1. **GRANTEE:** HDT Expeditionary Systems, Inc.
   Solon, OH

2. **PURPOSE AND LIMITATION:**
   a. This special permit authorizes the transportation in commerce of lithium battery packs exceeding 35 kg aboard cargo-only aircraft. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization’s Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) other than as specifically stated herein 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.
   d. This special permit serves as an approval under Special Provision A99 and the third paragraph of IA.2 of Packing Instruction 965 of the ICAO TI and as a “Competent Authority Approval” as defined under 49 CFR § 107.1.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that a lithium battery pack may not exceed 35 kg when transported aboard cargo aircraft, except as specified herein.
5. **BASIS**: This special permit is based on the application of HDT Expeditionary Systems, Inc. dated February 13, 2023, submitted in accordance with § 107.109.

6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium ion batteries including lithium ion polymer batteries</td>
<td>9</td>
<td>UN3480</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **OPERATIONAL CONTROLS:**

      (1) Only lithium ion battery packs each comprised of 720 LFP26650P-320 lithium ion cells, as specified in the HDT Expeditionary Systems, Inc.’s application dated January 7, 2021 and on file with the Office of Hazardous Materials Safety, may be offered for transportation under the terms of this special permit. Each battery pack has a nominal energy content of 7.3 kWh.

      (2) Cells and battery packs must be protected against short-circuiting.

      (3) The state of charge for lithium ion battery packs may not exceed 30% when offered for aircraft transportation.

      (4) A battery pack must be equipped with a battery management system that has been verified as preventing overcharge, short circuits, and over discharge between the cells or modules.

      (5) Each battery pack must be equipped with a means of preventing dangerous reverse current flow when cells or modules are connected in parallel.

   b. **TESTING REQUIREMENTS**: Each cell within the battery pack must be of a type that has successfully passed the required tests in accordance with the UN Manual of Tests and Criteria, 6th Revised Edition.
c. **PACKAGING:**

(1) Each battery pack must be prepared in Packing Group II packaging that meets the requirements of 49 CFR § 173.185(b) and Section I of Packaging Instruction 965 of the ICAO TI.

(2) Each battery pack must be individually packaged in a fully enclosed non-metallic inner packaging and separate from conductive materials in the packaging.

(3) Not more than one battery pack may be packaged in each packaging.

(4) The net weight of the battery pack within each package must not exceed 150 kg (331 pounds).

d. **MARKING:** Each package covered under the terms of this special permit must be durably and legibly marked and displayed on a background of contrasting color with “DOT-SP 21171”.

8. **SPECIAL PROVISIONS:**

a. 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, the HMR, and the ICAO TI.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. 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, destination and State of the Operator.

d. The special permit grantee must maintain the following record and upon request and make this information available to DOT representatives or enforcement officials. The record to be maintained is as follows:

(1) Dates of shipment; and

(2) Description of each type of shipment.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Cargo-only aircraft.
10. **MODAL REQUIREMENTS**: A current copy of this special permit must be carried aboard each 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:

- 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.:

[Signature]

for William Schoonover
Associate Administrator for Hazardous Materials Safety


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: TG