Rapiscan Systems

BAGGAGE/PARCEL CABINET X-RAY SYSTEM RADIATION LEAKAGE REPORT

FIELD SERVICE ENGINEERS

Form R-0588-3 9/9/09

45. RSI W.O.# 3339132
Deferred W.O.# 3400318

1. Name of Facility: Ft. Lauderdale - Hollywood International Airport
2. Region: Florida
3. Street Address: 200 Terminal Drive
4. City: Ft. Lauderdale
5. State or Province Code: Florida
6. Zip Code: 33315
7. Room No. or Other Physical Location of System: T-1C ckpt Lane 3
8. Person Interviewed: [redacted]
9. Telephone Number: [redacted]
10. Fax Number: [redacted]
11. Manufacture Information & Certification Label Present: ☒ Yes - Pass ☐ No - Fail
12. Radiation Measuring Instrument: Inovision Model: IXS1P-KYR Serial No. 0558 Calibration Due Date: 11/11/10 — FSE Shall Attach Copy of Calibration Certificate to This Form
Manufacturer: Rapiscan Systems Inc.
13. System Model No.: 620 DV
14. Single Source ☐ Dual Source ☒ Other ☐, Describe:
15. System Serial No.: 7090303
16. Date of Manufacture Mo. Yr.: Jan 2009
17. X-ray Tube Serial Number(s): P-6W79, P-65YU
18. Facility Owner Has been notified of responsibility for "Application for Registration" with their State Radiation Control Agency: ☒ Yes ☐ No
19. Customer has been notified of their Responsibility for posting their State "Notice to Employees" Document and Posted in Several Conspicuous Locations so Employees Can View: ☒ Yes ☐ No
20. Operator Instructions Available: ☒ Yes - Pass ☐ No - Fail
21. Maintenance Schedule Available: ☒ Yes - Pass ☐ No - Fail
22. Warning Label Present at Controls Stating: "Caution: X-Rays Produced When Energized": ☒ Yes - Pass ☐ No - Fail
23. Warning Labels Present at Ports Stating: "Caution: Do Not Insert Any Part of the Body When System is Energized, X-Ray Hazard": ☒ Yes - Pass ☐ No - Fail
24. Two Indicators Labeled "X-Ray On" Present at Controls (including software user interface): ☒ Yes - Pass ☐ No - Fail
25. At Least One Indicator, Marked "X-Ray On" Is Visible from Each Port: ☒ Yes - Pass ☐ No - Fail
26. Captured Key: The Key for the Key Actuated Control Cannot be Removed in Any Mode that Allows X-Ray Generation: ☒ Yes - Pass ☐ No - Fail
27. All Doors and Access Panels To the X-Ray Beam Prevent Generation of X-Radiation: ☒ Yes - Pass ☐ No - Fail
28. Some Part of the Body Can Be Inserted Through a Port Into The Primary Beam: ☐ Yes ☒ No
29. Use of X-Ray Control Necessary to Resume Operation Following Interruption: ☒ Yes ☐ No
30. Means Provided to Ensure Operator Presence at the Control Area X-ray located in a public access area: ☒ Yes - Pass ☐ No - Fail
Or X-ray located in a non-public access area ☐ Not Required
Rapiscan Systems Test Procedure Used: Rapiscan Systems WI-0023-4
31. Scatter Block Description: ☐ Two (2) Reams Copy Paper ☒ Other, Describe: Pelican case 1400
32. Means Provided to Operator for Terminating Exposures of Greater than One-Half Second and Preventing X-rays (E-Stop Test): ☒ Yes - Pass ☐ No - Fail
33. X-Ray Generator Settings: 160.8 kVp 1.0 mA
160.8 kVp 1.0 mA

Note: All Survey Measurements Shall be Obtained at 5 cm from All External Surfaces and at 5 cm from the Plane of All Access Port Openings or Shroud Extension Openings. Scatter Block shall be Stacked and Positioned Centerline of Primary Beam.

34.1. Background Radiation: 5 uR/hr

Maximum External Surface Dose Rate Not to Exceed 500 uR/hr at 5 cm from all external surfaces.

34.3 Record All Readings in uR/hr Unless Otherwise Noted

Please see model specific diagram (attached)

36. Overall Condition of Lead Drapes: ☒ SAT - Pass ☐ UNSAT - Fail Description
37. Overall Condition of Machine: ☒ SAT – Pass ☐ UNSAT – Fail
38. Comments, Corrective Active Actions and/or Recommendations:
39. Surveyor Name (Print: L, F, MI): [redacted]
40. Surveyor Signature: [redacted]
41. Date of Survey: 9/7/10
42. Time of Survey: 1900

This Surveyor has inspected, tested and certified this x-ray machine is in compliance with U.S. FDA 21 CFR 1020.40 and equivalent international radiation emission leakage standards.

[redacted]) have received a copy of this Radiation Survey Report and understand the responsibility to retain this report for State inspection.

