



Doc 9284-AN/905
2011-2012 Edition
ADDENDUM NO. 4
30/3/12

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**TECHNICAL INSTRUCTIONS FOR THE SAFE TRANSPORT
OF DANGEROUS GOODS BY AIR**

2011-2012 EDITION

ADDENDUM NO. 4

The attached addendum should be incorporated into the 2011-2012 Edition of the Technical Instructions (Doc 9284).

(3 pages)

**TECHNICAL INSTRUCTIONS FOR THE SAFE TRANSPORT
OF DANGEROUS GOODS BY AIR**

1. The following amendments relate to the carriage of battery-powered wheelchairs or other similar mobility aids by passenger and crew. They are approved and published by decision of the Council of ICAO and should be incorporated in the 2011-2012 Edition of the Technical Instructions (Doc 9284):

In Part 8, Chapter 1, pages 8-1-1 and 8-1-2, *replace* sub-paragraphs e), f) and g) with the following:

- e) as checked baggage and with the approval of the operator(s), mobility aids (e.g. wheelchairs) powered by non-spillable wet batteries or batteries which comply with Special Provision A123, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), subject to the following conditions:
 - 1) non-spillable wet batteries must comply with Special Provision A67 or the vibration and pressure differential tests of Packing Instruction 872;
 - 2) the operator must verify that:
 - i) the battery is securely attached to the mobility aid;
 - ii) the battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and
 - iii) electrical circuits have been isolated;
 - 3) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo;
 - 4) where the mobility aid is specifically designed to allow its battery(ies) to be removed by the user (e.g. collapsible):
 - i) the battery(ies) must be removed; the mobility aid may then be carried as checked baggage without restriction;
 - ii) the removed battery(ies) must be carried in strong, rigid packagings which must be stowed in the cargo compartment;
 - iii) the battery(ies) must be protected from short circuit; and
 - iv) the pilot-in-command must be informed of the location of the packed battery;
 - 5) it is recommended that passengers make advance arrangements with each operator;
- f) as checked baggage and with the approval of the operator(s), mobility aids (e.g. wheelchairs) powered by spillable batteries, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), subject to the following conditions:
 - 1) where possible the mobility aid must be loaded, stowed, secured and unloaded always in an upright position. The operator must verify that:
 - i) the battery is securely attached to the mobility aid;
 - ii) battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and
 - iii) electrical circuits have been isolated;
 - 2) if the mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position, the battery(ies) must be removed and carried in strong, rigid packagings as follows:
 - i) packagings must be leak-tight, impervious to battery fluid and be protected against upset by securing them to pallets or by securing them in cargo compartments using appropriate means of securement (other than by bracing with freight or baggage) such as by the use of restraining straps, brackets or holders;

- ii) batteries must be protected against short circuits, secured upright in these packagings and surrounded by compatible absorbent material sufficient to absorb their total liquid contents; and
- iii) these packagings must be marked "Battery, wet, with wheelchair" or "Battery, wet, with mobility aid" and be labelled with a "Corrosive" label (Figure 5-22) and with package orientation labels (Figure 5-26) as required by 5.3;

The mobility aid may then be carried as checked baggage without restriction;

- 3) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo;
 - 4) the pilot-in-command must be informed of the location of the mobility aid with an installed battery or the location of a packed battery;
 - 5) it is recommended that passengers make advance arrangements with each operator; also, unless batteries are non-spillable they should be fitted, where feasible, with spill-resistant vent caps;
- g) as checked baggage and with the approval of the operator(s), mobility aids (e.g. wheelchairs) powered by lithium ion batteries, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg), subject to the following conditions:
- 1) the batteries must be of a type which meets the requirements of each test in the UN *Manual of Tests and Criteria*, Part III, sub-section 38.3;
 - 2) the operator must verify that:
 - i) the battery is securely attached to the mobility aid;
 - ii) the battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and
 - iii) electrical circuits have been isolated;
 - 3) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo;
 - 4) where the mobility aid is specifically designed to allow its battery(ies) to be removed by the user (e.g. collapsible):
 - i) the battery(ies) must be removed and carried in the passenger cabin;
 - ii) the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals);
 - iii) the battery must be protected from damage (e.g. by placing each battery in a protective pouch);
 - iv) removal of the battery from the mobility aid must be performed by following the instructions of the manufacturer or device owner;
 - v) the battery must not exceed 300 Wh; and
 - vi) a maximum of one spare battery not exceeding 300 Wh or two spares not exceeding 160 Wh each may be carried;
 - 5) the pilot-in-command must be informed of the location of the lithium ion battery(ies);
 - 6) it is recommended that passengers make advance arrangements with each operator;