Pratt & Whitney
A United Technologies Company

400 Main Street
East Hartford, Connecticut 06108

NMSB 2

April 15, 2004

License Number: 06-07522-02 03003796

RECEIVED
REGION 1
'04 APR 21 P1:51

Mr. John R. McGraph
Senior Health Physicist
United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Dear Mr. McGraph

As we discussed on March 4 of this year, please terminate license number 06-07522-02 as the devices covered by the license were removed from the Pratt & Whitney facility in 1996 and 1999. The devices were returned to the original manufacturer i.e. United Technologies Research Center (UTRC) 411 Silver Lane East Hartford, 06108.

Attached are decommissioning area surveys and transportation records for the devices. These records indicate that the levels of the final area swipe surveys performed were within NRC's recommended levels, and the required shipping papers conformed to the proper condition for transportation according to the applicable regulations of the Department of Transportation.

One of the licensed devices, density gage s/n 3327LN, was first returned to UTRC to be refurbished through the installation of a new source. UTRC then shipped the gage to Pratt & Whitney's facility in North Berwick, Maine.

Please do not hesitate to contact me at (860) 565-9728 should you have any questions.

Sincerely,

Carlos Rivera, RSO
Sr. EH&S Engineer

134877

NMSS/RGN1 MATERIALS-002

Dept. 432
Density Gage (automated)
Isotope: Gd-153

SN: 33272N

UNITED
TECHNOLOGIES
RESEARCH
CENTER

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package - limited quantity of material, UN2910.

This is to certify that this package conforms to all packaging requirements of the U.S. Department of Transportation rules and regulations regarding the shipment of excepted radioactive material, limited quantity.

The radiation level on the surface of this package is less than 0.5 mr/hr. The non-fixed (removable) radioactive surface contamination on the external surface of this package is less than 0.00001 microcuries per square centimeter.

No other labels required.

This document pertains to: Gd-153
Source S/N: 3327LN

This equipment will be shipped from:

Pratt & Whitney, 400 Main Street, East Hartford, CT

This equipment will be shipped to:

United Technologies Research Center
411 Silver Lane
East Hartford, CT

Date shipped: 5/6/96

Signed:

Date: 5/6/96

Date: **5/6/96**

Log Sheet for Verifying the Acceptability of Gage Transportation According to
49 CFR 173.421 (Limited Quantities of Class 7 (radioactive) materials)

Gage Type (LTG, PFG, DG):	**DG**
Gage S/N:	**N/A**
Isotope:	**Gd-153**
Source S/N:	**3327LN**
Source Activity:	**72 mCi**
Location:	**Dept. 432, PWA/East Hartford**
Dose Rate Meter Used:	**Victoreen 450 (Latest Cal. 3/20/96)**
Wipe Counter Used:	**PCC-11TC**
Wipe Counter Efficiency:	**1.92%**

1)

Sample	Wipe Location	Gross Counts	Gross CPM	Activity μCi
Standard	N/A	(Gd-153)	**1246**	N/A
Background	N/A		**38**	N/A
1	Source Housing		**34**	**<8.7E-4**
2	Beneath Gage		**43**	**<8.7E-4**
3	Package Surface		**36**	**<8.7E-4**
4				
5				

2) Maximum dose rate measured on the surface of the packaged device:
0.10 mR/hr

For a package to conform to the conditions and limitations specified in 49 CFR 173.421 the following conditions must be met:

1) Maximum activity of the wipe taken on the external surface of the packaged device is less than 0.005 μCi (wipe #3). NO gage can be transported if the removable surface contamination on the external surface of the package is greater than 1E-5 μCi /sq. cm. (1E-5 μCi /sq.cm. * 500 sq. cm. = 0.005 μCi).
2) Maximum dose rate at package surface is less than 0.5 mR/hr (item #2).

