

Appendix 0
Hazardous Materials Group Factual

Florida Department of Health Information (Radioactive Materials)

000001



Jeb Bush
Governor

Robert G. Brooks, M.D.
Secretary

DATE: 8/20/02	TIME: 2:00 PM	NUMBER OF PAGES (Excluding Cover Sheet)	8
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TO: Jim Henderson, NTSB	FAX NUMBER: (202) 314-6482
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FROM: PAUL VAUSE <input checked="" type="checkbox"/>
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NOTES:

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<http://www.doh.state.fl.us/environment/radiation/>

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Phone (850) 245-4545 Bureau of Radiation Control • Radioactive Materials Section Fax (850) 921-6364
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M. Stephens

copy Paul V. J. & Inf. E.



State of Florida Bureau of Radiation Control Radiological Incident Final Report

Incident Number
FL02-120

Abnormal Occurrence No Follow-up Report No Allegation No

Incident Date 26-Jul-02 Report Date 29-Jul-02

Licensee or Owner
 FedEx

Street Address 3670 Hack's Cross Rd Bldg G, 2nd Floor City, State and Zip Code Memphis, Tn 38125-8800 License # None License Type: Category None

Contact Person, Title: Address if Different from Licensee or Owner Dr. Roy Parker, RSO Phone Number

Isotope(s) Tl-201(2), P-32 (2) Activity(s) 5.47 Gbq, 5.68 GBq, 7.19 GBq, 59.2 MBq

Material Form: Chemical Form: Physical Form liquid, liquid, solid, liquid Probable Disposition of Material Recovered

Exposure? No Number N/A Type of Individual(s) N/A Exposure Source N/A Dose Delivered to N/A Maximum Dose Received N/A

Incident Category
 Transportation

Incident Location Tallahassee Regional Airport Location Classification Unrestricted Area

Incident Description
FedEx flight #1478, a Boeing 727 from Memphis-landed short of the runway and burned at the Tallahassee municipal airport at 5:43 a.m on 7-26-02. Shipping documentation received later in the day indicated three yellow II and one white I radio pharmaceutical packages were on board. HazMat material is carried behind the cockpit on the right side of the plane, and this area of the plane was intact. All RAM was located and removed. There was no evidence of contamination. No Public health threat exists from RAM. Any media calls should be referred to the National Transportation representative Terry Williams at (202)314-6100. This office will take no further action on this incident.

Device Type (Quantity)	Manufacturer	Model Number	Serial Number(s)
1			
2			
3			

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Emergency Groups at Scene None Organizations Notified NRC Media Contacted None

Investigator's Name: Title William Passetti, Chief Office Bureau of Radiation Control Date: Time Investigated 26-28-Jul-02

Charles S. Adams
Incident Response Coordinator, Environmental Section, Bureau of Radiation Control Date 29 Jul 02
[Signature]
Emergency Response Supervisor, Environmental Section, Bureau of Radiation Control Date 7/29/02

ATTACHMENTS: Abstract Yes No; Narrative Yes No; Supplementary Material Yes No; Total Page(s) 1

DISTRIBUTION: Administrator, Radioactive Materials Licensing Section, Bureau of Radiation Control; Incident File, Environmental Section Bureau of Radiation Control **000003**

**FedEx Flight # 1478
Incident Number FL02-120
Chronology**

Friday, July 26, 2002

The Environmental Radiation section of the Florida Bureau of Radiation Control notified headquarters in Tallahassee of the crash and requested we respond to the incident since radioactive materials were known to be aboard the flight.

9:00am

Members of the response team (Bill Passetti, Bureau Chief and Paul Vause, Environmental Manager) gathered the emergency response kit and two types of radiation survey meters (Ludlum model 12s microR meter and Victoreen 450 ion chamber) and proceeded to the crash site.

