ICAO Lithium Battery Shipping Update

Changes to the 2015-2016 ICAO Technical Instructions as Published in Addendums 3 & 4

Presented to: Int’l Aircraft Systems Working Grp
By: Harry Webster, FAA Tech Ctr
Date: May 25-26, 2016
• **Addendum No. 3**
  - Packing Instruction 965, Section IA.1
    • Lithium ion cells and batteries must be offered for transport at a state of charge not exceeding 30 per cent of their rated capacity. Cells and/or batteries at a state of charge greater than 30 per cent of their rated capacity may only be shipped with the approval of the State of Origin and the State of the Operator under the written conditions established by those authorities.
    • Note.— Guidance and methodology for determining the rated capacity can be found in sub-section 38.3.2.3 of the UN Manual of Tests and Criteria.
– Packing Instruction 965, Section IB.1

• Lithium ion cells and batteries must be offered for transport at a state of charge not exceeding 30 per cent of their rated capacity. Cells and/or batteries at a state of charge greater than 30 per cent of their rated capacity may only be shipped with the approval of the State of Origin and the State of the Operator under the written conditions established by those authorities.

• Note.— Guidance and methodology for determining the rated capacity can be found in sub-section 38.3.2.3 of the UN Manual of Tests and Criteria.
• Packing Instruction 965, Section II
  
  – Lithium ion cells and batteries must be offered for transport at a state of charge not exceeding 30 per cent of their rated capacity.

  – Note.— Guidance and methodology for determining the rated capacity can be found in sub-section 38.3.2.3 of the UN Manual of Tests and Criteria.

  – A shipper is not permitted to offer for transport more than one package prepared according to this section in any single consignment.
• Packing Instruction 965, Section II (cont’d)
  – Packages and overpacks of lithium ion batteries prepared in accordance with the provisions of Section II must be offered to the operator separately from cargo which is not subject to these Instructions and must not be loaded into a unit load device before being offered to the operator.
  – Not more than one package prepared in accordance with this section may be placed into an overpack.
• Packing Instruction 965, Section II (cont’d)
  – Note.— For the purpose of Section II, an overpack is an enclosure used by a single shipper that contains no more than one package prepared in accordance with this section. For shipments prepared in accordance with Section IA and/or IB, this limit of one package of Section II batteries per overpack still applies.
  – A shipper is not permitted to offer for transport more than one package prepared according to this section in any single consignment.
• Packing Instruction 965, Section II (cont’d)
  – Packages and overpacks of lithium metal batteries prepared in accordance with the provisions of Section II must be offered to the operator separately from cargo which is not subject to these Instructions and must not be loaded into a unit load device before being offered to the operator.
  – Not more than one package prepared in accordance with this section may be placed into an overpack.
• Packing Instruction 965, Section II (cont’d)
  – Note.— For the purpose of Section II, an overpack is an enclosure used by a single shipper that contains no more than one package prepared in accordance with this section. For shipments prepared in accordance with Section IA and/or IB, this limit of one package of Section II batteries per overpack still applies.
Air Navigation Commission (ANC)

• The ANC approved all of the changes to the Technical Instructions submitted by the DGP as previously outlined in Addendum 3.
• The ANC was then tasked by the ICAO Council to draft a paper to consider the ban of shipments of lithium-ion cells and batteries on passenger aircraft.
• Much debate ensued…
• The ANC voted to recommend to the ICAO Council that shipment of lithium-ion cells on passenger aircraft be forbidden
On February 22, 2016, the ICAO Council voted to temporarily ban the shipment of lithium-ion batteries on passenger aircraft. The ban does not apply to lithium-ion batteries packed with or contained with equipment. The ban is to take effect on April 1, 2016, and remain in force until safer methods of shipment are developed.
• The decision by the ICAO council to temporarily ban the shipment of lithium-ion cells and batteries not packed in or with equipment necessitated another addendum to the packing instructions

• Addendum No. 4
  – Packing Instruction 965
    • Insert the word “FORBIDDEN” in any reference to shipment on passenger aircraft (many locations)
    • Cargo Aircraft Only labels
Questions?

Harry Webster
FAA William J Hughes Technical Center
Harry.Webster@faa.gov
609-485-4183