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ASSEMBLY — 39TH SESSION

TECHNICAL COMMISSION

Agenda Item 37: Other issues to be considered by the Technical Commission

NEED FOR STATES/INDUSTRY JOINT ACTIONS TO INCREASE COMPLIANCE WITH ICAO REGULATIONS ON AIR CARRIAGE OF LITHIUM BATTERIES

(Presented by the International Air Cargo Association (TIACA))

EXECUTIVE SUMMARY

TIACA believes that any regulations on air carriage of lithium batteries should be global in nature, so that the participants of the cargo supply chain can comply with a common standard, rather than having to adjust their operations to differing regulations across the world leading to operational inefficiencies and confusion, to the detriment of safety. ICAO provides the appropriate forum for bringing all key stakeholders together to discuss the many complexities relating to lithium batteries. Joint States and the Industry measures are to be taken to comply with ICAO regulations, including the new lithium battery regulations that took effect April 1, 2016.

<i>Strategic Objectives:</i>	This paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	None
<i>References:</i>	C-DEC 207/5 Review of the Report of the Twenty-fifth Meeting of the Dangerous Goods Panel (DGP/25) Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) U.S. DoT Safety Alert for Operators (SAFO) 16004 dated 5/6/16

1. INTRODUCTION

1.1 ICAO Technical Instructions establish further regulatory restrictions on the carriage of lithium batteries. However, this prohibition alone does not mitigate the risks associated with the carriage of lithium batteries. With these new regulatory restrictions in mind, operators should ascertain what actions they take in response to the ICAO recommendations and manufacturer publications to eliminate or reduce the risk. The shipper's knowledge of the new requirements contained in the ICAO Technical Instructions and full cooperation of the air cargo supply chain is of utmost importance. TIACA, as an international organization representing this supply chain, is fully engaged in the activities aiming at mitigating the risks associated with the carriage of lithium batteries.

2. BACKGROUND

2.1 Lithium batteries are an omnipresent and growing power source in today's world, running countless electronic devices. Lithium batteries are shipped via all transportation modes, and millions have been shipped safely by air, as cargo, mail and baggage. Due to concerns about the thermal properties of lithium batteries under certain conditions the ICAO Council on 22 FEBRUARY 2016 approved amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) which prohibit as of 1 April 2016 the transport of lithium ion batteries as cargo on passenger aircraft and incorporate additional requirements to mitigate risks posed by lithium batteries as cargo on cargo aircraft.

2.2 The term "lithium batteries" as used in ICAO include the following:

- a) Lithium Ion Batteries. (UN3480). These are rechargeable lithium batteries, similar to those found in cameras, cell phones, laptop computers, and radio-controlled toys. Lithium polymer batteries are types of lithium ion batteries.
- b) Lithium Metal Batteries. (UN3090). These cannot be recharged and are designed to be discarded once their initial charge is used up.

Note. — For clarity, UN3480 and UN3090 do not include lithium batteries contained in or packed with equipment.

2.3 ICAO Technical Instructions establish further regulatory restrictions on the carriage of lithium batteries. With these new regulatory restrictions in mind, operators that have implemented a formal Safety Management System (SMS) should conduct a Safety Risk Assessment (SRA) in accordance with the Safety Risk Management process in its SMS to further evaluate and identify hazards associated with the acceptance of lithium batteries offered by shippers.

3. DISCUSSION

3.1 It is generally recognized that the safe transport of hazardous materials by air requires compliance from the entire supply chain, including shippers, operators and manufacturers. It should be specifically noted that shippers play an important role in the safe transport of lithium batteries and that the operators can enhance safety by recognizing the role that their cargo customers have in introducing risk into their system.

3.2 Given the significance and complexity of the many issues relating to air shipments of lithium batteries as cargo, mail and baggage, TIACA is presenting this position paper to advise the views of its membership, which includes all sectors of the air cargo industry.

3.3 TIACA wants to urge all appropriate regulators to adhere to the following principles when considering issues related to air transportation of lithium batteries:

3.3.1 Any regulations on air transportation of lithium batteries should be global in nature, so that the parties, who operate in every country and territory in the world, can comply with a common set of regulations, rather than having to adjust their operations to differing regulatory regimes across the world – which would produce widespread operational inefficiencies and confusion, to the detriment of safety.

3.3.2 The regulators need to partner with the air cargo industry to clarify and simplify the requirements, where appropriate, in order to facilitate better understanding by all parties in lithium battery supply chains.

3.3.3 ICAO is the key forum for reaching consensus on the regulatory framework for air transportation of lithium batteries through the ICAO Technical Instructions and policies in support of a safe, efficient, secure, economically sustainable and environmentally responsible civil aviation sector.

3.3.4 It is critical to improve awareness of lithium battery regulations throughout the air cargo supply chain and the general public. TIACA and the regulators should work together to develop and sustain an awareness campaign with appropriate industry stakeholder involvement.

3.4 There must be robust compliance with and enforcement of regulations relating to the manufacture, shipment and air transportation of lithium batteries as cargo, mail and baggage. Too often manufacturers and shippers in certain regions of the world fail to properly adhere to the regulations applicable to their lithium battery shipments, with little consequence. TIACA is willing to partner with the regulators to work with their counterparts in different states to improve oversight, particularly those countries with significant lithium battery exports, and to assist in training in order to upgrade enforcement efforts. Industry stakeholders must also seek to ensure compliance and to reduce the incidence of undeclared and mis-declared (intentional or unintentional) shipments.

4. WAY FORWARD

4.1 ICAO provides the appropriate forum for bringing all key stakeholders together to discuss the many complexities relating to lithium batteries. TIACA will continue to urge its members and industry overall to comply with the ICAO regulations, including the new regulations that took effect April 1, 2016.

4.2 TIACA supports taking the necessary mitigating steps to address the reasons for ICAO's temporary prohibition on lithium battery shipments on passenger aircraft, in particular:

4.2.1 Development of a performance-based packaging standard that is appropriately balanced with the commercial realities of shipping lithium batteries by air (the process is currently underway at ICAO).

4.2.2 All-cargo operators conducting a thorough Safety Risk Assessment (SRA) of their operations, to identify the risks of transporting lithium batteries as well as strategies for mitigating those

risks, and to determine the safest handling/transport applicable to the shipment. SRAs should be updated appropriately.

4.3 TIACA is ready to use its influence in the lithium battery supply chains to clarify the requirements, where appropriate, in order to facilitate a better understanding by all parties. At the same time TIACA is offering its partnership to ICAO and regulators to assist in further simplifying the requirements and promoting them amongst its members.

4.4 TIACA supports the views expressed by the ICAO Air Navigation Commission that the three pillars of a risk assessment methodology, performance-based packaging for lithium batteries, and improved transparency of their shipment constituted a stable approach to risk management. TIACA also considers that while the said risks still existed they are able to be better managed on cargo aircraft than on passenger aircraft.

4.5 TIACA is ready to partner with the regulators to develop a campaign to improve awareness of lithium battery regulations throughout the air cargo supply chain and the general public.

Note. — TIACA is a global not-for-profit trade association representing all the major segments of the air cargo and air logistics industry – combination and all-cargo airlines, forwarders, airports, ground handlers, road carriers, customs brokers, logistics companies, shippers, it companies, aircraft and equipment manufacturers, trade press, and educational institutions

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