9:30am – 3:30pm

Mr. Passetti and Mr. Vause arrived at the crash site and reported their presence to a Leon County deputy, the Tallahassee fire department and the Florida Division of Emergency Management. They stated their purpose: to locate the radioactive materials, provide information regarding radioactive contamination and exposure to emergency personnel and recover the radioactive materials if possible. A member of the fire department escorted them to the plane wreckage to take radiation surveys of the aircraft and wreckage after the area was no longer considered a fire hazard. The escorting fireman informed them that they had performed a radiation survey of the aircraft and wreckage and had not found anything. Mr. Passetti and Mr. Vause surveyed the wreckage and aircraft and found one area directly behind the cockpit on the starboard side of the aircraft that exhibited elevated radiation dose rates (450 microR/hr) above background (30 microR/hr). Attachments 1 and 2 are pictures of the area where elevated radiation levels were located. Since elevated radiation dose levels had been found, they surveyed fire department personnel for radioactive contamination and found that none of the fire fighters were contaminated. The area was taped off to prevent emergency personnel from inadvertently entering and exposing themselves to radiation exposure. A Federal Express employee, Mr. Oppenheimer, provided a copy of the shipping manifest indicating the flight was transporting 4 type A packages of radioactive materials. A list of the materials may be found in attachment 3. Mr. Passetti and Mr. Vause remained at the crash site for the arrival of the National Transportation Safety Board (NTSB) investigation team. A decision was made by NTSB to close the site down until Saturday.

Saturday, July 27, 2002

8:30am – 5:00pm

Mr. Passetti and Mr. Vause returned to the crash site Saturday morning to monitor radiation levels, look for radioactive contamination around the aircraft and to recover the radioactive

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materials from the interior of the aircraft, if possible. Surveys of the aircraft and soil did not reveal any radioactive contamination outside of the plane. Radiation dose levels directly behind the cockpit on the starboard side of the aircraft had not changed significantly from the day before. Fire fighting personnel escorted Mr. Vause into the burned out interior of the plane in an attempt to recover the radioactive materials. Radiation dose rates within the interior of the plane did not exceed 2mR/hr. Two firemen and Mr. Vause were able to locate, isolate and remove all of the radioactive material listed in the shipping manifest after prying apart pieces of the aircraft, shipping containers and other burned debris. All of the radioactive materials found inside the aircraft were given to Mr. Passetti on the exterior of the aircraft for additional radiation surveys that could not be performed in the plane. The radioactive materials recovered consisted of 7 individual shielded vials of thallium 201 solution that were severely damaged, 1 shielded vial of phosphorous 32 in solution that appeared to have received moderate fire damage and 1 very badly damaged phosphorous 32 wire in a device assembly. The highest radiation dose levels (30 milliR/hr) were found at the surface of the badly damaged device assembly containing the phosphorous 32 wire. None of the shipping containers (Type A packages) survived the crash and fire. Attachments 4 and 5 are pictures of the very badly damaged device assembly containing the phosphorous 32 wire. A radiation survey of the aircraft's interior, exterior and the ground was performed after removal of the radioactive materials and radiation levels were found to be at background (30 microR/hr). All of the radioactive materials were bagged, placed into a small steel container and taken to the Federal Express terminal and placed into a large steel container, marked and labeled with radiation signage and stored in a secured area for eventual disposal. Mr. Passetti and Mr. Vause left the crash site at approximately 5:00 pm and advised NTSB and the Florida Division of Emergency Management that they would return on Sunday July 28, if needed.

