



DANGEROUS GOODS PANEL (DGP) MEETING OF THE WORKING GROUP OF THE WHOLE

Rio de Janeiro, Brazil, 20 to 24 October 2014

**Agenda Item 5: Review of provisions for the safe transport of lithium batteries
5.6: Miscellaneous lithium battery issues**

RECENT LITHIUM BATTERY INVESTIGATIONS

(Presented by B. Firkins)

SUMMARY

The Civil Aviation Safety Authority of Australia (CASA) was advised of a retailer who was selling lithium ion batteries which had been deliberately mislabelled with a lower WHr rating. The purpose was to enable the continuing carriage of the battery by the final purchaser, under the existing passenger provisions of Part 8, without having to seek airline approval.

The Civil Aviation Safety Authority of Australia has also been having extreme difficulty in obtaining evidence that batteries meet the UN 38.3 test standards.

The DGP-WG is invited to note CASA's concerns, and to provide support, through identifying initiatives, which will assist in securing compliance and maintaining aviation safety.

1. INTRODUCTION

1.1 The Civil Aviation Safety Authority of Australia (CASA) was advised of a retailer who was selling lithium ion batteries which had been deliberately mislabelled with a lower WHr rating.

1.2 The batteries were being sold for remotely piloted aerial systems (RPAS). RPAS are increasing in commercial popularity, primarily for aerial photography; the desire for lifting a camera and maintaining airborne flight time, often away from battery recharging facilities, has resulted in users carrying many batteries; or batteries with a longer operating duration.

1.3 The batteries were externally sealed and displayed ratings of 22.2 Volt and 4500 mAmphr (99.9 Whr).



Picture 1. Outside label and cover removed from a 12,400 mAh lithium battery

1.4 Underneath the sealed label was a near identical label for 22.2 Volt and 12,400mAmphr (275Whr)



Picture 2. The 12,400 mAh battery that above label was removed from.

1.5 The alleged purpose of the relabeling was to enable the continuing carriage of the battery by the final purchaser, under the existing passenger provisions of Part 8, without having to seek airline approval (100-160Whr), or having to consign it as cargo in accordance with the relevant packing instructions.

1.6 The retailer has purported that he received the batteries in this relabelled condition from overseas. There was insufficient evidence to proceed further against the retailer. The matter will be referred to the State of alleged Origin.

1.7 CASA has been developing a campaign to raise awareness with import and law enforcement agencies who may be in a position to detect variances, such as deliberate mislabelling of batteries.

1.8 CASA is also to generating a separate campaign to focus on RPAS operators, as they appear to be an emerging area of aviation which requires safety education and outreach.

1.9 Secondly, CASA is involved with a separate investigation involving the carriage of a significant quantities of lithium ion batteries which were involved in an aircraft cargo hold fire that occurred on the ground. The matter is proceeding through the courts.

1.10 Thirdly, the Technical Instructions require that batteries be of a type that meets the UN 38.3 test standards. CASA contacted a number of airlines and noted that operator approval was required under Part 8, for lithium ion batteries (in excess of 100 Whr and not exceeding 160 Whr) was that the batteries be of a type that had passed the UN 38.3 tests. CASA asked how they satisfied themselves that such batteries had passed. The answers were generally around managing the risk whereby they compelled carriage of the batteries in the cabin, where crew had method and means for managing an occurrence.

1.11 CASA has also been having extreme difficulty in obtaining evidence that certain batteries from certain manufacturers/distributors meet the UN 38.3 test standards. This is due, in part, to the global and virtual businesses, where batteries are manufactured and sold under a “white-label” arrange for relabeling and wholesaling.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to note CASA’s identification of deliberate mislabelling of batteries and it’s education approach to import and enforcement agencies.

2.2 The DGP-WG is invited to consider and propose how an effective and efficient method, for demonstrating proof of compliance with UN 38.3 tests, can be achieved.

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