
COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the Transport of Dangerous Goods

(Eighteenth session,
Geneva, July 2000,
agenda item 5(b))

REQUIREMENTS FOR LITHIUM BATTERIES

Transmitted by the expert from the United States

Introduction

1. The expert from the United States participated in the lithium battery meeting hosted by Canada and as reflected in the report submitted a document putting forward proposed amendments to the special provision applicable to lithium batteries. These were not discussed to a conclusion. It is the intent of this paper to highlight concerns and request that the Sub-Committee reconsider the current exceptions for small lithium batteries which are excepted from the regulations on the basis of lithium content alone and are not subject to the UN test and criteria for lithium batteries.
2. This proposal takes into account the current understanding of an incident involving lithium batteries that occurred at Los Angeles International Airport (LAX). The incident involved small lithium batteries with less than one gram of lithium per cell. The LAX incident indicated that small lithium batteries if mishandled may have the potential of initiating a fire through mechanical abuse. Once ignited, such small lithium batteries may also have the potential of propagating fire to other batteries in the package. Special procedures for extinguishing fires may also be necessary to decrease the hazard associated with this type of situation, particularly on aircraft. As noted in the paper submitted to the Canada working group, the expert from the United States believes that additional consideration needs to be taken with respect to the transport of these small lithium batteries. A government/industry effort to develop a comprehensive set of safety measures is presently ongoing in the United States.
3. It should be noted that under the current requirements, any quantity of lithium is prohibited from transport on passenger aircraft under the current ICAO Technical Instructions. With this in mind, it is the opinion of the expert from the United States that some conditions should apply to even small lithium batteries to ensure that their transport on passenger aircraft can be carried out safely. This could be accomplished, in part, by ensuring the safety of the batteries themselves by subjecting them to the UN test criteria regardless of lithium content.
4. While the overall work on lithium batteries may extend into the next biennium, it is the opinion of the expert from the United States that the step of requiring all lithium batteries independent of size or lithium content to be subjected to the lithium battery testing requirements should be taken during this biennium.

Proposal

5. Amend special provision 188 by inserting a new subparagraph (d) as follows:

“(d) Each cell or battery is of the type proved to be non-dangerous by testing in accordance with tests in the *Manual of Tests and Criteria*, Part III, sub-section 38.3; such testing shall be carried out on each type prior to the initial transport of that type.”

Renumber existing subparagraphs (d) through (j).
