

-Official Emblem-

Requirement of The Civil Aviation Authority of Thailand

No. 122

on Rules, Procedures and Conditions for the Carriage of Lithium Batteries on Board Aircraft

Pursuant to Article 3 (5) of the Civil Aviation Authority of Thailand Notification Re: Prescribing Categories and Lists of Dangerous Goods Which May Endanger the Safety of Aircraft or Persons on Board Aircraft B.E. 2562 (2019) provides that substances and articles carried by passengers or crew members on board an aircraft for personal use, whether as carry-on baggage or checked baggage, in quantities or amounts specified in the Technical Instructions for the Safe Transport of Dangerous Goods by Air of the International Civil Aviation Organization, as in force at the time of transport, are exempted from being regarded as dangerous goods that may endanger the safety of aircraft or persons on board an aircraft. Whereas lithium batteries are articles that may be carried by passengers or crew members on board an aircraft for personal use in quantities or amounts specified in the above Technical Instructions which are not regarded as dangerous goods that may endanger the safety of an aircraft or persons on board an aircraft. By virtue of Section 6/1 of the Air Navigation Act B.E. 2497 (1954), as amended by the Emergency Decree Amending the Air Navigation Act B.E. 2497 (1954), B.E. 2558 (2015), and Section 15/28 (2) of the Air Navigation Act B.E. 2497 (1954), as amended by the Air Navigation Act (No. 14) B.E. 2562 (2019), which authorizes the Director General of the Civil Aviation Authority of Thailand to issue requirements concerning the conduct of persons involved in the transport of dangerous goods. The Director General of the Civil Aviation Authority of Thailand hereby issues this Requirement on the rules, procedures and conditions for the carriage of lithium batteries on board an aircraft in accordance with the latest edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air of the International Civil Aviation Organization, for compliance by passengers, crew members and all persons concerned, as follows:

Article 1. This Requirement shall be called “Requirement of the Civil Aviation Authority of Thailand No. 122 on Rules, Procedures and Conditions for the Carriage of Lithium Batteries on Board an Aircraft.”

Article 2. This requirement shall come into force as of the day following the date of its publication in the Government Gazette.

Article 3. The Civil Aviation Authority of Thailand Notification Re: Criteria for the Carriage of Lithium Batteries on Board Aircraft B.E. 2559 (2016), dated 20 September B.E. 2559 (2016), shall be repealed.

Article 4. In this requirement:

“ **Lithium Batteries**” means batteries containing lithium metal or lithium compounds as components and are classified into two categories, namely, Lithium Ion Batteries, which are rechargeable batteries; and Lithium Metal Batteries, which are non-rechargeable batteries intended for single use.

“ **Spare Lithium Batteries**” means lithium batteries that are not installed in equipment, or lithium batteries separately carried on board an aircraft as spare batteries for use when the batteries installed in equipment become weak or depleted and shall include power banks.

“**Power Bank**” means a portable lithium ion battery used as a supplementary source of electrical power for supplying electrical energy to other electronic devices, such as mobile phones, and which is not part of such devices.

“**Portable Electronic Device**” (PED) means as electrical or electronic devices designed to be portable and powered by batteries for its operation, including devices containing lithium batteries, such as mobile phones, laptop computers, cameras or audio players.

“**Portable Medical Electronic Device**” (PMED) means an electronic device designed to be portable and used for the treatment, diagnosis or monitoring of a personal medical condition that powered by batteries for its operation, including devices containing lithium batteries, such as blood pressure monitors, cardiac pacemakers or ventilators.

“**Crew Member**” means a person designated by an air operator, an aircraft owner, or a person having operational control of an aircraft, as the case may be, to perform duties on board an aircraft for a particular flight.

“**Air Operator**” means a Thai Air Operator or a Foreign Air Operator.

“**Technical Instructions**” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284), issued periodically in accordance with the procedures established and approved by the Council of the International Civil Aviation Organization.

Article 5. This Requirement shall apply to the carriage of lithium batteries on board an aircraft for all flights departing from licensed aerodromes and temporary takeoff and landing area for aircraft in Thailand, whether as Commercial Air Transport, Aerial Work or General Aviation, o both domestic and international routes.

Article 6. Passengers and crew members carrying lithium batteries on board an aircraft shall comply with the rules, procedures and conditions prescribed in this Requirement, shall ensure that lithium batteries are safely stowed while on board the aircraft, and shall not

engage in any act that may create a risk to the safety of the aircraft or persons on board the aircraft.