Signature: [redacted] 9-13-10

This report is to certify this x-ray unit has been surveyed for radiation leakage emissions and found to be within the regulatory radiation emission limit. The safety features, controls and indicators incorporated in the x-ray unit have been satisfactorily tested and/or inspected. The owner of this x-ray unit is responsible for State Radiation Control Agency compliance (not applicable for facilities exclusively operated by the Federal Government) and for the safe use and routine inspection, general maintenance and cleanliness of this x-ray unit. Only trained and qualified individuals should operate this equipment.

Seal 58774
3329132 + 3400318

[redacted]

W/O 3389132

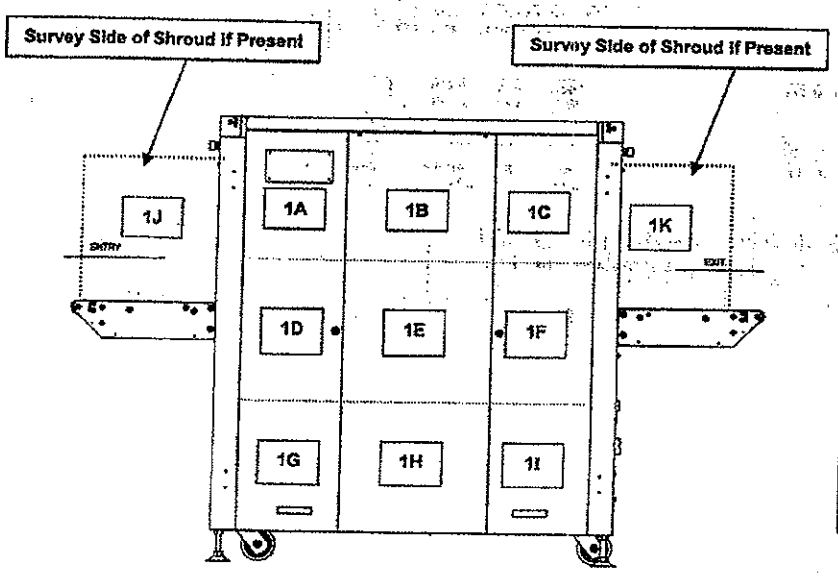
Rapiscan Systems	MODEL 620DV OR 500 SERIES EQUIVALENT RADIATION LEAKAGE SURVEY FORM	MODEL 620DV FSE SURVEY FORM	FORM FSE-R-0047-620DV-1

FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY

United States and Canada External Surface Radiation Leakage Limit is 5.0 uSv/hr at 5 cm (500 uR/hr)

Global External Surface Radiation Leakage Limit is 1.0 uSv/hr at 5 cm (100 uR/hr at 5 cm)

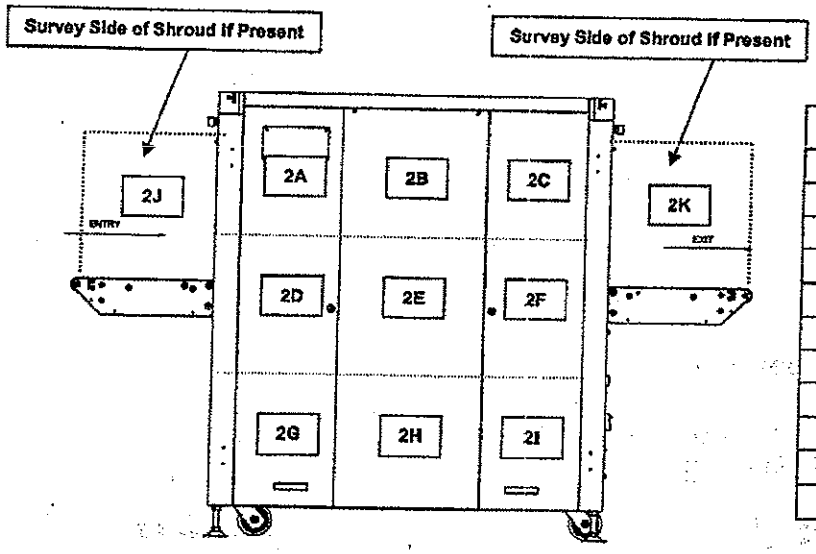
Date: 9/7/10	Location Manufactured: (Check One) ___ Malaysia ___ UK ✓ US	Instrument Model No: Inovision 451
Time: 1900	Date of Mfg: January 2009	Instrument Serial No: 0558
Background: ___ uSv/hr (5 uR/hr)	Serial No: 7090303	Instrument Calibration Due: 11/11/10
All Measurements Recorded In: ___ uSv/hr ✓ uR/hr (Check One)	Settings: 160.8 kvP 1.0 mA Settings: 160.8 kvP 1.0 mA	Description of Scatter Body: (Check One) ___ Paper (2 Reams, 500 sheets each) ___ Wood Block (4" x 4" x 12" L) ✓ Other Pelican 1400 Case



