You may have noticed...

January, 2003

Dear valued customer,

The shipping regulations of the US Department of Transportation (DOT) now require that shipments of pressurized ion chamber models (450P/451P series) be handled as "hazardous materials". We have obtained DOT exemption to ship this instrument, as designed, with cushioning in a strong fiberboard box. You may use our exemption to ship this instrument to others, or to return it for calibration or service. It may comfort you to know that approximately 11,000 of these units have been shipped without incident.

As you may know, 450P/451P survey meters are very unique and provide the increased sensitivity to make low-level radiation measurements. This is made possible by pressurizing the ion chamber with a non-volatile mixture. The mixture is considered a "compressed gas" by DOT, although non-toxic and non-flammable.

While we acknowledge the inconvenience of these requirements, we also support the efforts of the DOT to ensure safety both on our highways and in the air. For your convenience, please see the following pages for detailed instructions before shipping or traveling with these products. A copy of the exemption #E13187 is attached or may be obtained online at http://hazmat.dot.gov/exemptions/E13187.pdf

Best regards,

Fluke Biomedical, LLC.
Global Calibration Laboratory

Instructions for shipment of 450P, 450P-DE-SI, 451P, and 451P-DE-SI

NOTES: You may want to save the shipping box as it is marked with the required statements, and if it traveled by air, also has the required compressed gas label affixed and a copy of the proper shipping papers to guide you through the process. The following are guidelines for shipping pressurized ion-chamber survey meters. Ultimately, it is the shipper's responsibility to assure compliance with DOT and/or IATA regulations.

Ground Shipments

- 1. Package instrument in strong package (200 burst or 32 edge crush minimum).
- 2. Cushion instrument on six sides with at least two inches of material to prevent damage during transport.
- 3. Label or mark carton "Inside containers conform with DOT-E 13187" on any side except the bottom.
- 4. Generate "Shippers Declaration for Dangerous Goods" per DOT 49CFR (see Example 1). UPS and FedEx Ground require that the shipper be registered as a Hazmat shipper. UPS also requires the shippers declaration be computer generated
- 5. Maintain a copy of our current exemption at each location where the package is offered for shipment.

Air Shipments - Domestic

- 1. Follow steps 1-5 for Ground Shipments.
- 2. Label carton (same side as step 3) with DOT class 2 Non-Flammable Gas label (green) and proper shipping names and UN Numbers (see Example 2).
- 3. Provide a copy of the current exemption to the courier when the package is offered for shipment.

International Shipments

- 1. Follow steps 1-3 and 5 for Ground Shipments and steps 1-3 for Air Shipments Domestic.
- 2. Generate "Shippers Declaration for Dangerous Goods" per IATA Regulations (see Example 3).

Transport as a Carry-On Service Tool

Service and Repair personnel may travel with a model 451P as part of 49CFR section 173.6 "Materials of trade exceptions". Under this exception, the product must be transported by motor vehicle and be packaged in the manufacturer's original packaging, or a packaging of equal or greater strength and integrity.