Sunday, July 28, 2002

8:30am – 3:30pm

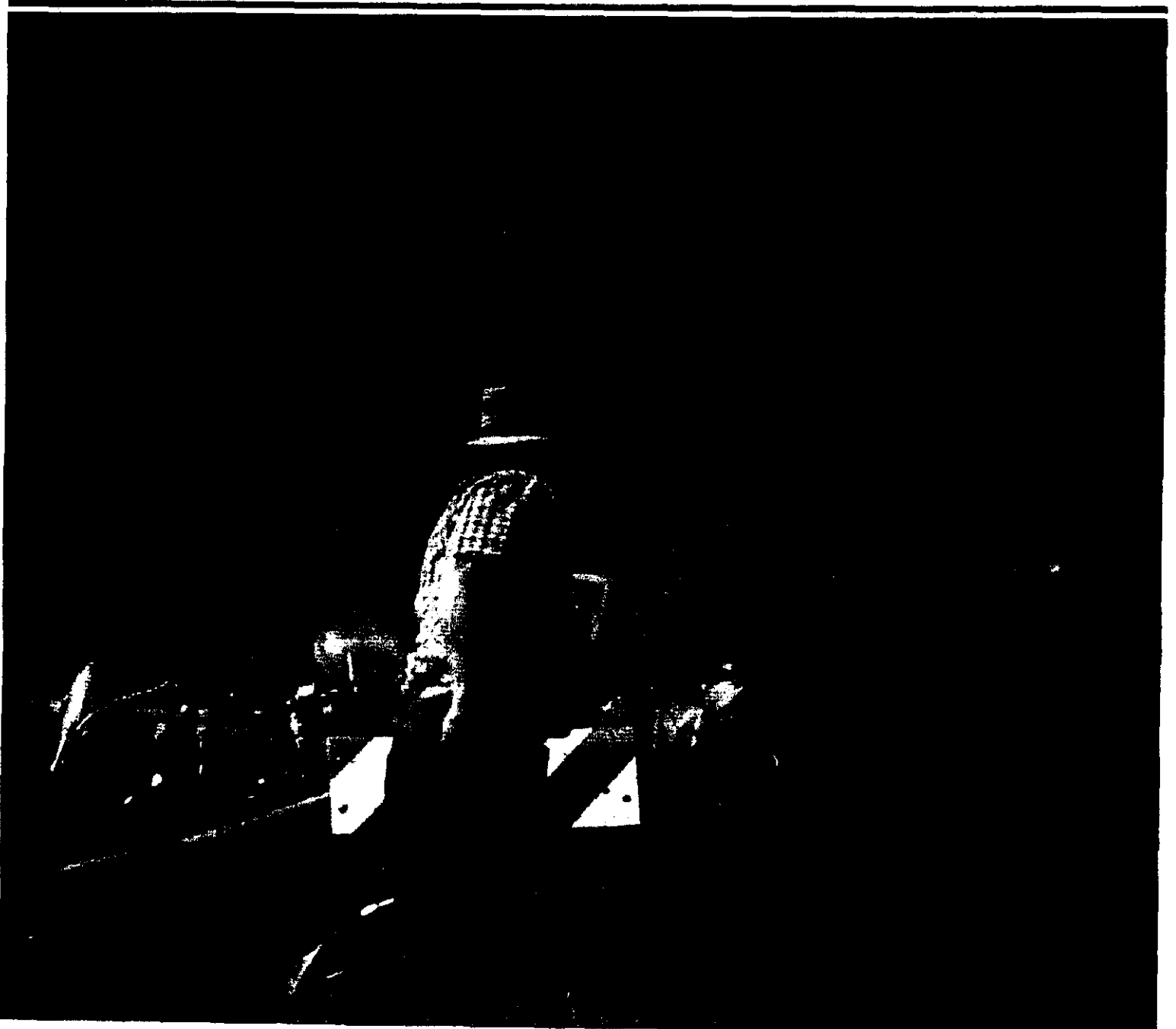
Mr. Vause returned to the crash site as requested by NTSB and the Florida Division of Emergency Management to survey the contents of the plane as it was removed from the interior of the aircraft and placed onto the ground for the investigators to comb through. Each pile of debris was surveyed and no radiation dose rates above background were detected in any of the debris. At 3:30 pm the entire interior of the plane cargo areas had been removed and no radiation levels above background (30 microR/hr) had been detected. The radiation incident was considered to be over and no subsequent visits to the crash site were requested.

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FedEx Flight # 1478

Incident Number FL02-120

DATES: July 26 - 28, 2002
Attachment 1



FedEx Flight # 1478

Incident Number FL02-120

DATES: July 26 - 28, 2002
Attachment 2



**FedEx Flight # 1478
Incident Number FL02-120**

DATES: July 26 - 28, 2002
Attachment 3

4 Type A packages of radioisotopes:

<u>Shipper</u>	<u>Isotope</u>	<u>Activity</u>	<u>TI</u>	<u>Being Delivered To</u>
1) Bristol-Myers Squibb Med	Thallium (TL201) (liquid form)	5.68GBq (150 millicuries)	0.3/ yellow II label	Mediscan, Inc (Valdosta, GA)
2) Bristol-Myers Squibb Med.	Thallium (TL201) (liquid form)	5.47GBq (147 millicuries)	0.3/yellow II label	Numed, Inc (Albany, GA)
3) ICN Radiochemicals	Phosphorus (P-32) (liquid form)	59.2MBq (1.5 millicuries)	0.1/yellow II label	FSU? (Tallahassee, FL)
4) Guidant	Phosphorus (P-32) (solid form)	7.19GBq (213 millicuries)	0.0/white I label	TLH.Comm. Hospital (Tallahassee, FL)

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FedEx Flight # 1478

Incident Number FL02-120

DATES: July 26 - 28, 2002
Attachment 4



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FedEx Flight # 1478 Incident Number FL02-120

DATES: July 26 - 28, 2002
Attachment 5



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