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)*: DFW; FDA Region: TX; **BB** St. No. R.R. or Airline/Airport *(10.80)*: 2233 S. International

CC City *(10.73)*: DFW Airport; State Code: TX; Zip Code: 75261

DD and Specific Location of X-ray System: Room No. or Other Location of System *(10.32)*: C20 Ln 2; Telephone No.: [redacted]

Certification Label Present: Yes; Instruments: *(type and serial number)*: Inovision Model: 451P-RYR Serial No. 505

01 1.2 Manufacture And Product ID:

A. Manufacture *(Responsible Firm)*: Heimann; B.: HS; C. System Model No. and/or Name: 6040i Hi-TRAX

D. Unique I.D.: 115V 60Hz; E. System Serial No.: 40594

F. Date of Manufacture Mo. 2 Yr. 2006; 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: 04

7.1 Scatter Block Description: Pelican 1400 case

[redacted] 3-17-11

7.2 Technical Factures: 65/-65 kVp; .4 ~~.319~~ mA

05 / **06**

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
	.083 mR/hr	Exp		.044 mR/hr	exp
	.061 mR/hr	Exp		.017 mR/hr	exp
	.059 mR/hr	exp		.012 mR/hr	exp
	.051 mR/hr	exp		.012 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

09 8.2: 78 µR ~~Average~~ dose per inspection

10 8.3: [redacted] 3-30-11

11 8.4

12 8.5

13 Surveyor Information: [redacted]; Date of Survey: 3-17-11; 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#: 3770887

Location: AFW C20 Ln2 Background Reading: 4 µR/hr Date: 3-16-11

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 40594	+65.92 kV, -65.47 kV, 319 µA	.319 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_____	_____kV, _____ µA	_____mA
☐ Other _____	s/n_____	_____kV, _____ µA	_____mA

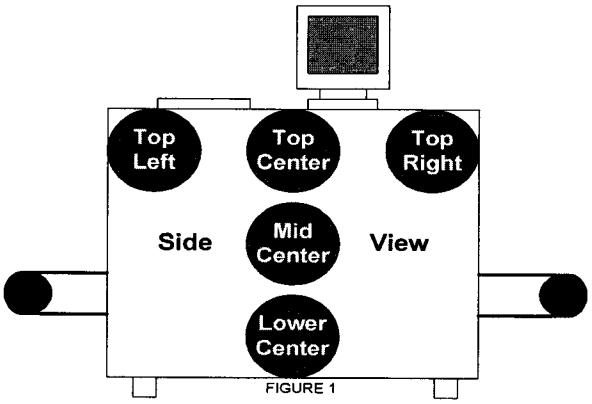

FIGURE 1

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	.005 mR/hr	TOP LEFT	.012 mR/hr
TOP CENTER	.004 mR/hr	TOP CENTER	.011 mR/hr
TOP RIGHT	.003 mR/hr	TOP RIGHT	.009 mR/hr
MID CENTER	.006 mR/hr	MID CENTER	.010 mR/hr
LOWER CENTER	.003 mR/hr	LOWER CENTER	.012 mR/hr

SIEMENS

Siemens Government Services, Inc.

[redacted]

WO#: 40594 3770887

X-Ray Serial #: 40594

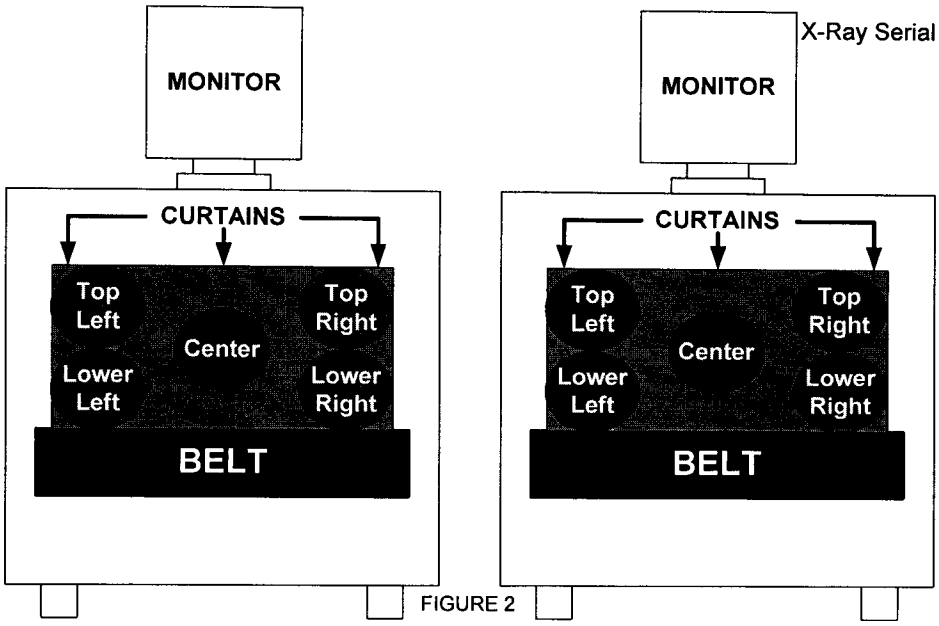

FIGURE 2

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	.004	mR/hr	TOP LEFT	.051	mR/hr
TOP RIGHT	.004	mR/hr	TOP RIGHT	.061	mR/hr
LOWER LEFT	.009	mR/hr	LOWER LEFT	.044	mR/hr
LOWER RIGHT	.006	mR/hr	LOWER RIGHT	.059	mR/hr
CENTER	.007	mR/hr	CENTER	.083	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:** 780µR
   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:** 3-16-11

[redacted]