Į.S	Shippar				All	Waybill No.			
1					.Pet	re i of i	páges		
-					Ship	ppers Refere (optopis)	nce Num	ber	
C	onsignee								
							•		
	,	t					• *		
<u> </u>			in Dankani	llan must	ba WA	RNING ,			1
ha.	Two completed and signed coples of this Declaration must be handed to the operator.					ire lo comply l	n all respe	cis with the a	policáble
T	TRANSPORT DETAILS					garous Goods	Regulatio	ns may be in	breach of
	This shipment is within the Airport of Departure:				the Den	applicable law, laration must n	subject 10 ol. in any	riegel panalli circumsiance	es, inis s, be
	milations prescribed for: letere non-applicable)				com	pleted and/or s	igned by .	a consolidato	
	Passenger BARCAN And Cargo Kajekrakik				· lorw	àrder or an IAI	A cargo a	gent.	
14	ALBCRAFT ONANA				Citi	ment Type: (d			<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
۸	irport of Dastination:				[]	RADIOACTIV		OKUSICA WAS	7
<u></u>		<u> disconsistante</u>	<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	Tinois				
N/	TURE AND QUANTIT	Y OF DAN	IGEROUS	GOODS	3				المحبيبا بقبيد حسرا
*******	Danperous G	oods Identifi	cellon		٠ - ا			ţ	
	سند خند نند نند نند	Class	אַט וֹ אַ	Pack-	diary	Quantity a	nd kira	Packing	Authorizatio
_	Proper Shipping Neme	Divi-	UN I ID No.		diary	Quantity a type of pac	nd kirg	Packing Inst.	Authorization
	Propiar Shipping Name	Divi-	1 No.	Group	dlary Risk [type of pac ساندانداند	kirig 		
 COM	Proper Shipping Neme	Divi-	1 No.	Group	dlary Risk [Quantity a type of pacture of pac	kirig ud BÖX*	Packing first!	Authorization DOT E-13187
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
CO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [type of pac L L L FIBERBOAR	kirig ud BÖX*		
COIRGO	Proper Shipping Name PRESSED GAS N.Q.S NTAINS WITROGEN &	Divi-	1 No.	Group	dlary Risk [ype of pac	kirig ud BÖX*	Inst.	
COIRGO	Proper Shipping Neme PRESSED GAS N.O.S RTAINS WITROGEN &	Divi-	1 No.	Ing Group 1	rdiary Rick	ype of pac	D BÖX	Inst.	DOT E-13187
COIRGO	Proper Shipping Neme PRESSED GAS N.O.S RTAINS WITROGEN &	Divi-	1 No.	Ing Group 1	rdiary Rick	FIBERBOAF 7.0 KGS	ID BÖX	Inst.	DOT E-13187
(CD)	Proper Shipping Neme PRESSED GAS N.Q. S PRESSED GAS N. Q. S PRESSED GAS N. S PRESSED	Port District Constant of the	No. UNIT ST	Ing	Hick	ype of pac	ID BÖX	Inst.	DOT E-13187
(CD)	Proper Shipping Neme PRESSED GAS N.O. S PRES	Port sion 2.2	No. 101195	Ing Group I Gr	Emerger	FIBERBOAN 7.0 KGS	D BOX	Inst.	DOT E-13187
CDI RGO	Proper Shipping Neme PRESSED GAS N.O. S PRES	Port sion 2.2	No. 101195	Ing Group I Gr	Emerger	FIBERBOAF 7.0 KGS	D BOX	Inst.	DOT E-13187
ddilio	Proper Shipping Neme PRESSED GAS N.O. S PRES	Port sion 2.2	No. 101195	Ing Group I Gr	Emerger	FIBERBOAN 7.0 KGS	D BOX	Inst.	DOT E-13187

EXAMPLE 2



Compressed Gas N.O.S. UN1956 (Contains Nitrogen and Argon)

Inside Containers Conform with DOT-E 13187



SHIPPER'S DECLARAT		Air Weybiil No.			
		Paga 1 of I pages			
		Shipper's Reference Number			
Consignae					
		·			
Two completed and signed be	nies of this Declaration must	pe WARNING			
handed to the operator.		Fallure to comply in all respects with the applicat	bla		
TRANSPORT DETAILS	1	Dangerous Goods Regulations may be in breech	h of		
This shipment is within the limitations prescribed for:	Airport of Departure:	the applicable law, subject to legal penaitles. This Declaration must not, in any circumstances, ba	5		
(celete non-applicable)		completed and/or signed by a:consolidator, a forwarder or an IATA cargo agent:			
PASSENGER DARGO AND CARGO XMREHAEK		DIMETURE OF ALL INVALABLES APERE			
Alrport of Destination:		Shipment Type: (delete non-applicable)			
Amport of occurrations		NON-RADIOACTIVE EXPLEMENTALE			
NATURE AND OUANTITY					
Proper Shipping, Name	ods identification Class Uni Pack or or Jing DM ID Group	dlany type of packing inst.	ithorization		
Proper Shipping Name: COMPRESSED CAS N.D.S. (CONTAINS NITROGEN &	Class UN Pack or or lng DN ID Group	Subsit Oughilly and subsit Parking Adday Subsit Oughilly and subsit Oughill and subsit Oughilly and subsit Oughill and subsit	ithorization		
Proper Shipping Name: COMPRESSED CAS N.D.S. (CONTAINS NITROGEN &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek fish and box 200	ihonzalisi		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek fish and box 200	ithorizziler		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek fish and box 200	ifhoilzállói		
Proper Shipping Name: COMPRESSED GAS N.D.S.	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek fish and box 200	in i		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek inst. in	Thom: a library		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek inst. in	ithorization		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek inst. in	Thorizătion		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek inst. in	Thorization		
Proper Shipping Name COMPRESSED GAS N.D.S. (CONTAINS NITROGEN & ARGON)	Class UA' Pack Of of Inig	der type of packing (nst.) I FIEERBOARD BOX 2000 X.7.0 XGS	Thorization		
Proper Shipping Name COMPRESSED GAS N.D.S. (CONTAINS NITROGEN & ARGON)	Class UA' Pack Of of Inig	dlany type of packing (nst.) Hek inst. in	Thorization		
Proper Shipping Name COMPRESSED GAS N.D.S. (CONTAINS NITROGEN & ARGON)	Class Uni Pack or Jing or Jing law	der type of packing (nst.) I FIEERBOARD BOX 2000 X.7.0 XGS	Thorization		
Proper Shipping Name: COMPRESSED CAS N. D. S. (CONTAINS MITROGES & ARGON)	Class Uni Pack Of Of Jag DM D Group Ison No. IS 2 UNI 950 I I I I I I I I I I I I I I I I I I I	Allek type of packing Inst.	Thorization		
Proper Stilpbing Name COMPRESSED GAS N.D.S. (CONTAINS NITROGEN & ARGON) Additional Handling Information hereby declare that the contonis of escribed above by the proper shippi	Class Uni Pack of or Jing DM ID Group 12.2 UNI 950	Riek type of packing Inst. Riek I FIEERBOARD BOX 200 X.7.0 XGS X.7.0 X.7.0 XGS X.7.0 XGS X.7.0 XGS X.7.0 XGS X.7.0 X.7.0 XGS X.7.0	Thorization		
Proper Stipping Name COMPRESSED GAS N.D.S. (CONTAINS NITROGES & ARGON) Additional Handling Information hereby declare that the contonis of the school of the proper shipping arked and labeled/placarded, and a shippin according to the applicable.	Class Liv Pack of or Jing Jin	Riek type of packing Inst. I FIBERBOARD BOX 2000 X.7.0	Thoriz allor		
Proper Shipping Name: COMPRESSED CAS X.P.S. (CONTAINS NITROGES &	Class Liv Pack of or Jing Jin	Riek type of packing Inst. I FIBERBOARD BOX 2000 X.7.0	Thoriz Elico		

