

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 21160

EXPIRATION DATE: 2023-02-28

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Alliant Techsystems Operations LLC Plymouth, MN

2. PURPOSE AND LIMITATION:

- a. This special permit authorizes the transportation in commerce of reserve lithium metal cells contained in equipment (Subassembly) that are not of a type proven to have passed the requirements of 38.3 in the UN Manual of Tests and Criteria. 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. No party status will 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 § 173.185(a)(1) in that the cell is not of a type proven to meet the requirements of 38.3 in the UN Manual of Tests and Criteria.
- 5. <u>BASIS</u>: This special permit is based on the application of Alliant Techsystems Operations LLC dated December 9, 2020 and supplemental information dated February 8, 2021, submitted in accordance with § 107.105 and the public proceeding thereon.

Tracking Number: 2020124389

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium metal batteries contained in equipment	9	UN3091	N/A

7. SAFETY CONTROL MEASURES:

a. Safety Controls:

- (1) The cell contained in equipment identified as the XM1211 Fuze Subassembly (Subassembly) which is housed in a strong, rigid casing is comprised of the G3201B1 lithium metal (reserve) cell, is a hermetically sealed, stainless steel container with no voltage, due to the fact that the lithium metal and electrolyte are stored separately inside the same housing; therefore, not all of the UN tests are appropriate for this type of cell. When activated by external means (i.e., mechanical, gforce or electrical power) at the user location, the cell is designed to generate the capacity and voltage as provided in the Alliant Technology Operations' December 8, 2020 application and which is on file with the Office of Hazardous Materials Safety (OHMS) General Approvals and Permits Branch.
- (2) This Special Permit is only valid for transportation of reserve cells which contain lithium metal and electrolyte in separate chambers in the non-activated state.
- (3) Packages must be transported by ground only via private or contact motor vehicle.
- b. <u>Testing</u>: All G3201B1 lithium metal (reserve) cells must have successfully passed the requirements specified in MIL-STD-331 (Vibration, Extreme Temperature Storage and Drop Tests) as specified in the application dated December 8, 2020 and on file with the OHMS General Approvals and Permits Branch.

- c. <u>Packaging</u>: The prescribed packaging for transporting the G3201B1 lithium metal (reserve) cells are described below:
 - (1) The Subassembly (equipment) containing the cell must be fully-encased in a rigid housing.
 - (2) Inner Packaging Eggcarton tray containing not more than 50 Subassemblies.
 - (3) Intermediate Packaging Not more than 10 inner packagings stacked with an additional empty inner packaging placed on top of the stack. Additionally, non-metallic polyfoam is placed between each inner packaging, and the complete stack is then banded together with box tape in two parallel bands.
 - (4) Outer Packaging The outer packaging is the UN 4G corrugated fiberboard box containing not more than two intermediate packagings side by side surrounded by cushioning material and sealed with reinforced tape. The voids within the fiberboard box must be filled using bubble cushioning material to ensure no movement of the contents during transportation. The UN 4G box must meet the Packing Group II performance criteria.
- d. <u>Marking</u>: Each package, and overpack if used, prepared under the provisions of this Special Permit must be plainly marked with:
 - (1) The permit number: "DOT-SP 21160."
 - (2) Lithium metal battery mark specified in 49 CFR 173.185(c)(3).
 - (3) "Do not stack."
 - (4) A phone number in case of an emergency

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the holder may only offer hazardous materials (i.e., the approval holder 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

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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 and made available for examination at each facility where the materials are package and offered or reoffered for transportation.
- d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit and destination.
- e. The special permit holder must maintain a record of all activity conducted under the authority granted in this special permit.
- f. The record must contain a complete listing and number of shipments made to include:
 - (1) Dates of Shipment.
 - (2) Description of each type of shipment (to include origination/destination).
- g. All of the above information must be made available upon request to a DOT representative or an enforcement Official.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: 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 <u>et seq</u>:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR 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 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

Dane By

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-30, 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: Steve H/Andrew Eckenrode