Are all of the above conditions met:

YES **X** NO _____

Prepared by: **G. Janowsky**

AREA SURVEY

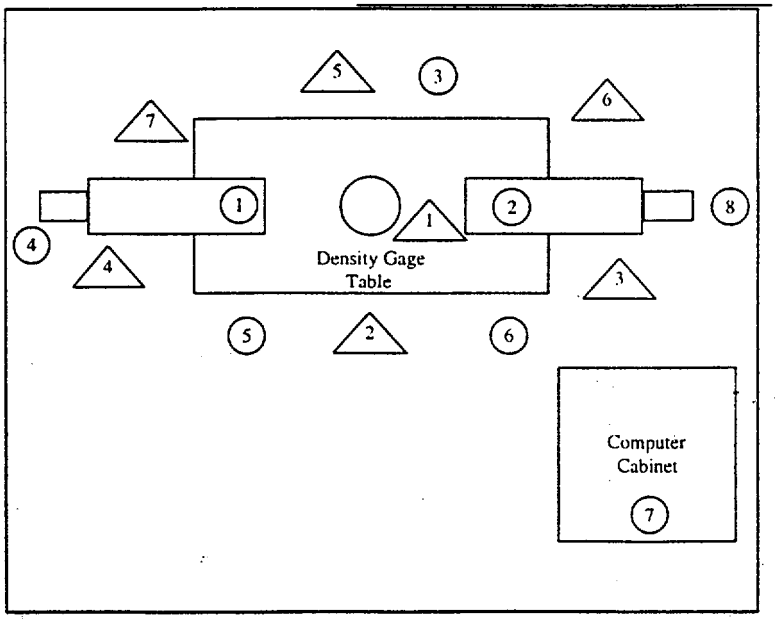
Surveyor: **G. Janowsky** Date: **5/6/96**
Location: **PWA/E.H./D.432** Instrument: **PCC-11TC**
Background: **38cpm** Efficiency: **1.92%**
Remarks: **Final survey - Gage being relocated to PWA/N. Berwick, ME**

SWIPE	CPM	SWIPE	CPM	ADDITIONAL SWIPES
1	47	16		
2	40	17		
3	42	18		
4	35	19		
5	33	20		
6	35	21		
7	40	22		
8	37	23		
9		24		
10		25		
11		26		
12		27		
13		28		ACTIVITY OF HIGHEST
14		29		SWIPE: **< 8.7E-4** uCi
15		30		

PHYSICAL SURVEY

AREA	READING (CPM)
Bkg	**25-50**
1	**25-50**
2	**25-50**
3	**< 25**
4	**25-50**
5	**< 25**
6	**< 25**
7	**< 25**
8	
9	

INSTRUMENT USED: **Minimonitor 125**



Dept. 963
Density Gage (semi-automated)
Isotope: Gd-153

SN: 3791LN

Area Survey/Leak Test

LOCATION **PWA/East Hartford/DO** SURVEYOR **S. Saitta**

DATE **16 August 1999**

RESULTS

Instrument:	**Eberline SPG-2**					Date counted:	**16 August 1999**	
Method:	Swipe					Background:	**195**	cpm
Gd-153 Std:	**391000**	cpm	Gd-153 Eff:	**12.75**	%	Gd-153 LOD:	**2.96E-4**	µCi
Cs-137 Std:		cpm	Cs-137 Eff:		%	Cs-137 LOD:		µCi
Am-241 Std:		cpm	Am-241 Eff:		%	Am-241 LOD:		µCi

Swipe#	Source S/N	Reading (cpm)	Activity (µCi)
1	**Floor in Front of Table**	**193**	**< 2.96E-4**
2	**Floor in Front of Computer**	**206**	**< 2.96E-4**
3	**Floor in Front of Density Gage**	**190**	**< 2.96E-4**
4	**Floor on Top of Density Gage**	**205**	**< 2.96E-4**
5	**Floor Behind Density Gage**	**193**	**< 2.96E-4**
6	**Floor in Back of Density Gage by Desk**	**185**	**< 2.96E-4**
7	**Source Housing**	**187**	**< 2.96E-4**
8	**Detector Face**	**196**	**< 2.96E-4**
9	**Chuck and Chuck Arms**	**218**	**< 2.96E-4**
10	**Table: Front of Chuck**	**217**	**< 2.96E-4**
11	**Table: Back of Chuck**	**218**	**< 2.96E-4**
12	**Package Surface**	**190**	**< 2.96E-4**
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

