The information in this report is required by 14 CRF 108.17 & 129.26. Failure to report may result in a civil penalty not to exceed $1000.00 for each such violation. (Federal Aviation Act of 1958, Section 901)

Department of Transportation **Federal Aviation Administration**	***X-RAY SYSTEM RADIATION LEAKAGE REPORT (BAGGAGE INSPECTION)*** *(Require by 14 CRF 108.17, 14 CRF 129.26)*	FIELD TEST SERIAL NO. 11-7 **T**	Form Approved OMB No. 2120-0098

AA 1.1 Name and Address of Facility — Name of Facility (18.80): PORT COLUMBUS INT'L AIRPORT; FDA Region: OH; **BB** St. No. R.R. or Airline/Airport (10.80): 4600 INT'L GATEWAY DR

CC City (10.73): COLUMBUS; State Code: OH; Zip Code: 43219

DD and Specific Location of X-ray System — Room No. or Other Location of System (10.32): B CHECKPOINT / LANE 4; Person Interview (33-54): [redacted]; Telephone No.:

Certification Label Present: YES; Instruments: (type and serial number) Model: THERMO RADEYE; Serial No.: 295

01 1.2 Manufacture And Product ID

A. Manufacture (Responsible Firm): RAPISCAN; B.: OHU46; C. System Model No. and/or Name: 520B

D.: 115VAC Unique I.D.: 60HZ; E. System Serial No.: 7075009

F. Date of Manufacture Mo.: 12 Yr.: 2007; 1.4 Operator Instructions Available: YES; 1.5 Maintenance Schedule Available: N/A

02 2.0 Warning Labels / Indicators

2.1 Warning Label Present at Controls Stating: "Caution: X-Rays Produced When Energized": YES

2.2 Warning Labels Present at Ports Stating: "Caution: Do Not Insert Any Part of the Body When System is Energized, X-Ray Hazard": YES

2.3 Two Indicators Labeled "X-Ray On" Present at Controls (One May Be Labeled "mA Meter"): YES

2.4 At Least One Indicator, X-Ray Marked "X-Ray On", Visible from Each Port, Door, And Access Panel: YES

3.0 Interlocks; 3.1 "Captured Key" Control: YES

3.2 Door Safety Interlocks

A. Minimum Number of Interlocks Visible At Any One Door: N/A

B. At Least One Interlock Dependent on No Moving Part Except Door: N/A

3.3 Prevention of X-Radiation By Interlocks

A. All Doors and Access Panels That Were Tested Prevent Generation of X-Radiation: N/A

B. Use of X-Ray Control Necessary to Resume Operation Following Interruption: N/A

4.0 Ports and/or Apertures

4.1 Some Part of the Body Can Be Inserted Through a Port Into The Primary Beam: NO

4.2 Some Part of the Body Can Be Inserted Into the Aperture: NO

6.0 Baggage Inspection Systems

6.1 Means Provided to Ensure Operator Presence at the Control Area: YES

6.2 Means Provided to Operator for Terminating Exposures of Greater than One-Half Second and Preventing: YES

03 7.0 Leakage Radiation

Specific Test Procedure Used: 04

7.1 Scatter Block Description: 3 TSR BINS

7.2 Technical Factures: 140 kVp; 0.7 mA

7.3 Location Exposure Levels: ENTRANCE	Non-Continuously Activated Systems Only Number of Exposures Initiated		Location Exposure Levels: EXIT	Non-Continuously Activated Systems Only Number of Exposures Initiated
05 0.095 mR/hr	Exp	**06**	0.066 mR/hr	exp
0.086 mR/hr	Exp		0.080 mR/hr	exp
0.087 mR/hr	exp		0.064 mR/hr	exp
0.088 mR/hr	exp		0.094 mR/hr	exp

07 Reasonable Number of Exposures That May Be Initiated in One Hour — OR — Duty Cycle of System Indicated As a Percentage of One Hour: 100%

08 8.0 Additional Information

8.1: 298 µR - DOSAGE PER INSPECTION

09 8.2

10 8.3

11 8.4

12 8.5

13 Surveyor Information — Surveyor Name (10-72) (Print: L, F, MI): [redacted]; Surveyor Signature: [redacted]; Date of Survey: 3/11/2011; Surveying Agency Code

Remarks:

FAA Form 165-17 (6-81)

FAA HQ

SGS Document# DOEO-0014, Rev. Jun 81

SIEMENS

Siemens Government Services, Inc.

