

03036424



December 2, 2005

Materials Safety and Inspection Branch
Div. of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Subject: Amendment application for Exempt Distribution License No. 04-23909-01E (mail control number 022492)

SAIC would like to reinitiate our amendment request for our NRC E License. In the last communication, I spoke with Mr. Richard Struckmeyer who requested removal of proprietary status for the drawing number 98300 and further information on prototype testing of the source. SAIC has removed the detailed proprietary information on the drawing and left the information specific to the mounting of the check source that may be used as public record. A new drawing is attached.

In addition SAIC / Exploranium has consulted with Canberra Industries as the original source manufacturer about their prototype testing of the button source. This source type has been prototype tested by Canberra in order for them to obtain an NRC Exempt Distribution License. SAIC would like to take credit for this prototype testing performed by the original manufacturer. We do not alter or change the source in any way except for adding the required company labels to the exterior of the source. We feel that additional prototype testing would not be necessary or add further benefit to the containment of the byproduct material since the check source itself has been prototype tested by Canberra Industries. The conditions of use do not exceed normal working conditions for which the source was tested. Also, the entire unit is enclosed inside an exterior housing as shown in the attached drawings. This housing would capture the check source in the unlikely event it were to become dislodged from the detector.

If you have any further request of need further clarification, please feel free to contact me.

Thank you,

A handwritten signature in black ink that reads "Jeffrey R. Johanning".

Jeffrey R. Johanning
Engineering Physicist / Alt. RSO
Science Applications International Corp.
(858)-826-9725