AREA SURVEY

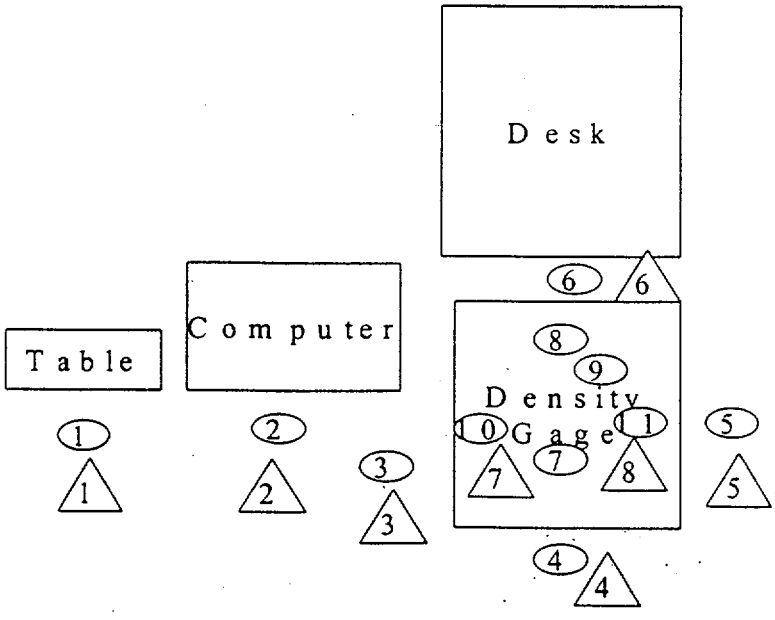
Surveyor: **S. Saitta** Date: **16 August 1999**
Location: **PWA/East Hartford** Instrument: **Eberline SPG-2**
Background: **195** Efficiency: **12.75%**
Remarks: **Decommission of Gage**

SWIPE	CPM	SWIPE	CPM	ADDITIONAL SWIPES
1	**193**	16		
2	**206**	17		
3	**190**	18		
4	**205**	19		
5	**193**	20		
6	**185**	21		
7	**187**	22		
8	**196**	23		
9	**218**	24		
10	**217**	25		
11	**218**	26		
12	**190**	27		
13		28		ACTIVITY OF HIGHEST
14		29		SWIPE: **< 2.96E-4** uCi
15		30		

PHYSICAL SURVEY

AREA	READING (CPM)
Bkg	**< 25**
1	**< 25**
2	**< 25**
3	**< 25**
4	**< 25**
5	**< 25**
6	**< 25**
7	**< 25**
8	**< 25**
9	

INSTRUMENT USED: **MiniMonitor 125**



United Technologies Research Center

SHIPPING PAPER FOR RADIOACTIVE MATERIALS

(To Be Completed In Duplicate)

No. of Pkgs.	HM	Proper Shipping Name	Hazard Class	UN or ID no.
1	X	Radioactive Material, n.o.s.	7	UN2982

Nature and Quantity of Content			Package		
Radioactive Material	Form	Activity	Category	Transport Index	Package
Name of each radionuclide	Description of the physical and chemical form or special form	Gigabecquerels (Curies) Conversion factor: Ci * 37 = GBq	Radioactive White - I Radioactive Yellow - II Radioactive Yellow - III	Max. radiation level at one meter (mR/hr rounded up to next tenth)	
Gadolinium 153	Sealed Source S/N 3791LN	**9.176** Gbq **0.248** (Ci)	Radioactive White - I	**0.1**	A

Additional Information Required for Fissile Material Only

Exempted from the additional requirements for fissile materials	Not Exempted	☐
	Fissile Class I	☐
	Fissile Class II	☐
	Fissile Class III	☐

Names, plus quantity in grams, or concentration or enrichment in U_{235}

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Signed: Glenn Janowsky
Radiation Safety Officer
Date: **16 August 1999**

Name and Address of Shipper

Pratt & Whitney Aircraft
400 Main Street
East Hartford, CT 06108

Name and Address of Customer

United Technologies Research Center
411 Silverlane
East Hartford, CT 06108

S:\public\2540\radioact\forms\whiteI

Date: 16 Aug 99

Log Sheet for Verifying the Acceptability of Gd-153 Sealed Source Transportation
(Type A Package; Radioactive White-I Label Category)

