



ミニセグウェイ等は航空機への搭載禁止へ

2015年12月より、ANA、JALを含む世界の大手主要航空会社において、ミニセグウェイ等、リチウムイオンバッテリーを原動力とする小型車両が受託、持込不可となりました。そこで、IATAが発表した今回の措置についてご紹介します。

1. ミニセグウェイ等の位置付け

IATA発行の文章によると、これらの乗り物は **Small Vehicles Powered by Lithium Batteries** や **Small Lithium Battery-powered Vehicles** と呼ばれ、具体的な例では、**Airwheel, Solowheel, Hoverboard, Mini-Segway, Balance Wheel** といった名称が挙げられます。これらは移動補助機器ではなく、PED (Portable Electronic Device) として扱われるという見解がなされています。つまり、PCや携帯電話と同じ扱いを受けます。

一方、旅客や乗員に許された受託、持ち込み可能なPEDは以下の通りです。

- 1) リチウムイオンバッテリーが100Whを超えない場合、受託、持ち込みとも可能。航空会社からの許可も必要ではない。
- 2) リチウムイオンバッテリーが100Wh以上160Wh以下の場合、受託、持ち込みとも可能。ただし、航空会社から許可が必要。
- 3) リチウムイオンバッテリーが160Whを超える場合、受託、持ち込みとも不可。

ミニセグウェイ等のワット数は、模倣品、粗悪品も多いと考えられるため、正確なワット数は判別困難ですが、大抵は160Wh以下と言われており、上記1)または2)に分類されます。



小型車両の一例

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2. 小型車両はワット数にかかわらず禁止

IATA の分類では PED に分類されるこれら商品ですが、実際には模倣品や粗悪品が多く、充電中に発火して家屋火災を引き起こしたケースも発生しています。リチウムイオンバッテリーの発火による航空機火災が懸念される中、上記分類に関係なく、リチウムイオンバッテリーを内蔵したミニセグウェイ等を受託・持込ともに不可とする各航空会社の決定にも納得がいきます。



ホバーボードの火災例

参考までに、ミニセグウェイが火災を起こしたビデオをご紹介します。爆発（40秒頃）後、水で一度消火したにも拘らず再び発火する様子（1分10秒頃）がわかります。

<https://www.youtube.com/watch?v=DfCMUaVT7hk>

3. 空港での確実な対応が求められます！

近年、リチウムイオンバッテリーを搭載した商品が数多く販売されています。一方で、リチウムイオンバッテリーによる火災が頻繁に報告されており、航空機における輸送には慎重な動きが増えています。ここで言う航空機輸送とは、貨物室での輸送だけではなく、旅客自身による携帯も含んでいます。

今回の小型車両における取り扱いは、携帯電話と同じ PED というカテゴリーにも拘らず受託や持込基準が異なることから、区分分けが非常に難しいことを示した一例と言えます。これら小型車両は空港で購入することも可能であることから、空港での適切で確実な対応が求められます。

次頁以降、IATA 発行の文書をご紹介します。この中で、2015年12月現在、搭載を禁止した航空会社の一覧を見ることが出来ます。

以上



Small Vehicles Powered by Lithium Batteries – Passenger Provisions

Updated 16 December 2015

Background

This notice is in response to questions raised by operators regarding the acceptability of small vehicles that are powered by lithium ion batteries in passenger checked and/or carry-on baggage. There have been reports of these small vehicles being sold at airports in airside shops, as well as being available in many cities, particularly in Asia.

Some examples of these small lithium battery-powered vehicles are: airwheel, solowheel, hoverboard, mini-segway, balance wheel.



Discussion took place with a number of the members of the ICAO Dangerous Goods Panel as to how these devices should be treated for the purposes of the provisions of Dangerous Goods Carried by Passengers and Crew, DGR Subsection 2.3.

The agreed view is that these devices are not “mobility aids”, but instead be treated as “portable electronic devices” (PED) on the basis that the item subject to the Regulations is the lithium ion battery that powers these devices.

The allowance for passengers or crew to have PED in their checked or carry-on baggage is determined by the size (Watt-hour rating) of the lithium ion battery as follows:

- where the lithium ion battery does not exceed 100 Wh passengers and crew may have these devices in either checked or carry-on baggage. Approval of the operator is not required;
- where the lithium ion battery exceeds 100 Wh but does not exceed 160 Wh passengers and crew may have these devices in either checked or carry-on baggage, but the approval of the operator is required; and



- where the lithium ion battery exceeds 160 Wh the device is forbidden from being in either passenger or crew checked or carry-on baggage.

Recommendations

In areas and cities where these devices are readily available operators should ensure that passenger handling staff and the ground service provider, where applicable, are made aware that these devices are subject to the restrictions applicable to PED as set out above.

Operators should consider developing posters, notices or other material with pictures or images of these small lithium battery-powered vehicles for display on their websites, at self-serve kiosks and check-in counters, specifically at airports serving cities where these devices are available, to alert passengers to the conditions applicable to their carriage in checked or carry-on baggage.

At these airports, the operators may wish to bring this matter to the attention of the airport operator's committee so that a coordinated and consistent message is presented to passengers. The airport operator's committee may also wish to coordinate with the airport operator to ensure that on-airport retailers are made aware of the restrictions that apply to the carriage of these devices by passengers, and potentially the restriction on sale to passengers where the operator does not approve the carriage of PED with a lithium ion battery that exceeds 100 Wh.

It is recommended that operators include the following in their operational manuals, or instructions to passenger service staff to address the passenger carriage of these small lithium battery-powered vehicles:

Personnel, including those of ground service providers, must verify that:

- the devices are protected against accidental activation by either being in the original manufacturer's packaging or by taping over the on/off switch;
- the Watt-hour rating of the lithium ion battery in the device does not exceed 160 Wh. All lithium ion batteries are required to have the Watt-hour rating marked on the outside of the battery case. If passenger handling staff are unable to verify the Watt-hour rating by checking either the battery, or the user documentation, it is recommended that the passenger be advised that the device cannot be carried;

Note: *The watt-hour rating is calculated by multiplying the voltage (V) by the ampere hours (Ah). Where the amperage is shown as milliampere hours (mAh) divide the mAh value by 1,000 to establish the Ah.*

If cabin crew identify that the device does not meet the operator's requirement during boarding, they should refer to the ground personnel for proper offloading.

It is recommended that operators restrict these devices to carry-on baggage.

However, PED as carry-on baggage are subject to specific operator restrictions on the size and weight of baggage permitted in the cabin.

You can contact the IATA Dangerous Goods Support team if you have questions or concerns that may not have been addressed in this document at: dangood@iata.org.