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 and Specific Location of X-ray System	Name of Facility *(18.60)* Cleveland Hopkins Int. Apt	FDA Region OH.	BB St. No. R.R. or Airline/Airport *(10.80)* 5300 Riverside Dr.	
CC		City *(10.73)* Cleveland		State Code OH	Zip Code 44135
DD		Room No. or Other Location of System *(10.32)* C kept / lane 3	[redacted]	Te [redacted]	
		Certification Label Present yes	Instruments: *(type and serial number)* Invision	Model: 457 P	Serial No. 0000000528
01	1.2 Manufacture And Product ID	A. Manufacture *(Responsible Firm)* Rapiscan	B. OHU 46	C. System Model No. and/or Name TRX-U 520 B	
		D. 110v Unique I.D. 60Hz	E. System Serial No. 7012416		
		F. Date of Manufacture Mo. 06 Yr. 2001	1.4 Operator Instructions Available yes	1.5 Maintenance Schedule Available N/A	
	2.0 Warning Labels	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	
02	Indicators	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 Inter-Locks	A. Minimum Number of Interlocks Visible At Any One 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. At Least One Interlock Dependent on No Moving Part Except Door 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 Pelican case	

05	7.2 Technical Factures 135 kVp .7 mA				
	7.3 Location Exposure Levels	Non-Continuously Activated Systems Only Number of Exposures Initiated	06 Location Exposure Levels	Non-Continuously Activated Systems Only Number of Exposures Initiated	
	.121 mR/hr	Exp	.099 mR/hr	exp	
	.106 mR/hr	Exp	.097 mR/hr	exp	
	.104 mR/hr	exp	.093 mR/hr	exp	
	.102 mR/hr	exp	.092 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 dosage per inspection - 230uR				
09	8.2				
10	8.3				
11	8.4				
12	8.5	[redacted]			
13	Surveyor Information	[redacted]		Date of Survey 3/11/11	Surveying Agency Code

Remarks:

FAA Form 165-17 (6-81)

FAA HQ

SIEMENS

Siemens Government Services, Inc.

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

WO#: 3725542

Location: C Clpt / Lane 3 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 7012416	135 kV, 700 µA	.7 mA
☐ Rapiscan **522B**	s/n	kV, µA	mA
☐ Other	s/n	kV, µA	mA

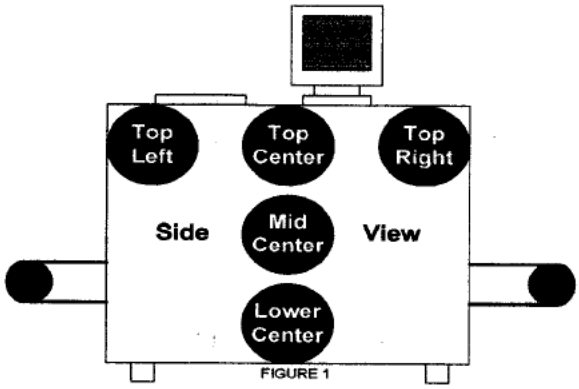

FIGURE 1

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	.006 mR/hr	TOP LEFT	.007 mR/hr
TOP CENTER	.008 mR/hr	TOP CENTER	.005 mR/hr
TOP RIGHT	.005 mR/hr	TOP RIGHT	.006 mR/hr
MID CENTER	.003 mR/hr	MID CENTER	.004 mR/hr
LOWER CENTER	.002 mR/hr	LOWER CENTER	.003 mR/hr

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SIEMENS

Siemens Government Services, Inc.

WO#: 3725542

X-Ray Serial #: 7012416

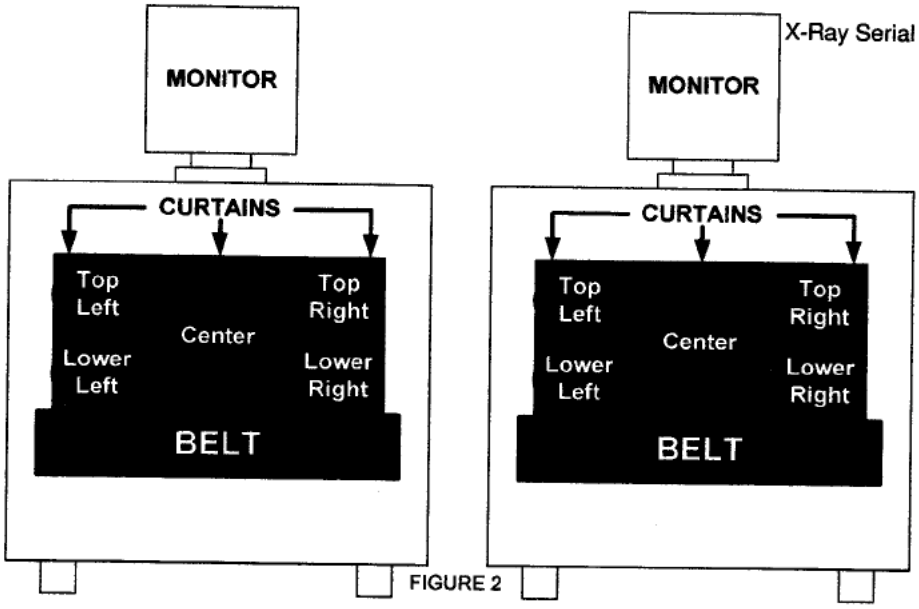

FIGURE 2

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	.102 mR/hr	TOP LEFT	.104 mR/hr
TOP RIGHT	.090 mR/hr	TOP RIGHT	.097 mR/hr
LOWER LEFT	.121 mR/hr	LOWER LEFT	.106 mR/hr
LOWER RIGHT	.092 mR/hr	LOWER RIGHT	.093 mR/hr
CENTER	.091 mR/hr	CENTER	.099 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:** 2.30mR
   d. Divide the cumulative exposure value by 10 to obtain the **Dosage per Inspection**;
   e. Record this result in Section 8.1 (A[redacted]14 FAA Form 165-17.

Survey Pe[redacted]

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

Cabinet X-Ray Unit Radiation Survey Form (non-AT)	Version: 6	Effective Date: Apr 2, 2010	Document No.: F-ALL-049	Page: 2 of 2

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