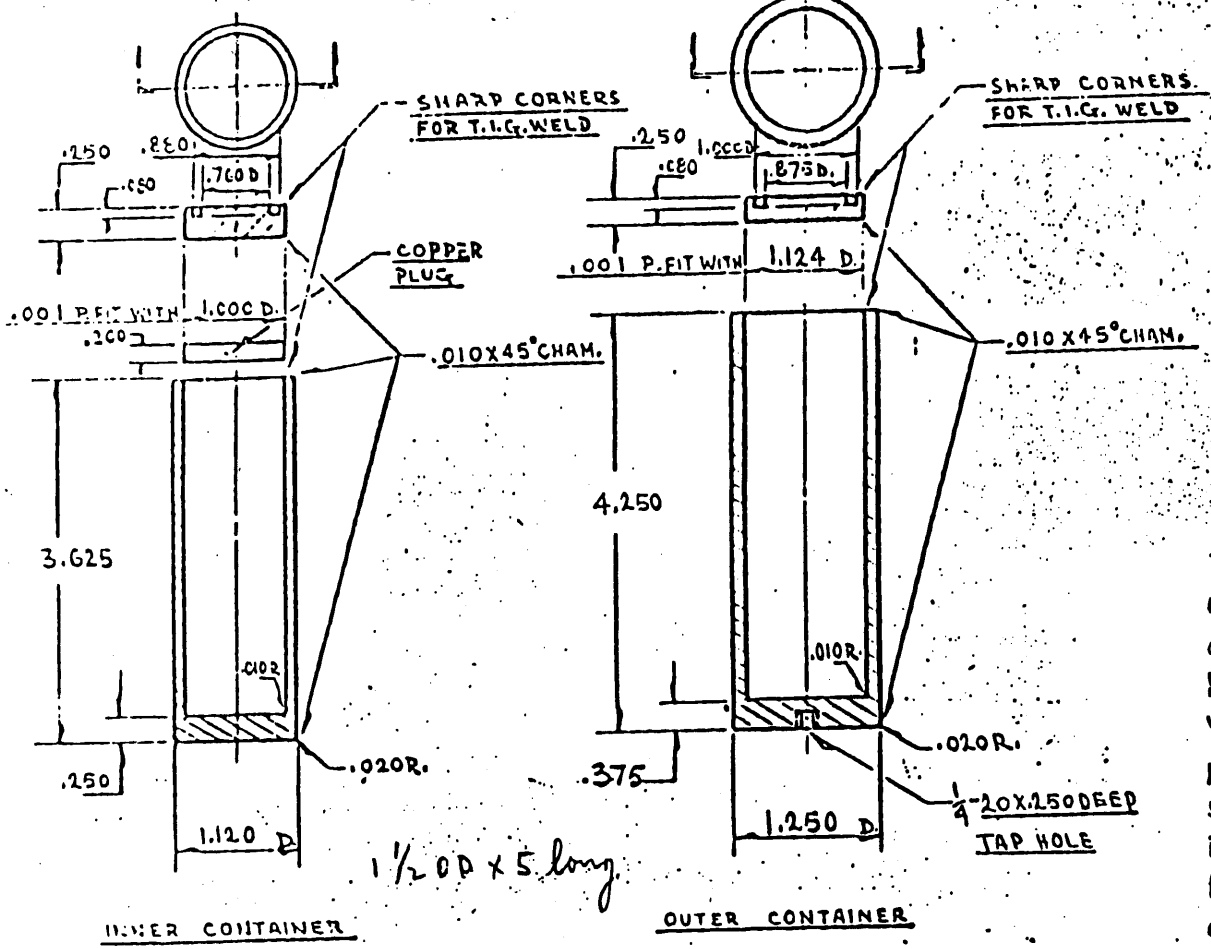
[1] Safety Series No. 6, Regulatins for the Safe Transport of Radioactive Materials, 1985 Edition (as amended), published by the International Atomic Energy Agency (IAEA) Vienna, Austria.

[2] Title 49 Code of Federal Regulations, Part 100 - 199, United States of America



NOTE:

1. DIA. CLEARANCE BETWEEN INNER AND OUTER CONTAINER .004 NOMINAL .002 MINIMUM.
2. WELD PENETRATION .050 DESIRABLE AND .040 MINIMUM.

NOTICE

This drawing is the property of Monsanto Research Corporation and must be returned, without reproduction or duplication, at any time upon request but in any event at completion of the work or job. While in the possession of the recipient, it must be properly safeguarded against revelation or disclosure to anyone except those employees who require it for the work or job. The recipient must keep confidential, and require his (its) employees to keep confidential, the information contained hereon.

UNLESS OTHERWISE SPECIFIED.
DIMENSIONS ARE IN INCHES
TOLERANCES:
DECIMALS
.XX = ±.02
.XXX = ±.005
.XXXX BASIC
ALL SURFACES 32
FRACTIONS ± 1/64
ANGLES ± 30'
MATERIAL 304 S.STL. & AS NOTED

APPD		
APPD		
APPD	[signature]	8-14-72
APPD	[signature]	8-11-72
CHECKED		
DRAWN	[signature]	8-11-72
SIGNATURE		DATE

MONSANTO RESEARCH CORPORATION
DAYTON LABORATORY
DAYTON, OHIO

Am-Li NEUTRON SOURCE (5×10^5 n/s)

STANDARD DRAWING

DWG NO. SK195-2A0

REV

SCALE | WT CALC ACT. | CODE IDENT NO. | SHEET OF