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 (10.60): MYRTLE BEACH INTERNATIONAL AIRPORT	FDA Region: MYR	BB	St. No. R.R. or Airline/Airport (10.60): 1100 JETPORT RD
CC		City (10.70): MYRTLE BEACH		State Code: SC	Zip Code: 29577
DD		Room No. or Other Location of System (10.32): MAIN CHECKPOINT, LANE 4	[redacted]	[redacted]	
		Certification Label Present: YES	Instruments: (type and serial number) INOVISION	Model: 451P	Serial No. 502S
01	1.2 Manufacture And Product ID	A. Manufacture (Responsible Firm): SMITHS DETECTION	B. HS	C. System Model No. and/or Name: HI TRAX 6040i	
		D. Unique I.D.: 115vac 60Hz	E. System Serial No. 40675		
		F. Date of Manufacture Mo. 12 Yr. 2007	1.4 Operator Instructions Available: YES	1.5 Maintenance Schedule Available: NA	
	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 Interlocks	A. Minimum Number of Interlocks Visible At Any One Door: NA	3.3 Prevention of X-Radiation By Interlocks	A. All Doors and Access Panels That Were Tested Prevent Generation of X-Radiation: NA	
		B. At Least One Interlock Dependent on No Moving Part Except Door: NA		B. Use of X-Ray Control Necessary to Resume Operation Following Interruption: NA	
	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 CASE FOR INOVISION METER		
05	7.2 Technical Factures	+72.79, -73.25 kVp	.421 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
EXIT TOP LFT	.023 mR/hr	Exp	EXIT CENTER	.042 mR/hr	exp
EXIT TOP RT	.034 mR/hr	Exp	ENTRANCE TOP RT	.016 mR/hr	exp
EXIT LOWER LFT	.020 mR/hr	exp	BACK TOP LFT	.012 mR/hr	exp
EXIT LOWER RT	.026 mR/hr	exp	FRONT TOP LFT	.009 mR/hr	exp

06

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 76uR		
09	8.2		
10	8.3		
11	8.4		
12	8.5		
13	Surveyor Information: [redacted]	Surveyor Name (10.72) (Enter L, F, MI): [redacted]	Date of Survey: 3/10/11 — Surveying Agency Code

Remarks: [redacted]

FAA Form 185-17 (6-81)

SGS Document# DOEO-0014, Rev. Jun 81

FAA HQ

RLS Move SQ0221

SIEMENS

Siemens Government Services, Inc.

WO#: 3780272

X-Ray Serial #: 40675

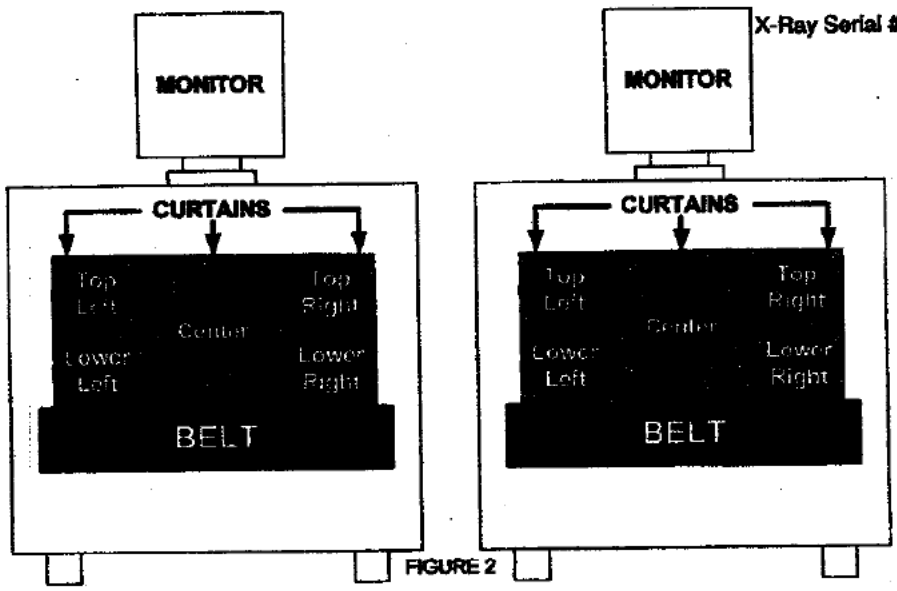

FIGURE 2

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	.006	mR/hr	TOP LEFT	.023	mR/hr
TOP RIGHT	.016	mR/hr	TOP RIGHT	.034	mR/hr
LOWER LEFT	.005	mR/hr	LOWER LEFT	.020	mR/hr
LOWER RIGHT	.004	mR/hr	LOWER RIGHT	.025	mR/hr
CENTER	.003	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:** 760 µR
   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 Perf[redacted]

Signature: [redacted] **Date:** 3/10/11

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

[redacted]

Printed copies of this document must be verified against the Document Server or Intranet for correct revision level before being used.

SIEMENS

Siemens Government Services, Inc.

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

WO#: 3780272

Location: MYR Lane #4 Background Reading: 2.0 µR/hr Date: 3/10/11

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 5030e	s/n_____	+_____kV, -_____kV,_____ µA	_____mA
☑ Smiths Heimann 6040i	s/n 40675	+72.79 kV, -73.25 kV, 421.18 µA	.421 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

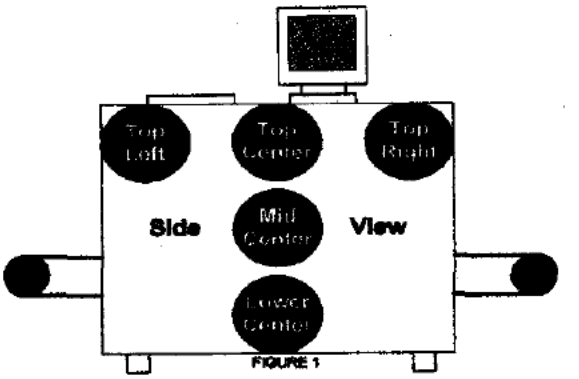

FIGURE 1

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	.009	mR/hr	TOP LEFT	.012	mR/hr
TOP CENTER	.004	mR/hr	TOP CENTER	.008	mR/hr
TOP RIGHT	.008	mR/hr	TOP RIGHT	.005	mR/hr
MID CENTER	.003	mR/hr	MID CENTER	.006	mR/hr
LOWER CENTER	.004	mR/hr	LOWER CENTER	.005	mR/hr

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[redacted]