Attachments: SAIC/Exploranium drawing no. 98300

022526

REVISION HISTORY				
ECO#	REV	DESCRIPTION	DATE	APPD.
-	-	SEE SHEET 1		

START WRAP
ALONG THIS EDGE
NOTE 3

MYLAR COVER
NOTE 10

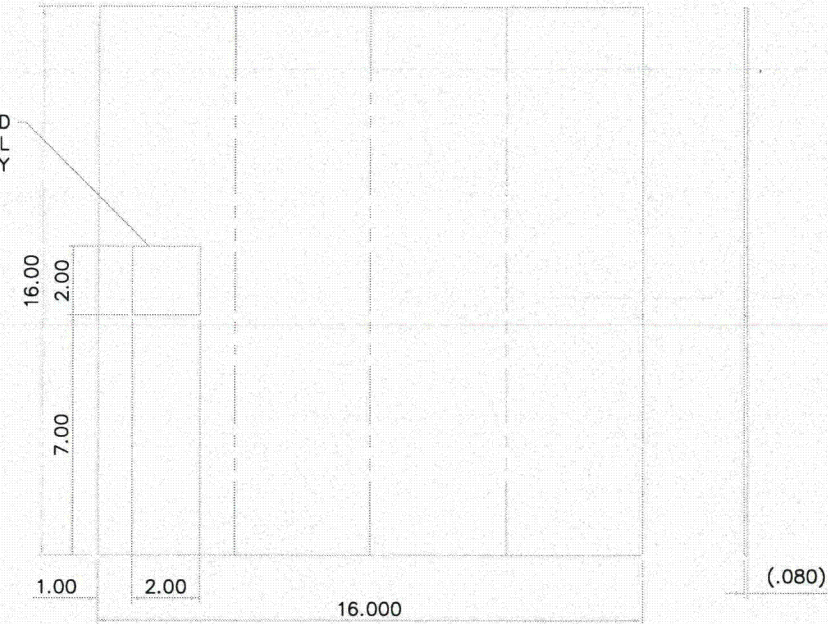
SOURCE

PORON NEST

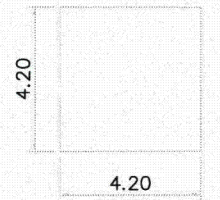
NOTE 7

DETAIL F
NOTE 8

CUTTOUT REQUIRED
FOR TOP CRYSTAL
ONLY

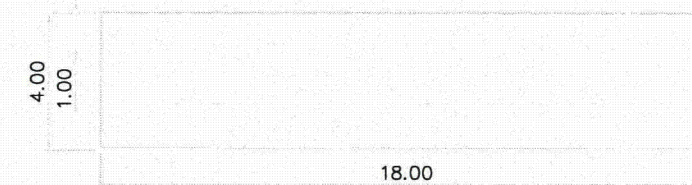


DETAIL A
FELT WRAP

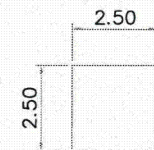


DETAIL B
FELT END

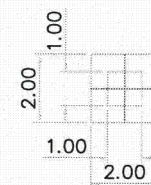
WRAP PMT END OF MU-METAL
WITH DUCT TAPE



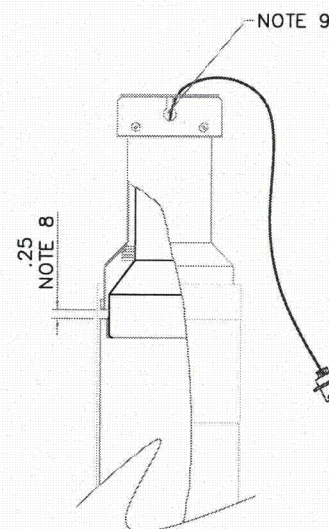
DETAIL C
Mu-METAL



DETAIL E
CLEAR MYLAR



DETAIL D
PORON NEST



DETAIL F


REVISION HISTORY			
ECO#	REV	DESCRIPTION	DATE

WARNING

The electronics inside this enclosure are extremely sensitive to temperature changes and should be kept at a constant temperature of 20°C ± 5°C. Do not open the enclosure for more than 10 minutes at a time. Opening the enclosure will cause the temperature to rise and may damage the electronics.

This unit includes a very low activity radioactive source. This source has NO known health and NO shipping restrictions apply as it is considered a **TYPE A** PACKAGE as specified in US NRC 49CFR 172.401. For further information, consult appropriate instrument user manual.

10. FOR THE TOP CRYSTAL ASSEMBLY THE FELT SHOULD BE WRAPPED WITH THE CUT OUT ON THE BEST FACE, APPLY THE PORON NEST (DETAIL D) TO THE SUREFACE OF THE CRYSTAL, RTV THE SOURCE DIRECTLY TO THE CRYSTAL SUREFACE IN THE CUT OUT OF THE PORON NEST. COVER COMPLETED SOURCE ASSEMBLY WITH CLEAR MYLAR RTV'ED TO THE PORON NEST SO THAT THE SOURCE LABEL IS VISIBLE. IF CLEAR MYLAR IS UNAVAILABLE USE MAT MYLAR AND PLACE AN ADDITIONAL 98030-1 SOURCE LABEL ON TOP OF THE MYLAR.

QTY	ITEM	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION		NOTE			
PARTS LIST								
DO NOT SCALE DRAWING			SIGNATURE	DATE	<div> SAIC Exploranium An Employee-Owned Company A Division of SAIC Canada 6108 Edwards Blvd, Mississauga, Ontario Canada L5T 2V7 Tel: (905) 670-7071</div> <div>MODEL GPX-1024/256</div> <div>TITLE DETECTOR ASY COMPLETE</div>			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			DRAWN	DJK 03/98				
DECIMALS	ANGLES	SURFACE	CHECK	— —				
.X ±.1	±.5°	125°	DESIGN	— —				
.XX ±.01		✓						
.XXX ±.005								
MATERIAL:			MANUFACTURING					
—			Q/A					
FINISH:			98300					
—								
			SCALE	1/1	WEIGHT	—	SHEET	1 OF 2

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MODEL GPX-1024/256

TITLE DETECTOR ASY COMPLETE

SIZE D DWG NO. 98300-INFO REV H