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): ORLANDO INTL. AIRPORT
- FDA Region: FL
- RR — St. No. R.R. or Airline/Airport (10.80): 9265 B AIRPORT BLVD.
- City (10.72): ORLANDO
- State Code: FLORIDA
- Zip Code: 32827
- Room No. or Other Location of System (10.32): EAST CHECKPOINT LANE 8
- Person Interview (33-54): [redacted]
- Telephone No.: [redacted]
- Certification Label Present: YES
- Instruments: (type and serial number) INOVISION Model: 451P-RYR Serial No. 0465

01 — 1.2 Manufacture And Product ID

- A. Manufacture (Responsible Firm): SMITHS DETECTION
- B.: HS
- C. System Model No. and/or Name: HI-TRAX 7555i
- D.: 115 VAC Unique I.D. 60 Hz
- E. System Serial No.: 23419
- F. Date of Manufacture Mo. 03 Yr. 2002
- 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 Inter-Locks

- 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: 94
- 7.1 Scatter Block Description: PELICAN 1400 CASE FOR INOVISION 451P METER

05 — 7.2 Technical Factures: 137.34 kVp .503 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
	.094 mR/hr	Exp		.066 mR/hr	exp
	.089 mR/hr	Exp		.012 mR/hr	exp
	.082 mR/hr	exp		.009 mR/hr	exp
	.079 mR/hr	exp		.007 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 117 μR
- 8.2
- 8.3
- 8.4
- 8.5

13 — Surveyor Information

- Surveyor Name (10-72) (Print: L, F, MI): [redacted]
- Surveyor Signature: [redacted]
- Date of Survey: 3/12/11
- Surveying Agency Code:

Remarks: [redacted]

FAA Form 165-17 (6-81)

FAA HQ

SIEMENS

Siemens Government Services, Inc.

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

WO#: 3785037

Location: MCO ECP 2A-E8 Background Reading: 0 µR/hr Date: 3/12/11

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 33419	+ 71.87 kV, - 65.47 kV, 503 µA	.503 mA
☐ Rapiscan 519	s/n	kV, µA	mA
☐ Rapiscan 520B	s/n	kV, µA	mA
☐ Rapiscan 522B	s/n	kV, µA	mA
☐ Other	s/n	kV, µA	mA

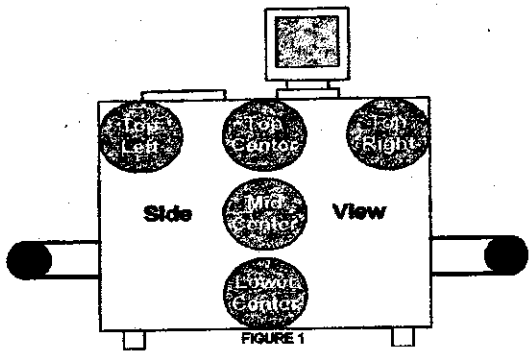

FIGURE 1

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	.003 mR/hr	TOP LEFT	.002 mR/hr
TOP CENTER	.003 mR/hr	TOP CENTER	.005 mR/hr
TOP RIGHT	.003 mR/hr	TOP RIGHT	.002 mR/hr
MID CENTER	.007 mR/hr	MID CENTER	.009 mR/hr
LOWER CENTER	.006 mR/hr	LOWER CENTER	.003 mR/hr

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[redacted]

SIEMENS

Siemens Government Services, Inc.

WO#: 3785027

X-Ray Serial #: 33419

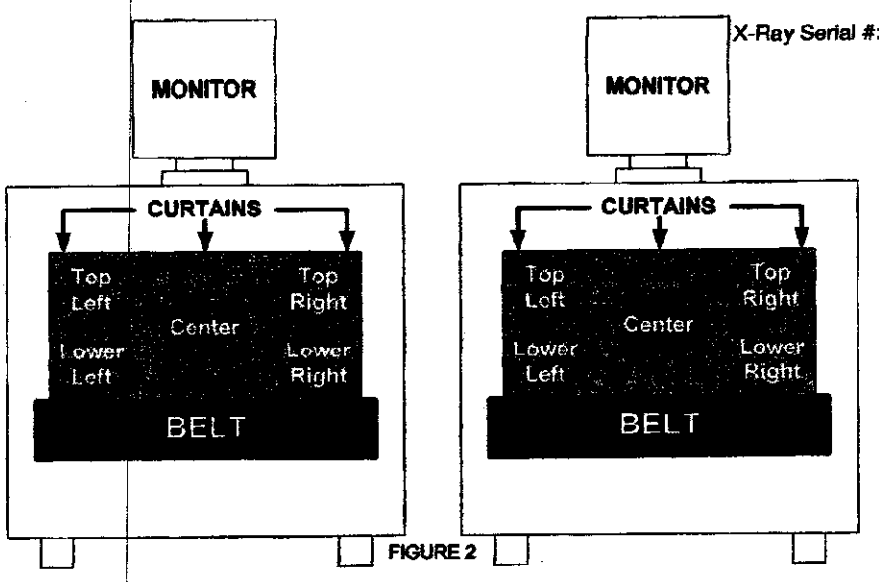

FIGURE 2

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	.003 mR/hr	TOP LEFT	.089 mR/hr
TOP RIGHT	.013 mR/hr	TOP RIGHT	.066 mR/hr
LOWER LEFT	.004 mR/hr	LOWER LEFT	.079 mR/hr
LOWER RIGHT	.005 mR/hr	LOWER RIGHT	.083 mR/hr
CENTER	.007 mR/hr	CENTER	.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:** 1.17 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:** 3/12/11

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