S-75/1: ULIQE 1-600-283-6510



400 Seventh Street, S.W. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

> DOT-SP 13187 (FOURTH REVISION)

EXPIRATION DATE: October 31, 2010

1. GRANTEE: Fluke Biomedical, LLC

(FORMER GRANTEE: Radiation Management Services,

Cardinal Health)
Cleveland, OH

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, marking, sale and use of non-DOT specification packaging described as a radiation detection survey meter containing a plastic ionization chamber for the transportation in commerce of certain Division 2.2 materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 172.301(c) in that the marking requirements are waived, 172.400 in that labeling is not required except when transported by aircraft, 172.504 in that placarding is not required and §§ 173.302a(a), 173.306(a)(2) and 175.3 in that the plastic ionization chamber is not an authorized packaging, except as specified herein.
 - 5. BASIS: This special permit is based on the application of Fluke Biomedical, LLC dated October 23, 2006, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description								
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group					
Compressed gas, n.o.s. (contains nitrogen and argon)	2.2	UN1956	N/A					

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification radiation detection survey meter (instrument) containing a plastic ionization chamber (pressure vessel). The ionization chamber has a maximum base diameter of 3.215 inches, maximum volume of 320 cubic inches water capacity, and design (operating) pressure of 120 psig. The design of the instrument must conform to Syncor Radiation Management documents submitted with the application, and on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

b. OPERATIONAL CONTROLS -

- (1) Pressure vessels manufactured under this special permit are not authorized for use seven (7) years after the date of manufacture.
- (2) Each instrument must be packed in a strong outside packaging as prescribed in § 173.301(a)(9).
- (3) Each outside packaging must be marked "INSIDE CONTAINERS CONFORM WITH DOT-SP 13187".
- (4) Emergency response information provided with the shipment, and available via an emergency response telephone number, must indicate that instruments are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous

materials specified in paragraph 6, only in conformance with the terms of this special permit.

- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. Except when offered for transportation by air:
 - (1) Packages covered by this special permit are excepted from labeling requirements of Subpart E of 49 CFR Part 172.
 - (2) Shipments are not subject to the placarding requirements of Subpart F of 49 CFR Part 172.
- g. Packagings permanently marked 'DOT-E 13187', prior to October 1, 2007, may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007, must be marked 'DOT-SP 13187'.
- h. Shipping papers displaying 'DOT-E 13187' may continue to be used until October 1, 2007, provided the special permit remains valid.

- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only and passenger-carrying aircraft.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety -- OHMSPA, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Robert A. McGuire

Associate Administrator
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: SS/dl