Article 7. Passengers and crew members may carry lithium batteries, spare lithium batteries, including power banks, Portable Electronic Devices (PEDs) and Portable Medical Electronic Devices (PMEDs), on board an aircraft for personal use, either as carry-on baggage or checked baggage, subject to the following rules, procedures and conditions:

(1) each lithium battery, whether installed in equipment or carried as a spare lithium battery, including a power bank, shall be of a type which meets the requirements of each test specified the UN Manual of Tests and Criteria, Part III, subsection 38.3;

(2) each lithium battery, whether installed in equipment or carried as a spare lithium battery, including a power bank, shall;

(a) contain no more than 2 grams (g) of lithium content, in the case of a lithium metal battery; or

(b) have a Watt-hour rating not exceeding 100 Watt-hours (Wh), in the case of a lithium ion battery;

(3) in the case of a lithium ion battery with a Watt-hour rating exceeding 100 Watt-hours (Wh) but not exceeding 160 Watt-hours (Wh), or a lithium metal battery for a Portable Medical Electronic Device (PMED) containing more than 2 grams (g) but no more than 8 grams (g) of lithium content, shall be obtained prior approval from the air operator, aerial work operator or general aviation operator, as the case may be. A passenger or a crew member may carry no more than two batteries;

(4) for Portable Electronic Devices (PEDs) containing lithium batteries:

(a) measures shall be taken to prevent unintentional activation and to protect the device from damage. Such measures may include completely switching off the device, locking the power button or screen, stowing the device in a manner that prevents accidental activation, or placing the device in an appropriate bag or case to protect it from impact or damage;

(b) the device should be carried as carry-on baggage. However, where the device is carried as checked baggage and contains a lithium metal battery with exceeding 0.3 grams (g) of lithium content, or a lithium ion battery with a Watt-hour rating exceeding 2.7 Watt-hours (Wh) per a device, the device shall be completely switched off and shall not be placed in sleep mode or hibernation mode;

(5) Portable Electronic Devices (PEDs) containing lithium batteries and heating elements capable of generating excessive heat that may cause a fire shall have the battery, the heating element, or other relevant components removed, disabled, or otherwise protected by appropriate measures to prevent the generation of heat through unintentional activation;

(6) spare lithium batteries (excluding power banks):

(a) shall be carried on board an aircraft as carry-on baggage only; and

(b) each battery shall be individually protected so as to prevent short circuits by placing it in the manufacturer's original retail packaging, insulating the battery terminals, for example by taping over exposed terminals, or placing each battery separately in a plastic bag or protective pouch;

(7) power banks:

(a) shall have a Watt-hour rating not exceeding 100 Watt-hours (Wh). Where a power bank has a Watt-hour rating exceeding 100 Watt-hours (Wh) but not exceeding 160 Watt-hours (Wh), prior approval shall be obtained from the air operator, aerial work operator or general aviation operator, as the case may be;

(b) shall be carried on board an aircraft as carry-on baggage only;

(c) shall not be charged from any power source while on board the aircraft;

(d) shall not be used to charge mobile phones or Portable Electronic Devices (PEDs) while on board the aircraft. The air operators, aerial work operators, or general aviation operators, as the case may be, may impose additional prohibitions or conditions where necessary for safety purposes;

(e) a passenger or a crew member may carry no more than two power banks on board an aircraft; and

(f) each power bank shall be individually protected against short circuits when not in use by placing it in the manufacturer's original retail packaging, insulating the battery terminals, for example by taping over exposed terminals, or placing each power bank separately in a plastic bag or protective pouch;

(8) baggage equipped with a lithium metal battery containing more than 0.3 grams (g) of lithium content or a lithium ion battery with a Watt-hour rating exceeding 2.7 Watt-hours (Wh) shall be carried on board an aircraft as carry-on baggage only, unless the battery is removed from the baggage. Where the battery is removed, the baggage may be carried as checked baggage, and the removed battery shall be carried on board an aircraft in accordance with (6);

(9) for safety purposes, while on board an aircraft, passengers and crew members shall keep spare lithium batteries, including power banks, and removed batteries that carried as carry-on baggage, in a location that is readily accessible to enable prompt action in the event of an abnormal occurrence, such as a seat pocket, the space underneath the seat in front of the passenger, or carriage on person throughout the journey. Such batteries shall not be stowed in an overhead compartment. The air operators, aerial work operators, or general aviation operators, as the case may be, may prescribe additional procedures, measures or practices regarding the stowage of lithium batteries on board the aircraft where necessary for safety purposes.