Cabinet X-Ray Unit Radiation Survey Form (non-AT)

WO#: 3719616

Location: CMH B-CP/LANE 4 Background Reading: 3 µR/hr Date: 3/11/11

1. Identify Cabinet X-ray Unit and X-ray Generator information:
   a. Check appropriate Make/Model box below (if '**Other**', record Make and Model on the line provided);
   b. Record the X-ray Unit's serial number next to the Make/Model;
   c. With the X-rays turned "**ON**", record the X-ray Generator Voltage (**kV**) and Anode Current (**µA**) Readings;
   d. Convert Anode Current readings from **µA** to **mA** by dividing the µA value by 1000 (**example: 100 µA = 0.100 mA**);
   e. Transfer the **Observed Voltage and Converted Anode Current** readings to **Box 05, Section 7.2** (Technical Factures) of DOEO-0014 FAA Form 165-17.

Make / Model	Serial Number	Observed Voltage and Anode Current	Convert Anode Current to mA for FAA form (divide µA by 1000)
☐ Smiths Heimann **5030s**	s/n_____	+_____kV, -_____kV,_____ µA	_____mA
☐ Smiths Heimann **6040i**	s/n_____	+_____kV, -_____kV,_____ µA	_____mA
☐ Smiths Heimann **7555i**	s/n_____	+_____kV, -_____kV,_____ µA	_____mA
☐ Rapiscan **519**	s/n_____	_____kV, _____ µA	_____mA
☒ Rapiscan **520B**	s/n 7075009	140 kV, 700 µA	0.7 mA
☐ Rapiscan **522B**	s/n_____	_____kV, _____ µA	_____mA
☐ Other _____	s/n_____	_____kV, _____ µA	_____mA

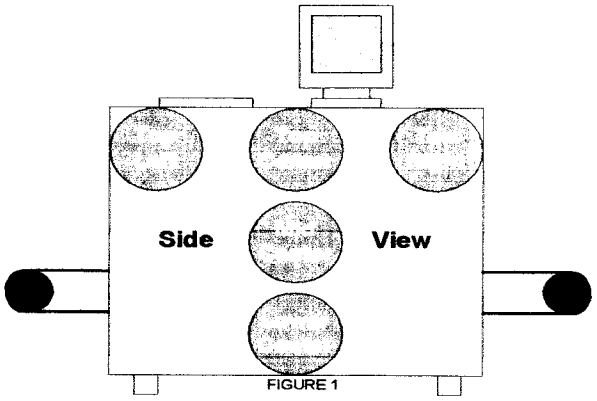

FIGURE 1

2. While holding the meter 5 centimeters (about 2 inches) from the surface, take readings in the area of the circles shown (Figure 1 above) on **BOTH** sides (Left and Right) of the X-ray machine (total of **10** readings):

   Note: The Inovision 451P Radiation Meter has a default range setting of **µR/hr**. Meter readings in µR/hr must be converted to mR/hr for this form and DOEO-0014 FAA Form 165-17.
   Conversion: 100 µR/hr = 0.100 mR/hr.

	FRONT		BACK	
TOP LEFT	0.006	mR/hr	TOP LEFT	0.008 mR/hr
TOP CENTER	0.008	mR/hr	TOP CENTER	0.024 mR/hr
TOP RIGHT	0.006	mR/hr	TOP RIGHT	0.010 mR/hr
MID CENTER	0.008	mR/hr	MID CENTER	0.009 mR/hr
LOWER CENTER	0.006	mR/hr	LOWER CENTER	0.006 mR/hr

Printed copies of this document must be verified against the Document Server or Intranet for correct revision level before being used.

