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 (10.80): John F Kennedy Airport	FDA Region: NY	RR	St. No. R.R. or Airline/Airport (10.60): Terminal 3
CC		City (10.73): Jamaica		State Code: NY	Zip Code: 11430
DD		Room No. or Other Location of System (10.32): Terminal 3	Person Interview (33-54): [redacted]	Telephone No.: [redacted]	
		Certification Label Present: Yes	Instruments: (type and serial number) INOVISION	Model: 451P	Serial No. 552
01	1.2 Manufacture And Product ID	A. Manufacture (Responsible Firm): Rapiscan	B. OHU46	C. System Model No. and/or Name: 520B	
		D. Unique I.D.	E. System Serial No. 704102		
		F. Date of Manufacture Mo. 10 Yr. 01	1.4 Operator Instructions Available: Yes	1.5 Maintenance Schedule Available: N/A	
	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	
02		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: meter CASE		
05	7.2 Technical Factures	140 kVp	.700 mA		

7.3 Location Exposure Levels	Non-Continuously Activated Systems Only Number of Exposures Initiated		Location Exposure Levels	Non-Continuously Activated Systems Only Number of Exposures Initiated
.157 mR/hr	Exp	06	.091 mR/hr	exp
.133 mR/hr	Exp		.082 mR/hr	exp
.119 mR/hr	exp		.075 mR/hr	exp
.097 mR/hr	exp		.074 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 Center Beam 220uR		
09	8.2		
10	8.3		
11	8.4		
12	8.5 [redacted]		
13	Surveyor Information [redacted]	Date of Survey 3/10/2011	Surveying Agency Code HB

Remarks:

FAA Form 165-17 (6-81)

MDR 51874
(PM) 3716684

FAA HQ

[redacted]

SIEMENS
Government Services, Inc.

Form

Cabinet X-Ray Unit Radiation Survey Form

WO#: 3716684

Location: Terminal 3 Background Reading: 2.0 µR/hr Date: 3/10/2011

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 704402	140 kV, 700 µA	.700 mA
☐ Rapiscan **522B**	s/n_____	_____kV, _____ µA	_____mA
☐ Other _____	s/n_____	_____kV, _____ µA	_____mA

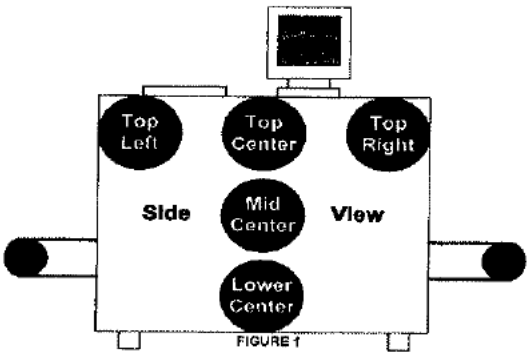

FIGURE 1

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	1007 mR/hr	TOP LEFT	1011 mR/hr
TOP CENTER	1009 mR/hr	TOP CENTER	1008 mR/hr
TOP RIGHT	1011 mR/hr	TOP RIGHT	1006 mR/hr
MID CENTER	1021 mR/hr	MID CENTER	1018 mR/hr
LOWER CENTER	1016 mR/hr	LOWER CENTER	1015 mR/hr

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Form

WO#: 3216684

X-Ray Serial #: 7014102

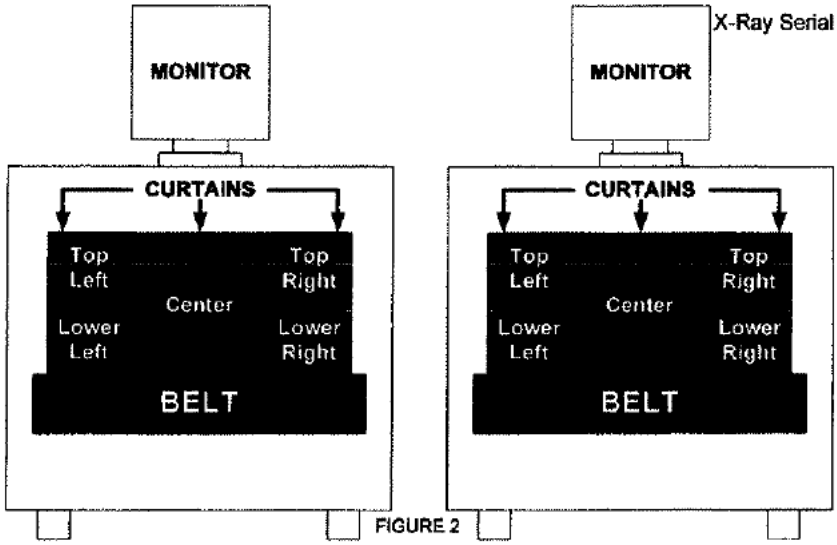

FIGURE 2

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	.082	mR/hr	TOP LEFT	.091	mR/hr
TOP RIGHT	.075	mR/hr	TOP RIGHT	.119	mR/hr
LOWER LEFT	.043	mR/hr	LOWER LEFT	.051	mR/hr
LOWER RIGHT	.074	mR/hr	LOWER RIGHT	.133	mR/hr
CENTER	.097	mR/hr	CENTER	.157	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:** 2.20 mR
   d. Divide the cumulative exposure value by 10 to obtain the **Dosage per Inspection**;
   e. Record this result in Section 8.1 ([redacted]A Form 165-17.

Survey Pe[redacted]

Signature:[redacted] **Date:** 3/10/2011

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Cabinet X-Ray Unit Radiation Survey Form	Version: 5	Effective Date: Oct 12, 2007	Document No.: F-ALL-049	Page: 2 of 2

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