Gage Type (LTG, PFG, DG):	**DG**
Gage S/N:	**1**
Isotope:	**Gd-153**
Source S/N:	**3791LN**
Source Activity:	**248.0 mCi**
Location:	**PWA E. Hartford D.O.**
Dose Rate Meter Used:	**Nuclear-Chicago (Latest Cal. 21 Jan 1999)**
Wipe Counter Used:	**Eberline SPG-2**
Wipe Counter Efficiency:	**12.75%**

1)

Sample	Wipe Location	Gross Counts	Gross CPM	Activity μCi
Standard	N/A	(Gd-153)	**391000**	N/A
Background	N/A		**195**	N/A
1	Source Housing		**187**	**< 2.96E-4**
2	Beneath Gage		**N/A**	**N/A**
3	Package Surface		**190**	**< 2.96E-4**
4				
5				

2) Maximum dose rate measured on the surface of the packaged device:
0.03 mR/hr

3) Maximum dose rate measured at one meter from package surface (Transport Index):
< 0.1 mR/hr

The following conditions must be met:

1) Maximum activity of the wipe taken on the external surface of the packaged device is less than 0.005 μCi (wipe #3). NO gage can be transported if the removable surface contamination on the external surface of the package is greater than 1E-5 μCi /sq. cm. (1E-5 μCi /sq.cm. * 500 sq. cm. = 0.005 μCi) (49 CFR 173.443).
2) Maximum radiation level at any point on the external surface of the package must be less than or equal to 0.5 mR/hr (49 CFR 172.403).
3) Package may not contain a quantity of Gd-153 greater than 135 Ci (49 CFR 173.431).

Are all of the above conditions met:

YES **X** NO _____

Prepared by: **S. Saitta**

RADIATION SURVEY/PHYSICAL INVENTORY

(Density Gage)

LOCATION **PWA/E. Hartford/D.O./D-908** SURVEYOR **S. Saitta**

DATE **16 August 1999**

Reason for Survey (i.e. routine survey, gage relocation, source installation, etc.) **Removal of Source, Decommission Gage**

RADIATION SURVEY

Area Surveyed				Reading (mr/hr)
Instrument:	**Nuclear-Chicago**	Calibration Date:	**21 Jan 99**	----------
Gd-153 S/N:	**3791LN**			----------
1. Background				**0.03**
2. Side of source housing at 2 inches (Shutter Open)				**0.09**
3. Side of source housing at 2 inches (Shutter Closed)				**0.05**

CONTAMINATION SURVEY

Instrument:	**Eberline SPG-2**			Date counted:	**16 August 1999**	
Method:	Swipe			Background:	**195**	cpm
Gd-153 Std:	**391000**	cpm	Gd-153 Eff: **12.75** %	Gd-153 LOD:	**2.96E-4**	µCi

