



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

May 12, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 20441
(FOURTH REVISION)

EXPIRATION DATE: 2027-04-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: LeoStella LLC
Tukwila, WA
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of low production lithium ion batteries contained in equipment. 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 "exemption" as defined in 1;3.1.1 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) and 2;9.3 a) of the ICAO TI in that the lithium batteries are not of a type proven to meet the requirements of the UN Manual of Tests and Criteria.
5. BASIS: This special permit is based on the application of LeoStella LLC dated March 1, 2023, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries contained in equipment*	9	UN3481	N/A

*Only low production lithium ion batteries may be offered for transportation. ("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.

7. SAFETY CONTROL MEASURES:a. Safety Controls:

- (1) The battery (Chinook, PN: 021703 with a maximum energy rating of 130 Wh) is comprised of Sony US18650 cells and contained within the Global 1 Spacecraft.
- (2) The battery must be equipped with an effective means of preventing dangerous reverse current flow.

b. Testing Requirements:

- (1) All lithium ion cells must be of a type that have passed all tests as specified in ABSL Test Reports 401202 WB04F dated May 27, 2016, and RL17-RP-ABSL-BA-00068 01 dated March 2, 2012, and on file with the Office of Hazardous Materials (OHMS).
- (2) All lithium ion batteries must be of a type that have passed tests specified in the ABSL test report titled "Chinook 8s3p Test Report SN002, SN003, SN004, SN005" dated February 22, 2017, and on file with OHMS.

c. Packaging Requirements:

- (1) The Global 1 Spacecraft must be shipped within a plywood packaging that meets Packing Group II performance criteria as specified in Spaceflight, Inc.'s application and supplemental information dated March 16, 2017, and April 17, 2017, respectively, and on file with OHMS.
- (2) The battery contained in equipment must be protected against short circuiting.

(3) A package may contain no more than two (2) batteries.

(4) The net weight of batteries contained in equipment within a package may not exceed 3 kg.

d. MARKING: Each package or over pack if used must be marked with the special permit number, "DOT-SP 20441", 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 the States of origin, transit, over flight, and destination of the consignment, as well as the State of the air operator.

e. The grantee must maintain a record of all activity conducted under the authority granted in this special permit and upon request make this information 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: Motor vehicle and 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: kah/NICKS