SIEMENS

Siemens Government Services, Inc.

WO#: 3719616

X-Ray Serial #: 7075009

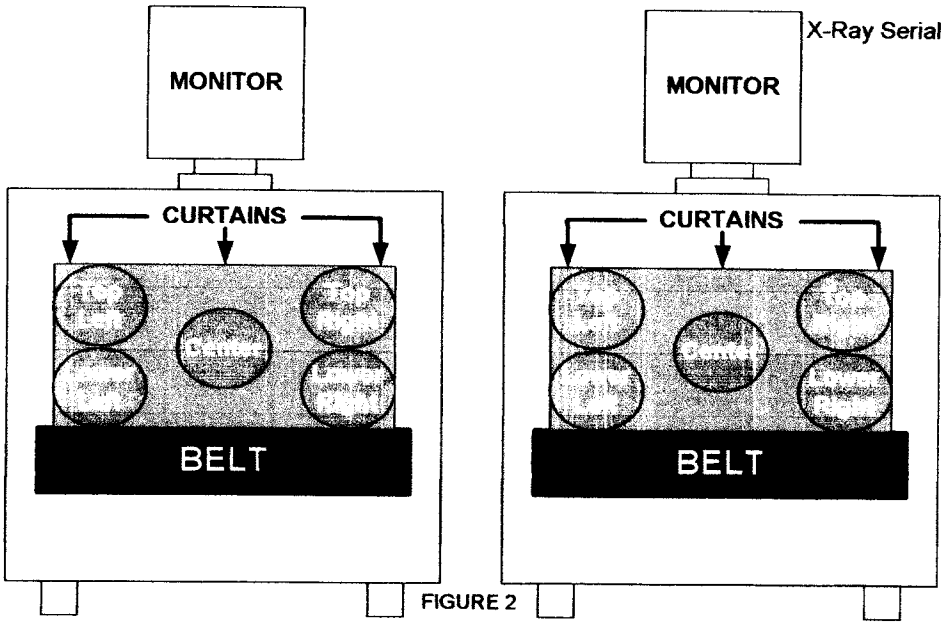

FIGURE 2

3. While holding the meter 5 centimeters (about 2 inches) from the surface, take readings in the area of the circles shown (Figure 2 above) on **BOTH** sides (ENTRANCE and EXIT) of the X-ray machine (total of **10** readings):

	ENTRANCE		**EXIT**	
TOP LEFT	0.077	mR/hr	TOP LEFT	0.066 mR/hr
TOP RIGHT	0.095	mR/hr	TOP RIGHT	0.080 mR/hr
LOWER LEFT	0.086	mR/hr	LOWER LEFT	0.062 mR/hr
LOWER RIGHT	0.087	mR/hr	LOWER RIGHT	0.064 mR/hr
CENTER	0.088	mR/hr	CENTER	0.094 mR/hr

4. Transfer the **8 highest** readings (out of **all 20** readings) to **Box 05, Section 7.3** (Exposure Levels) of DOEO-0014 FAA Form 165-17. Be sure to enter values in **mR/hr!! (100 µR/hr = 0.100 mR/hr)**.

   Note: On all X-Ray equipment, any reading of **0.5 mR/h (= 500 µR/h) or higher** is considered a **failure** of the Radiation Leak Survey.

5. Perform **Cumulative Exposure Test:**
   a. Push the MODE button once on the Inovision 451P;
   b. Verify that the meter's scale changes from **µR/h** to **µR** (Cumulative Mode);
   c. Place the meter on the belt and run through the X-Ray beam 10 times in Cumulative Mode. **Record total here:** 2.98 mR
   d. Divide the cumulative exposure value by 10 to obtain the **Dosage per Inspection**;
   e. Record this result in Section 8.1 (Additional Information) of DOEO-0014 FAA Form 165-17.

Survey Performed By (print your name): [redacted]

Signature: [redacted] **Date:** 3/11/11