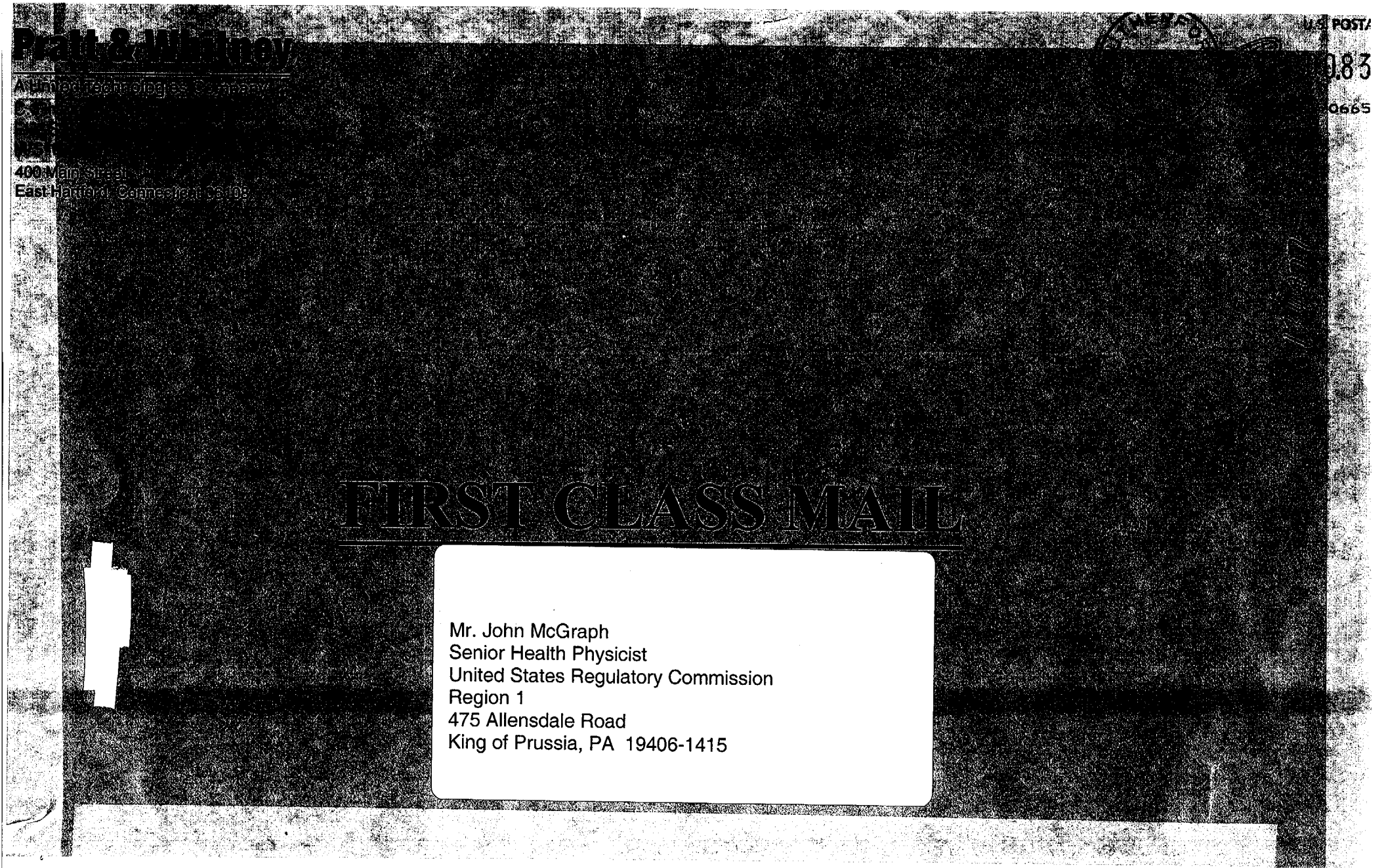
Swipe#	Area Surveyed	Reading (cpm)	Activity (µCi)
1	1. Source Housing	**187**	**< 2.96E-4**
2	2. Detector Face	**196**	**< 2.96E-4**
3	3. Table Top	**218**	**< 2.96E-4**
4	4. Floor Around Gage	**190**	**< 2.96E-4**
5	5. Floor Behind Gage		

NOTES/COMMENTS/DISCREPANCIES:

None

CORRECTIVE ACTION TAKEN:

None


Pratt & Whitney
A United Technologies Company
400 Main Street
East Hartford, Connecticut 06108
FIRST CLASS MAIL
Mr. John McGraph
Senior Health Physicist
United States Regulatory Commission
Region 1
475 Allensdale Road
King of Prussia, PA 19406-1415

This is to acknowledge the receipt of your letter/application dated 4/15/2004, and to inform you that the initial processing which includes an administrative review has been performed.

☑ TERM 06-07522-02
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 134877.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 03120
and	:	Status Code: 0
Regional Licensing Sections	:	Fee Category: 3P
	:	Exp. Date: 20050331
	:	Fee Comments: _____
	:	Decom Fin Assur Reqd: N
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: UNITED TECHNOLOGIES CORP.
   Received Date: 20040419
   Docket No: 3003796
   Control No.: 134877
   License No.: 06-07522-02
   Action Type: Termination

2. FEE ATTACHED
   Amount: /
   Check No.: /

3. COMMENTS

Signed M. A. Perkins
Date 4/27/04

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____