

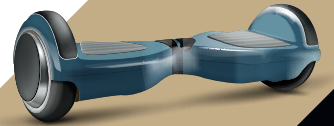


Transportation of Hoverboards (Lithium Battery Powered Vehicles)

The South African Civil Aviation Authority's Dangerous Goods Section has recently noted an increase in incidents involving the carriage of "Hoverboards" by passengers as part of their baggage.

Hoverboards are also known as balance boards, gravity boards, or self-balancing devices that contain lithium batteries. As a result, the SACAA has identified safety concerns with the carriage of such equipment without proper classification, packaging and documentation.

- ✓ Hoverboards contain lithium batteries and can pose a risk of fire and explosion during transportation if they are not manufactured and packaged to the correct specifications.
- ✓ Lithium batteries may become ignitable when short-circuited, overcharged, heated to high temperatures, mishandled, or manufactured with defects.



CARRIAGE

- ✓ Hoverboards and similar devices must be carried as cargo, either on passenger aircraft or on "cargo only" aircraft and should be classified accordingly.
- ✓ These small lithium battery-powered vehicles must meet the definition of "vehicles" as set out in Special Provision A214, and as they are powered by a lithium-ion battery, the correct classification for them is UN 3171, **Battery-powered vehicle**. They must therefore be packed in accordance with Packing instruction 952.
- ✓ Furthermore, the lithium batteries in the hoverboards must have been tested in accordance with 38.3 of the UN Manual of Tests and Criteria to ensure that they have been properly manufactured and packaged to maintain integrity during transport. Transportation of these vehicles without complying with the SACAA Dangerous Goods Regulations and the ICAO Technical Instructions for the safe transport of dangerous goods by air, is a punishable offence.



TRANSPORT BY AIRLINE PASSENGERS AND CREW MEMBERS

Passengers who wish to travel with these vehicles should check with the airline concerned prior to travelling, because many airlines have banned these items in both carry-on and checked baggage.

SPECIAL PROVISION A214

UN 3171 only applies to vehicles powered by wet batteries, sodium batteries, lithium metal batteries or lithium-ion batteries and equipment powered by wet batteries or sodium batteries transported with these batteries installed.

For the purpose of this special provision, vehicles are self-propelled apparatus designed to carry one or more persons or goods. Examples of such vehicles are cars, motorcycles, scooters, three- and four-wheeled vehicles or motorcycles, trucks, locomotives, bicycles (pedal cycles with a motor) and other vehicles of this type (e.g. self-balancing vehicles or vehicles not equipped with at least one seating position), wheelchairs, lawn tractors, self-propelled farming and construction equipment, boats and aircraft. This includes vehicles transported in a packaging. In this case some

parts of the vehicle may be detached from its frame to fit into the packaging.

Examples of equipment are lawn mowers, cleaning machines or model boats and model aircraft. Equipment powered by lithium metal batteries or lithium-ion batteries must be assigned to the entries UN 3091, Lithium metal batteries contained in equipment or UN 3091 Lithium metal batteries packed with equipment or UN 3481 Lithium-ion batteries contained in equipment or UN 3481 Lithium-ion batteries packed with equipment, as appropriate. Lithium-ion batteries or lithium metal batteries installed in a cargo transport unit designed only to provide power external to the cargo transport unit must be assigned to UN 3536, Lithium batteries installed in cargo transport unit.

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