U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

June 27, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 15721
(FIFTH REVISION)

EXPIRATION DATE: 2026-01-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Probe Technology Services, Inc.
Fort Worth, TX

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the transportation in commerce of certain non-DOT specification high-voltage accelerator systems containing sulfur hexafluoride. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.

b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.

c. Party status will not be granted to this special permit.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.304(a) in that the prescribed non-DOT specification packaging is not authorized and 173.301(f)(1) in that the prescribed packaging must be equipped with a pressure relief device, except as specified herein.

5. BASIS: This special permit is based on the application of Probe Technology Services, Inc. dated January 23, 2023, submitted in accordance with § 107.105, and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Sulfur hexafluoride	2.2	UN1080	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packagings consist of three designs for a high voltage accelerator system.

(1) Cylinder designs NGA-001 and NGA-002 consist of an Inconel 718 (UNS NO7718) outer housing and end caps and is mechanically sealed to form a cylinder. The interior contains electronic components, a vacuum tube, and an inner pressure vessel constructed of 304 stainless steel. The inner pressure vessel contains sulfur hexafluoride gas.

(2) Cylinder design NGA-005 consists of a pressure vessel constructed of 304 stainless steel. The pressure vessel contains electronic components, a vacuum tube, and sulfur hexafluoride gas.

(3) Each pressure vessel charged with sulfur hexafluoride must not exceed a pressure of 120 psig at 70 °F. The high voltage accelerator systems are not equipped with a pressure relief device. The systems must be in conformance with the drawings on file with the Office of Hazardous Materials Safety (OHMS).

b. TESTING:

(1) At the time of manufacture, for cylinder designs NGA-001 and NGA-002, each inner pressure vessel must be hydrostatically pressure tested to at least 400 psig without evidence of leakage and the outer housing must be subjected to an external pneumatic pressure test to at least 15,000 psig without evidence of leakage. The Green Tweed and Pave connectors must be rated to withstand pressures of 4,400 psig and 25,000 psig, respectively. For cylinders that require retesting due to a failed hydrostatic test of 15,000 psig, the outer cylinders must be tested at 16,500 psig without evidence of leakage.

(2) At the time of manufacture, for cylinder design NGA-005, each pressure vessel must be hydrostatically pressure tested to at least 400 psig without evidence of leakage. The Green Tweed and Pave connectors must be rated to withstand a pressure of 25,000 psig.

(3) Only Probe Technology Services, Inc. is authorized to test/refurbish/certify new or used high voltage accelerator systems for shipment. Each high voltage accelerator system must be serviced in accordance with the Probe Technology Services, Inc. procedures detailed in the application for special permit on file with OHMS.

c. OPERATIONAL CONTROLS:

(1) The high voltage accelerator system must be overpacked in a strong outside container.

(2) Each outside packaging must be marked "DOT-SP 15721".

(3) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed to fire.

8. SPECIAL PROVISIONS:

a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).

b. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package and it is reoffered 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.

9. MODES OF TRANSPORTATION AUTHORIZED: As authorized by the HMR.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft, or motor vehicle 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, 49 CFR Parts 171-180.

- 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.

- 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 this 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, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover
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, East Building PHH-13, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: AC/TG