Operators Side

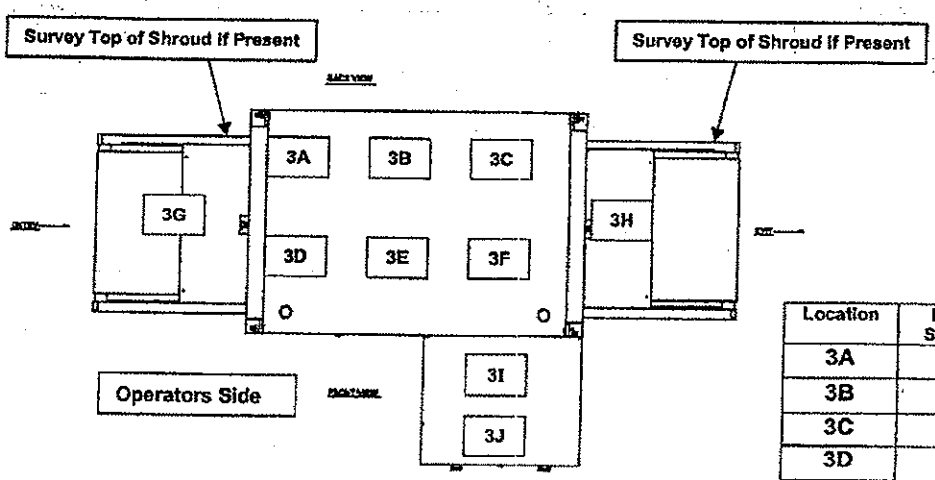
Location	Results NO Scatter Body	Results WITH Scatter Body
1A	14	15
1B	16	22
1C	14	14
1D	15	16
1E	21	28
1F	17	12
1G	22	12
1H	10	13
1I	9	13
1J	76	91
1K	66	86

FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY



Non-Operators Side

Location	Results NO Scatter Body	Results WITH Scatter Body
2A	15	18
2B	29	32
2C	11	10
2D	16	21
2E	25	23
2F	10	11
2G	11	10
2H	10	14
2I	9	10
2J	48	48
2K	35	61

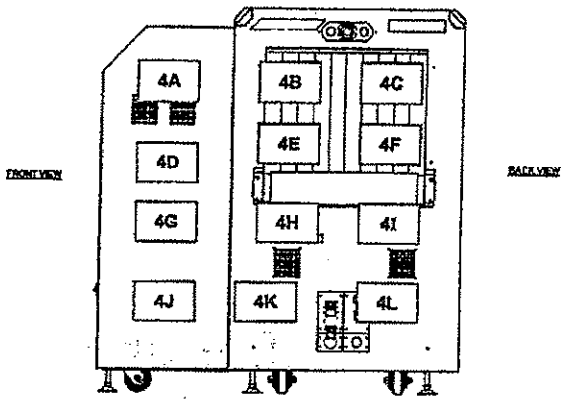


Top View

Location	Results NO Scatter Body	Results WITH Scatter Body
3A	11	10
3B	12	17
3C	11	12
3D	10	21
3E	18	20
3F	15	10
3G	28	34
3H	56	75
3I	16	19
3J	11	13

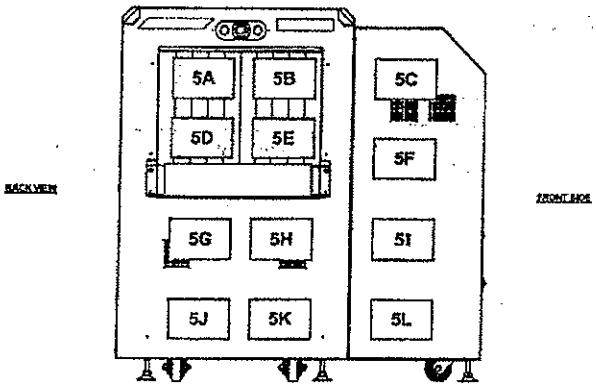
FIELD SERVICE ENGINEERS RADIATION EMISSION SURVEY

EXIT TUNNEL



Location	Results NO Scatter Body	Results WITH Scatter Body
4A	31	36
4B	34	55
4C	33	53
4D	48	68
4E	35	48
4F	36	61
4G	12	12
4H	20	27
4I	17	43
4J	14	15
4K	18	21
4L	14	12

ENTRANCE TUNNEL



Location	Results NO Scatter Body	Results WITH Scatter Body
5A	35	38
5B	30	35
5C	28	27
5D	35	53
5E	34	46
5F	27	25
5G	17	22
5H	31	23
5I	22	17
5J	14	15
5K	11	15
5L	14	28

Instructions:

- If shrouds are NOT installed, radiation measurements shall be taken 5 cm from the lead drapes.
- If shrouds are installed, radiation measurements shall be taken at the imaginary plane of the shroud opening.
- Lead Drapes should touch the conveyor. If they do not, check to verify x-ray radiation is not traveling down the conveyor where the gap exists between the lead drapes and the conveyor surface.
- Survey below the conveyor up against the cabinet near any gaps, mating surfaces, and photo sensor cut-outs.

SURVEY PERFORMED BY: [redacted] DATE: 9/7/10

[redacted]