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 *(18.80)*: Rogue Valley Medford Airport	FDA Region	BB	St. No. R.R. or Airline/Airport *(10.80)*: 1000 Terminal Loop Parkway
CC		City *(10.73)*: Medford			State Code: OR; Zip Code: 97504
DD		Room No. or Other Location of System *(10.32)*: Main passenger Check Point – Lane 1	Person Interview *(33-54)*: [redacted]		Telephone No.: [redacted]
		Certification Label Present: YES	Instruments: *(type and serial number)* Model: Inovision 451 P		Serial No. 576
01	1.2 Manufacture And Product ID	A. Manufacture *(Responsible Firm)*: Rapiscan Security Systems, Inc.	B. Mfr. Code: OHU46		C. System Model No. and/or Name: 522B
		D. Unique I.D.: 115 VAC 60 Hz	E. System Serial No. 7013703		
		F. Date of Manufacture: Mo. Sept 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 Inter-locks		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 Case for Inovision 451 P		

7.2 Technical Factures: 199.8 kVp, .687 mA

05	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
	.048 mR/hr	Exp		.034 mR/hr	Exp
	.045 mR/hr	Exp		.033 mR/hr	Exp
	.042 mR/hr	Exp		.029 mR/hr	Exp
	.034 mR/hr	Exp		.027 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 Main Beam Intensity = 108 uR		
09	8.2		
10	8.3		
11	8.4		
12	8.5		

13	Surveyor Information	Surveyor Name *(10-72) (Print: L, F, M)*: [redacted]	Surveyor Signature: [redacted]	Date of Survey: 3/7/2011	Surveying Agency Code

Remarks:

WO 3712436
EQ 52014
Semi PM
MFR

SIEMENS

Siemens Government Services, Inc.

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

WO#: 3712434

Location: MFR CHK PT. LANE 1 Background Reading: 2 µR/hr Date: 3-7-11

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_____	_____kV, _____µA	_____mA
☒ Rapiscan **522B**	s/n 7013703	199.8 kV, 687 µA	.687 mA
☐ Other _____	s/n_____	_____kV, _____µA	_____mA

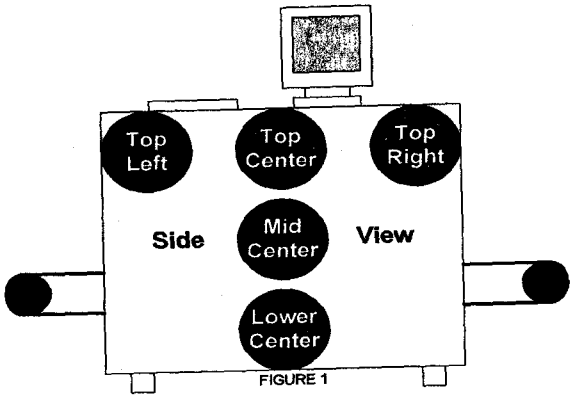

FIGURE 1

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	.012 mR/hr	TOP LEFT	.012 mR/hr
TOP CENTER	.010 mR/hr	TOP CENTER	.011 mR/hr
TOP RIGHT	.014 mR/hr	TOP RIGHT	.010 mR/hr
MID CENTER	.013 mR/hr	MID CENTER	.014 mR/hr
LOWER CENTER	.013 mR/hr	LOWER CENTER	.018 mR/hr

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[redacted]

SIEMENS

Siemens Government Services, Inc.

WO#: 3712436

X-Ray Serial #: 7013703

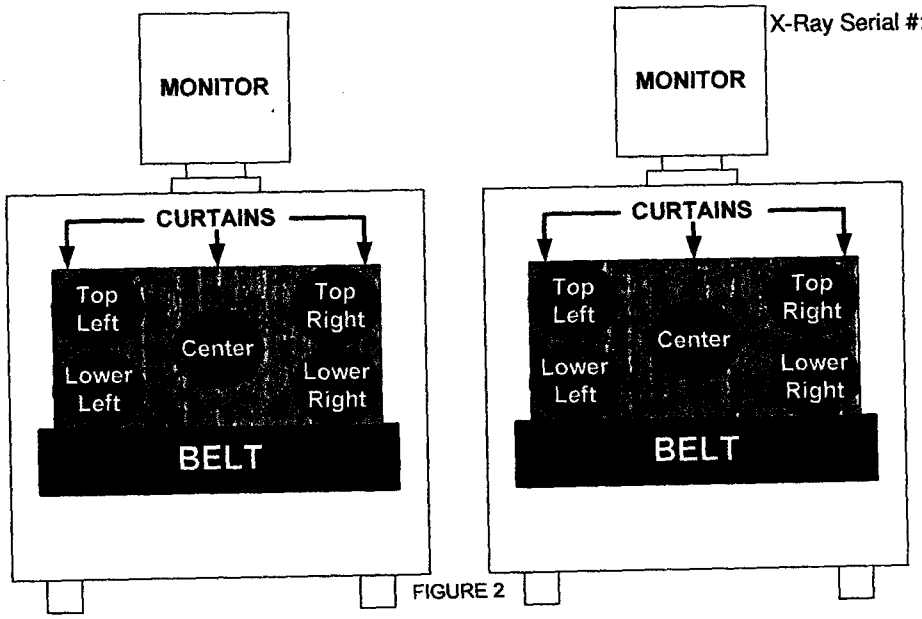

FIGURE 2

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	.021 mR/hr	TOP LEFT	.045 mR/hr
TOP RIGHT	.029 mR/hr	TOP RIGHT	.034 mR/hr
LOWER LEFT	.034 mR/hr	LOWER LEFT	.027 mR/hr
LOWER RIGHT	.022 mR/hr	LOWER RIGHT	.048 mR/hr
CENTER	.033 mR/hr	CENTER	.042 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:** 1.08 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:** 3-7-11

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