EXPIRATION DATE: 2018-08-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Wrightspeed, Inc.
   Alameda, CA

2. PURPOSE AND LIMITATION:
   a. This special permit authorizes the transportation in commerce of prototype lithium ion batteries by cargo-only aircraft. 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. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
   
   d. 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.
   
   e. No party status will be granted to this special permit.

Continuation of DOT-SP 20348

May 17, 2017

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(a) in that lithium batteries must be tested in accordance with the UN Manual of Tests and Criteria, except as specified herein.

5. BASIS: This special permit is based on the application of Wrightspeed, Inc. dated September 30, 2016 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

<table>
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<tr>
<th>Hazardous Materials Description</th>
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<tr>
<td>Proper Shipping Name</td>
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<td>Lithium ion batteries</td>
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7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS -

(1) The batteries are rated at 2,000 Wh and comprised of battery modules which contain Toshiba cells each rated at 46 Wh.

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

(3) Batteries must be offered for transportation at a state of charge not greater than 30%.

(4) The batteries must be equipped with an effective means of preventing dangerous reverse current flow.

(5) The battery must be equipped with internal controls which minimize the potential of thermal runaway and provide an interface for monitoring bus bar voltage and temperature.

b. TESTING - Each cell must be of a type that has passed the required tests in accordance with the UN Manual of Tests and Criteria, 5th Revised Edition.
c. **PACKAGING** -

(1) Each battery must have a strong, impact-resistant outer casing.

(2) The battery must be surrounded by non-combustible and non-conductive cushioning material and individually placed in a steel drum meeting Packing Group I performance criteria.

(3) The net weight of batteries within each package must not exceed 22 kg.

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 20348.”

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:** 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:

   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.:

[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 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/kah