



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

August 17, 2023

Gregory M. Stewart
President
Orbiter, Inc.
13500 Pacific Avenue S.
Tacoma, WA 98444

Reference No. 23-0051

Dear Mr. Stewart:

This letter is in response to your May 11, 2023, email and subsequent phone conversation requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transport of lithium ion batteries on passenger aircraft. You describe a scenario—which you believe presents safety risks—in which a portable electronic device containing a “privately-labeled lithium ion battery” that has a rating of up to 100-watt hours (Wh) is carried on a passenger aircraft by professional timekeepers for use at sporting events; however, the portable electronic device or spare lithium ion batteries will not be resold or distributed. Specifically, you ask whether the carriage of these portable electronic devices on passenger aircraft is prohibited.

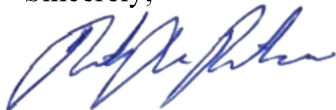
The answer is no. For passengers, crewmembers, and air operators, § 175.10 provides exceptions from the HMR which permit traveling on aircraft with certain items that may otherwise be considered a hazardous material. These exceptions do not prohibit passengers from bringing on-board any of the authorized items simply because they are used in support of the passengers’ profession, provided the quantity limits and conditions of the exception are met. *See* § 175.10(a)(18). This section specifically authorizes portable electronic devices to be carried in either checked or carry-on baggage. Portable electronic devices powered by a lithium ion battery must not exceed 100 Wh without the approval of the operator; however, the operator may allow portable electronic devices up to 160 Wh under certain conditions. Air operators are responsible for the processes and procedures used to identify safety hazards and control or mitigate safety risks. Therefore, passengers should check with the airline for their policy on hazardous materials and additional size limits for baggage carried by passengers.

When carried in checked baggage, portable electronic devices powered by lithium ion batteries must be completely switched off (not in sleep or hibernation mode) and protected to prevent unintentional activation or damage. Additionally, spare lithium ion batteries must be carried in carry-on baggage only.

Regarding privately-labeled lithium ion batteries, use of this exception requires that each lithium ion battery be of a type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Sub-section 38.3, and that each spare lithium ion battery must be individually protected so as to prevent short circuits (*e.g.*, by placement in original retail packaging, by otherwise insulating terminals by taping over exposed terminals, or placing each battery in a separate plastic bag or protective pouch).

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dirk Der Kinderen".

Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division



BA

Casey

23-0051

May 11, 2023

**Mr. Shane Kelley
Director, Standards and Rulemaking Division
U.S. DOT/PHMSA (PHH-10)
1200 New Jersey Avenue, SE East Building, 2nd Floor
Washington, DC 20590**

Dear Mr. Kelly:

Hope all is well.

The following is about gaining a letter of interpretation about transporting Lithium-Ion batteries on aircraft for commercial use because misinformation is being broadcast widely on social media.

We understand from Ms. Victoria Lehman (Stakeholder Engagement Branch Manager, AXH-510 FAA Security and Hazardous Materials Safety (ASH) C: 202-236-5776) that commercial transportation of Lithium-Ion on aircraft is not allowed. It is allowed only for personal use (electric tooth brushes, razors, cameras and other personal devices. She said if it is commercial use it is a COLD STOP and not allowed even in the overhead bin in the passenger cabin.

Can you confirm this? This is what our company understands and thus we use AGM batteries that are allowed.

However, a company RACERESULT.com from Germany actively promotes their lithium-ion product can be transported on aircraft. They broadcast this knowing the rules apply to personal and commercial use. They broadcast widely to thousands of professional race timers around the world that is wrongly. They do this for the purpose of profit. See: <https://youtu.be/HRVeahleQcw> See at 37 minutes 13 seconds (battery).

(In the area that discusses batteries) They also use social influencers at FACEBOOK page "Timers-Talk Freely" that do not disclose who they represent in violation of FCC social media rules to also broadcast knowingly and block posts which state the Lithium-Ion rules.

This is important as there are thousands of professional timers flying equipment to the over 30,000 events that are timed each year. The races they time include Marathons, 5-K's, Triathlons, and motor sports just to name a few. The numbers of Lithium-Ion batteries shipped on passenger planes can be on average two to fifty (assuming way points on a race). However, the social influencers at Facebook, "Timer-Talks Freely" state as long as the batteries are less than 100 watt hours can be unlimited. In the video the RaceResult engineer states if the battery is removed from the device it can be transported on aircraft. The engineer is known in the industry as an "authority".

Please contact me with questions. Also, if you can reply back the status of receiving a determination letter this is also appreciated as we would like to notify the industry. Almost, all will want to comply and do the right thing.

Summary: "We would like a determination that transporting lithium-ion on aircraft for commercial use is a cold stop and not allowed. Since professional race timing is billed thru a company or for hire to time many people, it is a commercial activity such that lithium-ion is not allowed for transportation on aircraft."

Sincerely,

**Gregory M. Stewart
President
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