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The Civil Aviation Authority of Thailand

Thailand Civil Aviation Regulation – Air Operations

Part Commercial Seaplane Operations

(TCAR OPS Part – SEA)

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Approved By

Air Chief Marshal

Manat Chavanaprayoon

Director General

The Civil Aviation Authority of Thailand

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ACRONYMS

AOC	Air operator certificate
AIS	Aeronautical information services
AFM	Aircraft flight manual
TCAR	The Civil Aviation Regulations
CAAT	The Civil Aviation Authority of Thailand
CRM	Crew Recourses Management
FDP	Flight duty period
MCTOM	Maximum Certificate Take-off Mass
MOPSC	Maximum operational passenger seating configuration
NOTAM	Notices to airmen
TC	Type certificate
STC	Supplemental type certificate
SPCs	Special categories of passenger
SSR	Secondary surveillance radar
PED	Portable electronic device
SOPs	Standards Operating Procedures
MEL	Minimum Equipment List
MMEL	Master Minimum Equipment Lit

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ARTICLE 1 — INTRODUCTION

(1) The Civil Aviation Authority of Thailand (CAAT) is to adopt the necessary implementing rules for establishing the conditions for the safe operation of commercial seaplane operations in accordance with the Air Navigation Act B.E. 2497 and the Regulation of the Civil Aviation Authority of Thailand on commercial seaplane operations.

(2) This Regulation establishes additional requirements specific to commercial seaplane operations. Operators involved in such operations shall comply with all relevant essential requirements set forth in this Regulation. In addition to the oversight of issued certificates, this Regulation grants the authority to conduct investigations, including ramp inspections, and to take necessary measures—such as grounding aircraft—to prevent continued non-compliance.

(4) In the interest of safety and to ensure compliance with the air operations requirements of TCAR - Part SEA, all operators of commercial seaplanes operations covered by this Regulation.

(5) These dedicated operational rules for air operations with commercial seaplane operations do not include requirements regarding the safety oversight of seaplane operations by the Civil Aviation Authority of Thailand. Such requirements are outlined in the Air Navigation Act B.E. 2497 and the Civil Aviation Authority of Thailand's internal oversight, certification, and enforcement procedures, which apply to the safety oversight of seaplane operators.

(6) Operators failing to comply with TCAR - Part SEA regulations may be subject to enforcement actions, including operational restrictions, suspension, or revocation of their authorisation or certificate. The Civil Aviation Authority of Thailand shall monitor compliance through inspections, audits, and oversight activities to ensure that seaplane operators adhere to established safety standards.

(7) In cases of non-compliance, the Director General may impose specific requirements, corrective actions, or operational limitations on the organisation, owner, or pilot-in-command. These corrective measures will be enforced to restore compliance with TCAR - Part SEA and maintain the highest standards of safety for commercial seaplane operations.

(8) Compliance with these regulations is mandatory for any operator wishing to conduct commercial seaplane operations in the Kingdom of Thailand.

(9) In this publication, the word 'must' or 'shall' is used to indicate where the Director General requires the organisation, owner, or pilot-in-command to respond to and comply with, or

adhere closely to, the defined requirement.

(10) If the organisation's, owner's, or operator's response is deemed inadequate by the Director General, a specific requirement or restriction may be applied as a condition of the appropriate instrument to be issued under Thailand Civil Aviation Regulations.

ARTICLE 2 — DEFINITIONS

For the purposes of this Regulation, the following definitions shall apply:

'**Adequate aerodrome**' means an aerodrome on which the aircraft can be operated, taking account of the applicable performance requirements and runway characteristics;

'**Adverse weather conditions**' means any meteorological condition, such as high winds, rough seas, thunderstorms, or poor visibility, that may impact the safe operation of seaplanes or amphibious aircraft.

'**Aerodrome**' means a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and movement of aircraft.

'**Aircraft**' means a machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface;

'**Amphibious Aircraft**' means an aircraft capable of operating on both land and water, equipped with retractable landing gear for land-based operations and floats or a hull for water landings.

'**Buoy**' means a buoy connected by chain or cable to a permanent unmovable anchor sunk deeply into the bottom of a body of water.

'**Beaching**' means the process of maneuvering a seaplane onto a shoreline or a designated ramp to facilitate passenger and baggage or cargo loading, maintenance, or overnight parking.

'**Contingency fuel**' means the fuel required to compensate for unforeseen factors that could have an influence on the fuel consumption to the destination aerodrome;

'**Critical phases of flight**' means in the case of aeroplanes means the take-off run, the take-off flight path, the final approach, the missed approach, the landing, including the landing roll, and any other phases of flight as determined by the pilot-in-command or commander;

'**Dangerous goods**' means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the technical instructions or which are classified according to those instructions;

'**Dock operations**' means the procedures and activities involved in mooring, securing, embarking, and disembarking seaplanes at a dock, pier, or floating platform.

‘**Dock**’ means to secure a seaplane to a permanent structure fixed to the shore. As a noun, the platform or structure to which the seaplane is secured.

‘**Docking area**’ means a designated location at a water aerodrome or seaplane base where aircraft are moored, secured, or parked while passengers and baggage or cargo are loaded or unloaded.

‘**Director General**’ means the Director General of the Civil Aviation Authority of Thailand.

