STATEMENT OF

FIRST OFFICER MARK ROGERS

AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

BEFORE THE

SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

UNITED STATES HOUSE OF REPRESENTATIVES

BALTIMORE, MD

NOVEMBER 16, 2009

"REAUTHORIZATION OF THE DEPARTMENT OF TRANSPORTATION'S HAZARDOUS MATERIALS SAFETY PROGRAM"

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Good afternoon Chairwoman Brown, Ranking Member Shuster, and distinguished members of the Subcommittee. I am Mark Rogers, a commercial airline pilot and director of the dangerous goods program for the Air Line Pilots Association, International (ALPA). ALPA represents more than 53,000 pilots who fly for 36 passenger and all-cargo airlines in the United States and Canada. On behalf of our members, I thank you for this opportunity to testify regarding immediate safety deficiencies related to the carriage of lithium batteries as cargo on passenger and all-cargo aircraft.

ALPA has long advocated for improved transport requirements for lithium-ion and lithium-metal batteries and we are pleased that your version of the HAZMAT Reauthorization bill mandates strict new requirements. By letter dated November 4, 2009, ALPA president, Captain John Prater, urged Chairman Oberstar to support the positions contained within the bill and requested that its language not be weakened. We believe that the actions we have recommended for incorporation into the reauthorization bill will greatly enhance the overall safety of the air-cargo transportation system.

On May 14, 2009, I appeared before this committee and cited numerous incidents wherein lithium batteries, carried either in the cabin of passenger aircraft or shipped as air-cargo, malfunctioned and resulted in fires. On that occasion, I presented a video of a fire spontaneously igniting in a laptop computer's lithium battery, demonstrating that once a single cell in a lithium battery ignites, the generated heat can cause surrounding cells to ignite as well.

Since then, six (6) more fires involving lithium batteries have been reported to the FAA. I reiterate that ALPA is not advocating for enhanced restrictions on the types of items individuals may personally carry on board aircraft. Our attention and concern remains focused on lithium batteries transported as air cargo. If these commodity shipments either initiate or become involved in a fire, they pose a significant risk to the safety and well-being of an aircraft and its occupants.

While it is true that a fire involving a limited number of lithium-ion batteries may be controlled by the active fire suppression system on an aircraft, FAA testing has shown that lithium-metal batteries are unresponsive to Halon, the traditional extinguishing agent used aboard aircraft.

Unfortunately, lithium-ion and lithium-metal batteries remain exempt from many of the Federal hazardous material regulations, such as the requirement to place a dangerous goods label on the

package, the requirement to notify the pilot in command of their presence, the requirement for airline personnel to perform an acceptance check of the package, or any of the cargo compartment quantity limitations normally applied to hazardous materials. Under existing regulations, a flight crew would not be made aware of a pallet containing thousands of lithium batteries, yet a five-pound package of flammable paint or dry ice would be subject to the full scope of the dangerous goods provisions. These exceptions are clearly inappropriate for any commodity having a significant history of fire incidents aboard aircraft, as do lithium batteries.

The full regulation of lithium batteries as dangerous goods would have a significantly positive impact on the safety of the air cargo supply chain. Improved packaging standards would help prevent damage to shipped batteries. Dangerous goods labels would ensure worldwide recognition that shipments have the potential to cause an incident if mishandled. An acceptance check would provide an opportunity to detect package damage or non-compliance with the regulations. Pilot notification would increase the awareness of flight crewmembers and allow them to communicate hazard information to emergency responders in the event of an incident.

Because of the inability of aircraft fire suppression systems to extinguish a fire involving lithium metal batteries, the current ban on bulk shipments of these items on passenger aircraft should be extended to all-cargo aircraft until adequate packaging materials can be developed which will protect these batteries both from damage and from external heat sources. ALPA has long been an advocate of one level of safety and security for cargo and passenger aircraft, and we find it particularly troubling that a commodity which is completely prohibited from shipment on passenger aircraft may be transported, nearly unregulated, on all-cargo aircraft.

We recognize that the risk associated with a single battery in a shipped package is low. We caution, however, against providing exceptions to the dangerous goods regulations for shipping small batteries based on this logic, as there is nothing to prevent hundreds or even thousands of these items from being consolidated in a single shipment. It is only through full regulation of the shipment of small batteries that the quantity of batteries stored at a single location in an aircraft or in a single cargo compartment can be addressed. In the absence of such regulations, the batteries are handled as general freight and airline employees are often unaware of the total quantity of batteries offered for shipment or the risk that they pose to the aircraft.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has testified before this Committee that pending, draft rulemaking will improve lithium battery safety in air transportation. However, despite National Transportation Safety Board (NTSB) recommendations, ALPA's urging and FAA encouragement, PHMSA has not published any significant lithium battery rulemaking since 2003 and even then the resulting final rule did not take effect until 2007.

