1. **GRANTEE:** Department of Defense (Military Surface Deployment & Distribution Command) and contractors operating under their direction
Scott AFB, IL

2. **PURPOSE AND LIMITATION:**
   
a. This emergency special permit authorizes the one-time, one-way transportation in commerce of low production lithium-ion batteries contained in equipment (spacecraft). 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. 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. This special permit serves as an approval under Special Provision A88 of the International Civil Aviation Organizations Technical Instructions (ICAO TI) and as a “Competent Authority Approval” as defined under 49 CFR 107.1.

d. 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) in that the batteries are not of a type proven to meet the requirements of the UN Manual of Tests and Criteria, 6th Revised Edition.

5. **BASIS:** This special permit is based on the application of Department of Defense (Military Surface Deployment & Distribution Command) dated May 08, 2019 submitted in accordance with § 107.117 and the determination that it is necessary for immediate national security.

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

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
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<tbody>
<tr>
<td><strong>Proper Shipping Name</strong></td>
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<tr>
<td>Lithium ion batteries contained in equipment including lithium ion polymer batteries</td>
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</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **SAFETY CONTROLS:**

      (1) Each battery is comprised of ten (10) Panasonic 18650NCR cells contained in equipment as described in the Department of Defense’s application dated May 8, 2019 and on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMAPD).

      (2) Cells and the battery contained in equipment must be protected against short-circuiting.

      (3) The battery contained in equipment must be equipped with an effective means of preventing dangerous reverse current flow when the battery contains cells that are connected in parallel.

      (4) The batteries must be shipped at a state of charge not more than 50 percent.
b. TESTING:

(1) The cells must be of a type that has passed the required tests in accordance with the UN Manual of Tests and Criteria, 5th Revised Edition.

(2) The batteries must be of a type that has passed the Department of Defense’s space environment tests as described in the May 08, 2019 application and on file with OHMAPD.

c. PACKAGING:

(1) The equipment containing the battery must be structurally designed to withstand the harsh environment for space application and may contain not more than one (1) battery per piece of the equipment.

(2) The equipment containing the battery must be placed in an AL3434-1207 Pelican case.

(3) A Pelican case may contain not more than two (2) pieces of the equipment.

(4) Appropriate measures must be taken to prevent movement of the equipment within the case that may lead to damage and a dangerous condition during transport.

(5) The equipment must be constructed and packaged in such a manner as to prevent accidental operation during transportation.

(6) The equivalent lithium content within each package must not exceed sixteen (16) grams.

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 or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

b. 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:** Motor vehicle and cargo-only aircraft.

10. **MODAL REQUIREMENTS:**

   a. A current copy of this special permit must be carried aboard each 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.

   b. Advanced Notice of hazardous material movements performed under the provisions of the special permit. The shipper (Tiger Innovations) of the hazardous material authorized here in, must notify the FAA Office of Hazardous Materials Safety (9-AWA-AXH-SPFlightNotifications@faa.gov). This notification must be given at least 72 hours in advance of plans to operate under the special permit, unless prior arrangements have been made with the Office of Hazardous Materials Safety. The notification must include the point of departure, intermediate stops, destination(s), and a loading and departure schedule. If a flight schedule deviates more than four hours from the originally scheduled departure time, the operator of the aircraft must immediately notify 9-AWA-AXH-SPFlightNotifications@faa.gov.

   Alternative notification procedures may be established subject to the written approval of the FAA Office of Hazardous Materials Safety.

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.

   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
Associate Administrator for Hazardous Materials Safety

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: Steve H/Andrew Eckenrode