

March 17, 2025



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21420
(SECOND REVISION)

EXPIRATION DATE: 2029-02-28

(FOR RENEWAL, SEE 49 CFR 107.109)

1. **GRANTEE:** RML Group Limited
Wellingborough, United Kingdom

U.S. Agent: Czinger Vehicles Inc.
Torrance, CA

2. **PURPOSE AND LIMITATIONS:**

a. This special permit authorizes the transportation in commerce of prototype and low production lithium ion batteries that have not passed the UN-required tests and exceed 35 kg net weight via 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 development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

c. No party status will be granted to this special permit.

d. This special permit serves as an approval under Special Provisions A88 and State Variation US 3 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.

Tracking Number: 2024124449

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that in that the net weight of each battery may not exceed 35 kg and § 173.185(a)(1) in that low production and prototype batteries have not passed the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria.
5. **BASIS:** This special permit is based on the application of RML Group Limited dated December 6, 2024, submitted in accordance with § 107.109.
6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identifi- cation Number	Packing Group
Lithium ion batteries <i>including lithium ion polymer batteries</i>	9	UN3480	N/A

7. **SAFETY CONTROL MEASURES:**

- a. **PACKAGING:**
 - (1) Inner Packaging: Each battery must be individually surrounded by polyethylene foam cushioning material that is non-combustible, and non-conductive;
 - (2) Outer packaging: The inner packaging must be further packaged in a UN 4D plywood box meets Packing Group I performance criteria on pallet that;
 - (3) Not more than one battery is allowed per package;
 - (4) The net weight of the package may not exceed 60 kg (132 pounds); and
 - (5) The gross weight of the package may not exceed 132 kg (291 pounds).
 - (6) Each package must meet the additional requirements in Packing Instruction 910 of the Supplement of the ICAO TI.

b. OPERATIONAL CONTROLS:

- (1) Only prototype and low production lithium ion batteries, as described in RML Group Limited's application dated August 3, 2022 and on file with the Office of Hazardous Materials Safety may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of not more than 100 batteries annually of a particular type). Each different battery type must comply with all the conditions of this special permit prior to being offered for transportation.
- (2) The authorized lithium ion battery identified as the P224 Prototype Battery System has a nominal energy content of 2.24 kWh which is for each of the two halves (RH and LH) shipped separately and consists of A123 cells in 96S2P.
- (3) All batteries must be offered for air transportation at a state of charge not exceeding 30 percent.
- (4) The batteries must be equipped with an effective means of preventing dangerous reverse current flow for cells or a series of cells that are connected in parallel.
- (5) Cells and batteries must be protected against short circuiting.
- (6) Each battery must be equipped with a battery management system (BMS) verified to prevent overcharge, short-circuiting, and over discharge.

c. TESTING REQUIREMENTS:

- (1) Each battery must be comprised of lithium ion cells that are of a type that has passed the required tests as specified in the "UN Manual of Tests and Criteria, 7th Revised Edition".
- (2) The prototype or low production lithium ion batteries need not be tested in accordance with the "UN Manual of Tests and Criteria, 7th Revised Edition".

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 the special permit number: "DOT-SP 21420".

8. **SPECIAL PROVISIONS:**

- a. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered for transportation in conformance with this special permit and the HMR and 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 the State of operator.
- d. For each cell and battery type, the grantee must maintain the following record and upon request and make this record available to DOT representatives or enforcement officials. The record to be maintained is as follows:

- (1) A description of each cell and battery type and types of tests conducted and test results prior to offering for transportation.
- (2) Dates and description of each shipment, to include number of cells and batteries.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle, cargo-only aircraft.
10. **MODAL REQUIREMENTS:** 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.
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.

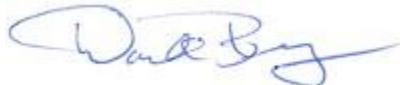
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-13, 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: Jephthah Nti