The rules and conditions under (1), (2) and (3) shall apply to all types of lithium batteries, whether installed in Portable Electronic Devices (PEDs), carried as spare lithium batteries, power banks, or installed in baggage.

Article 8. The provisions of Article 7 shall not apply to mobility aids, such as wheelchairs or other similar devices powered by lithium ion batteries, carried by passengers whose mobility is restricted due to disability, health conditions, age, or temporary physical conditions such as injury, provided that the following rules and conditions are complied with:

(1) shall be obtained prior approval from the air operator, aerial work operator or general aviation operator in advance, as the case may be, and provided information regarding the type of batteries, operating instructions, and the separating or removing the battery procedures, as appropriate;

(2) the lithium ion battery shall be a type which meets the requirements of each test specified the UN Manual of Tests and Criteria, Part III, subsection 38.3;

(3) where the mobility aid is not capable of providing adequate protection against damage to the battery, or does not provide an adequate battery protection system, for example the battery is equipped with impact-resistant protective housing, and there are no exposed electrical terminals, the following requirements shall apply:

(a) the battery shall be removed from the mobility aid in accordance with the manufacturer's instructions;

(b) each removed battery shall not exceed 300 Watt-hours (Wh);

(c) measures shall be taken to protect the battery against short circuits, such as insulating or covering exposed terminals;

(d) the battery shall be protected from damage, for example by placing it in a suitable bag or packaging; and

(e) the battery shall be carried in the aircraft cabin as carry-on baggage;

(4) a passenger may carry spare lithium batteries for such mobility aid as follows:

(a) one spare battery not exceeding 300 Watt-hours (Wh); or

(b) two spare batteries, each not exceeding 160 Watt-hours (Wh).

Such spare batteries shall be carried in the aircraft cabin as carry-on baggage and shall comply with (3) (c) and (d);

(5) where the lithium battery remains installed in the mobility aid and the mobility aid incorporates an adequate battery protection system in accordance with the manufacturer's instructions, such as impact-resistant protective housing and protection of battery terminals against short circuits, there shall be no limitation on the Watt-hour rating and the battery need not be removed from the mobility aid.

For the purposes of this Article, “battery protection system” means the design or construction of a device that prevents damage to the battery, short circuits, or any movement that may create hazard during transport or operation.

Article 9. Passengers and crew members shall not carry on board an aircraft any spare lithium batteries, including any power banks, where the Watt-hour rating (Wh), in the case

of a lithium ion battery, or the lithium content (LC(g)), in the case of a lithium metal battery, is not indicated, cannot be verified, is unclear, or is incorrectly marked, whether as carry-on baggage or checked baggage.

Article 10. A Passenger or a crew member who intends to carry lithium batteries that shall be obtained approval under Article 7(3), Article 7(7), or Article 8(1), shall notify the air operator, aerial operator, or general aviation operator, as the case may be, in advance of travel , or at the latest, at the time of check-in (for commercial air transport flights) or prior to boarding the aircraft (for aerial work or general aviation), in accordance with the procedures established by air operator, aerial work operator, or general aviation operator, as the case may be, together with at least the following information:

(1) the Watt-hour rating (Wh) of a lithium ion battery or the lithium content (LC(g)) of a lithium metal battery;

(2) the number of batteries or devices;

(3) the type of device, such as a Portable Electronic Device (PED), a Portable Medical Electronic Device (PMED), a spare lithium battery, a power bank, or a mobility aid, such as a wheelchair or a similar device; and

(4) installation layout or carriage conditions, for example, whether installed in a device, carried as spare lithium battery, or carried as a power bank.

The air operator, aerial work operator, or general aviation operator, as the case may be, has authority to refuse the carriage of any lithium batteries or devices containing a lithium battery where the applicable rules, procedures, or conditions are not complied with.

Article 11. The air operators, aerial work operators, or general aviation operators, as the case may be, shall establish and implement appropriate measures or procedures to ensure compliance by passengers and crew members with the rules, procedures and conditions prescribed in this Requirement.

Article 12. The transport or carriage of lithium batteries, as cargo on a Passenger Aircraft or Freighter/Cargo Aircraft, under applicable United Nations Number not prohibited by the Technical Instructions, shall comply with the Technical Instructions.

Issued on 22 May B.E. 2569 (2026)

-Signature-

Air Chief Marshal Manat Chavanaprayoon

Director General

The Civil Aviation Authority of Thailand