Given that FAA has received six reports of fires related to lithium batteries since we last testified, it is clear that we cannot afford to wait several years or longer for the NPRM process to bring about the implementation and enforcement of improved lithium battery regulations. Every day we delay, people and property are being exposed to the potential danger of an in-flight fire that neither the aircraft's fire suppression system nor the flight crew can extinguish. Expeditious approval of the legislation before this Committee is necessary to ensure the safety of lives and property involved in air cargo operations.

An objection has been raised that if these needed regulatory improvements are made via the legislative process, the U.S. will not be in harmonization with the international aviation community. In fact, those with a financial interest in the outcome of this debate – the airlines, battery and electronic equipment manufacturers – have been allied against harmonization which would result in safety improvements. Due to their objections, the Dangerous Goods Panel of the International Civil Aviation Organization (ICAO) has failed to act decisively on this issue at two separate panel meetings over two years. As a consequence, shipments of lithium batteries continue to be excepted under ICAO rules with no change possible for at least two more years.

At a recent meeting of the ICAO Dangerous Goods Panel we made the follow recommendations which the airlines, and battery and electronic equipment manufacturers opposed:

1. Eliminate exceptions for lithium batteries shipped as cargo aboard aircraft. Although lithium batteries have been involved in dozens of fires aboard aircraft, the Technical Instructions provide relief from the packaging, testing, labeling, training, acceptance check and pilot notification requirements of fully regulated dangerous goods.

2. Restrict the quantity of lithium-ion batteries at a single location on the aircraft. While ICAO limits the quantity of lithium-ion batteries per package, an unlimited number of packages are allowed on both passenger and cargo aircraft, increasing the risk that a fire involving these batteries will overwhelm a cargo fire suppression system.

3. Prohibit cargo quantities of lithium-metal batteries on all aircraft. Following a fire in 1999, the U.S. Federal Aviation Administration (FAA) determined that a fire involving a single lithium-metal battery would spread to an entire shipment, and that the aircraft fire suppression agent Halon would have no effect the fire. PHMSA banned bulk shipments of lithium-metal batteries on passenger aircraft in 2004. We proposed to extend this ban to both passenger and cargo aircraft worldwide.

4. Require the full regulation of lithium batteries, thereby alerting the acceptance and loading personnel to the presence of lithium battery shipments at cargo acceptance points.

Because the international community has failed to take needed remedial action, ALPA believes this Committee should act now to protect the public, flight crewmembers and other individuals directly involved in the air-cargo transportation system. The U.S. continues to be regarded as the world's leader in regulating the safe carriage of hazardous materials in air transportation. We submit that passage of this proposed legislation will enhance that status within the ICAO community. By pointing to this legislation, U.S. representatives will be positioned to propose their adoption on a worldwide basis. It should be noted that whether enhanced regulations governing the handling of lithium batteries are adopted via legislation or NPRM, they will differ from existing ICAO rules. Consequently, for a time, there will be a lack of harmonization with ICAO practices, regardless of the way the rules are adopted.

Compliance with provisions in the Department of Transportation's hazardous materials regulations will ensure that each shipment by air cargo of lithium batteries is subjected to the following conditions:

A. Design testing of each battery according to the UN Manual of Tests and Criteria
B. Each cell or battery must be protected from short circuit

C. Packaging in strong outer UN Specification Packaging
D. A dangerous goods transport document must be provided
E. The package must be marked with a Class 9 Dangerous Goods Label
F. An acceptance check is required to be performed by the operator
G. A pilot notification form must be provided to the pilot in command
H. Training must be provided to persons preparing batteries for shipment

ALPA believes it is critical that the total quantity of lithium-ion batteries stored at any single location or in a single cargo compartment must be limited. While the risk of a fire initiating in a single battery can never be completely eliminated, by limiting the number of batteries stored at a single location, the severity of a fire can be reduced. A conservative approach to the number of batteries permissible at a single location must be adopted until testing is performed to determine the quantity of batteries that can be successfully extinguished using aircraft fire suppression systems.

In conclusion, I want to express ALPA's appreciation for this Committee's interest in the safe transport of lithium batteries as cargo on passenger and all-cargo aircraft and for the leadership which you have provided by ensuring that PHMSA promulgates regulations mandating the safe transportation of lithium batteries. The language that you have added to the HAZMAT reauthorization bill will greatly enhance the overall safety of air cargo operations and protect lives and property whenever lithium batteries are moved through the air transportation system.

Thank you for the opportunity to testify today. I would be pleased to address any questions that you may have.