



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**March 27, 2024**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 21675

**EXPIRATION DATE: 2026-02-28**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Zoox, Inc.  
Foster City, CA
2. PURPOSE AND LIMITATION:
  - a. This special permit the transportation in commerce aboard cargo-only aircraft of battery-powered vehicles containing prototype and low production lithium ion batteries for testing. 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. No party status will be granted to this special permit.
  - d. This special permit serves as an approval under Packing Instruction 952 (Additional Packing Requirements – Batteries, paragraph 2) 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 § 173.185(a)(1) and § 173.220(d) in that each lithium battery has not passed the tests 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 Zoox, Inc. dated November 20, 2023, submitted in accordance with § 107.105 and the public proceeding thereon.

Tracking Number: 2023114858

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Battery-powered vehicle	9	UN3171	N/A

Only battery-powered vehicles containing prototype and low production lithium ion batteries may be offered for transportation for testing under the terms of this special permit. “Low production” is defined as a production run of no more than 100 batteries annually of a particular type. Each battery must comply with all the conditions in this special permit.

7. SAFETY CONTROL MEASURES:a. OPERATIONAL CONTROLS:

- (1) Only battery-powered vehicles containing lithium ion batteries as identified in the Zoox, Inc.’s November 20, 2023, application on file with the Office of Hazardous Materials Safety (OHMS) may be offered for transportation under the terms of this special permit.
- (2) The nominal energy content contained in the vehicle may not exceed that described in the Zoox, Inc.’s November 20, 2023, application on file with the OHMS.
- (3) The state of charge for the lithium ion batteries must be not more than 30% when offered for transportation aboard aircraft.
- (4) Lithium batteries contained in the vehicles must be protected in such a manner as to prevent damage and short circuits.
- (5) The batteries must be equipped with an effective means of preventing dangerous reverse current flow for the batteries that contain cells connected in parallel.
- (6) Each battery must be equipped with a battery management system (BMS) verified to prevent overcharge, short-circuiting, and over discharge.

b. TESTING: Each cell within the battery contained in the vehicle must be of a type tested in accordance with the UN Manual of Tests and Criteria, 6<sup>th</sup> Revised Edition, as provided in the Zoox, Inc.'s November 20, 2023, application on file with the OHMS.

c. PACKAGING:

(1) Battery-powered vehicles must be packaged in accordance with § 173.220(d) and Packing Instruction 952 of the ICAO TI. The requirement in § 173.220(d) that each lithium battery must be of a type that has successfully passed each test in the UN Manual of Tests and Criteria is waived.

(2) Each battery-powered vehicle may contain no more than the number of lithium ion batteries specified in Zoox, Inc.'s November 20, 2023, application on file with the OHMS.

(3) The net weight of each battery may not exceed that the weight specified in Zoox, Inc.'s November 20, 2023, application on file with the OHMS.

(3) Lithium batteries contained in the vehicles must be securely fastened in the battery holders of the vehicles and be protected in such a manner to prevent movement that could lead of damage, short circuits, or a dangerous evolution of heat.

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 or its contents 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, and destination.

e. The grantee must maintain the following record and upon request make this record available to DOT representatives or enforcement officials. The record must contain a listing and number of shipments made to 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.:

A handwritten signature in blue ink, appearing to read "W. Schoonover", is written over a faint circular stamp.

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: THOMAS