1. **GRANTEE:** (See individual authorization letter)

2. **PURPOSE AND LIMITATIONS:**

   a. This special permit authorizes the transportation in commerce of lithium ion battery assemblies exceeding 35 kg net weight 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. 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. Party status is only authorized to Toyota Motor Corporation and their subsidiaries.

   e. This special permit serves as an approval under Special Provision A99 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.

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR 172.101 Hazardous Materials Table Column (9B) in that a lithium battery may not exceed 35 kg, except as specified herein.

5. **BASIS:** This special permit is based on the application of Toyota Motor Corporation dated December 15, 2022, submitted in accordance with § 107.109.

Tracking Number: 2022124766
6. HAZARDOUS MATERIALS (49 CFR 172.101):

<table>
<thead>
<tr>
<th>Hazardous Material 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. PACKAGING:

(1) Inner Packaging:

   (i) Each lithium ion battery must be placed in an individual, non-metallic inner packaging that completely encloses the battery.

   (ii) The inner packaging must be surrounded by cushioning material that is non-combustible, electrically non-conductive, and absorbent with heat and fire suppression properties.

   (iii) Each lithium ion battery must be packaged in a manner to prevent shifting, accidental activation, and short-circuiting.

(2) Outer Packaging: UN4B aluminum box certified by BAM and marked with UN4B/X103/S/20/D/BAM 5367-ZARGES.

(3) Packaging must comply with the requirements in Packing Instruction 974 of the Supplement to the ICAO TI. Additionally, waste lithium battery assemblies and lithium battery assemblies being shipped for recycling or disposal are forbidden from air transport, and lithium battery assemblies must not be packed in the same outer packaging with substances and articles of Class 1 (explosives) other than Division 1.4S, Division 2.1 (flammable gases), Class 3 (flammable liquids), Division 4.1 (flammable solids), or Division 5.1 (oxidizers).

b. TESTING:

(1) Each lithium ion cell must be of the model TYB-SHP3.2P-02 and must be of a type that has successfully passed the required tests in accordance with the 38.3 of the UN Manual of Tests and Criteria.
(2) Each lithium ion battery must be of the model DCX21-13381 and must be of a type that has successfully passed the required tests in accordance with the 38.3 of the UN Manual of Tests and Criteria.

(3) Any changes to the battery cell or battery from the tested types listed above, invalidates this special permit.

c. OPERATIONAL CONTROLS:

(1) Only lithium ion batteries complying with the following are authorized to be transported under the terms of this special permit: comprised of 188 lithium ion cells, a total energy capacity of 2.17 kWh, and weighs 58 kg.

(2) Only lithium ion cells of model TYB-SHP3.2P-02 with a gross mass of 123.3 g each, Watt-hour rating of 11.52 Wh.

(3) Lithium ion cells and batteries must be protected against short-circuiting and be equipped with means of venting and preventing dangerous reverse current flow.

(4) Each lithium ion battery must be offered for transportation at a state of charge not exceeding 30%.

(5) Lithium ion batteries must be packed to prevent accidental activation of the battery.

(6) Lithium ion cells or batteries that are leaking or liable to rapidly disassemble, dangerously react produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive, or flammable gases, or vapors under normal conditions of transport may not be transported under this special permit.

(7) Only one lithium ion battery per package is authorized under this special permit.

(8) The lithium ion battery must be secure to prevent shifting and minimize vibrations.

(9) Any changes to the lithium ion battery or cell from the one listed above invalidates this special permit.

d. MARKINGS: Each package must be marked with the special permit number, “DOT-SP 21452”, in accordance with § 172.301(c).
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, the HMR, and the ICAO TI.

   c. A current copy of this special permit must be maintained at each facility where the package is 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, destination, and the State of Operator.

   e. The special permit holder must maintain a record of all activity conducted under the authority granted in this special permit. Upon request, this record must be made available to a DOT representative or an enforcement official. The record must include:

      (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:

    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 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: ae