‘**Emergency exit**’ means an installed exit-type egress point from the aircraft that allows maximum opportunity for seaplane cabin coordinator and flight crew compartment evacuation within an appropriate time period and includes floor level door, window exit or any other type of exit, for instance hatch in the flight crew compartment and tail cone exit;

‘**Emergency response plan (ERP)**’ means a documented set of procedures and responsibilities for responding to incidents, accidents, or emergencies related to seaplane operations, including search and rescue coordination, water evacuations, and aircraft recovery procedures.

‘**Fixed platform**’ means a platform extending from the shore, on water and supported by pillars to hold it in position, intended to align alongside seaplanes for the purposes of embarkation and disembarkation of passengers, loading and unloading of cargo, or refueling or parking of seaplanes.

‘**Flight crew member**’ means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;

‘**Flight recorder**’ means any type of recorder that is installed on the aircraft for the purpose of facilitating accident or incident safety investigations;

‘**Floating platform**’ means a platform placed on open water intended for the purpose of embarkation and disembarkation of passengers, loading and unloading of cargo by seaplane.

‘**Grounding**’ means the formal prohibition of an aircraft to take-off and the taking of such steps as are necessary to detain it.

‘**Maximum operational passenger seating configuration (MOPSC)**’ means the maximum passenger seating capacity of an individual aircraft, excluding crew seats, established for operational purposes and specified in the operations manual. Taking as a baseline the maximum passenger seating configuration established during the certification process conducted for the type certificate (TC), supplemental type certificate (STC) or change to the TC or STC as relevant to the individual aircraft, the MOPSC may establish an equal or lower number of seats, depending on the operational

constraints.

'**Mooring**' means a fixed permanent installation on the water surface used to secure seaplanes. The seaplane may be moored to a floating buoy, a pier, platforms, etc.

'**Movement area**' means the part of the temporary take-off and landing area on water to be used for take-off, landing and taxiing of seaplanes, consisting of the maneuvering area and platforms.

'**Night**' means the period between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise as may be prescribed by the appropriate authority.

'**Operating site**' means a site, other than an aerodrome, selected by the operator or pilot-in-command or commander for landing, take-off and/or external load operations including temporary take-off and landing area on water.

'**Operational control**' means the responsibility for the initiation, continuation, termination or diversion of a flight in the interest of safety.

'**Pilot-in-command**' means the pilot designated as being in command and charged with the safe conduct of the flight. For the purpose of commercial air transport operations, the 'pilot-in-command' shall be termed the 'commander'.

'**Portable electronic device (PED)**' means any kind of electronic device, typically but not limited to consumer electronics, brought on board the aircraft by crew members, passengers, or as part of the cargo, that is not included in the configuration of the certified aircraft. It includes all equipment that is able to consume electrical energy. The electrical energy can be provided from internal sources such as batteries (chargeable or non-rechargeable) or the devices may also be connected to specific aircraft power sources.

'**Principal place of business**' means the head office or registered office of the organisation within which the principal financial functions and operational control of the activities referred to in this Regulation are exercised.

'**Protected area**' means an area which is protected from large waves. The structure providing protection can be natural or constructed.

'**Psychoactive substances**' means alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, with the exception of caffeine and tobacco.

‘**Temporary take-off and landing area on water**’ means an open body or water approved by the CAAT for the temporary take-off and landing of a seaplane.

‘**Restricted area**’ means a designated zone around a seaplane base or water aerodrome where unauthorized vessels, swimmers, or activities are prohibited to ensure safe aircraft movement.

‘**Safety-sensitive personnel**’ means persons who might endanger aviation safety if they perform their duties and functions improperly, including flight crew members and seaplane cabin coordinator, aircraft maintenance personnel and air traffic controllers.

‘**Seaplane base**’ means a facility providing operational support for seaplane activities, which may include docks, fueling stations, passenger handling areas, and maintenance facilities.

‘**Seaplane cabin coordinator**’ means an appropriately qualified individual, on the aircraft, other than a flight crew or technical crew member, who is assigned specific duties related to passenger and flight safety during seaplane operations.

‘**Seaplane ground personal / Dock personnel**’ means a person designated by the air operator who is responsible for communication regarding the arrival and departure of the seaplane with the operator, handling passengers, preparing the passenger manifest and load sheet, and providing assistance during emergency evacuation and other related emergency scenarios.

‘**Seaplane**’ means an aeroplane on floats (amphibious or non-amphibious) or a flying boat (water-only or amphibious).

‘**Seaplane handling agent**’ means a person provided by the operator who will be responsible for communication on arrival/departure of the seaplane with the operator, handling of passenger, preparing a passenger manifest and load sheet and providing assistance during emergency evacuation of the seaplane and other related emergency scenarios.

‘**Seaplane platform**’ means a platform used for the purpose of embarkation and disembarkation of passenger or cargo by seaplane.

‘**Wheel-based aircraft operations**’ refer to a seaplane, or more specifically amphibious aircraft, that can operate on both water and land using retractable wheels, allowing them to take-off and landing on runways like regular aeroplanes.

‘**Vessel**’ means a type of boat or ship that is used to travel on water. It can be used to transport people, cargo, or equipment from one place to another. To be considered a vessel, it must be able to navigate on water.

‘**Water aerodrome**’ means a defined area, primarily on water, intended to be used either wholly or in part for the arrival, departure and movement of seaplanes, and any building and equipment on ground or water. This term includes bother certified water aerodromes and any suitable body of water intended for use as a take-off and landing area for seaplanes

‘**Water runway**’ means a defined rectangular area on water, intended for the landing and take-off of seaplane long its length.

‘**Waterways’** means a river, canal or other waterbody serving as a route or way of travel or transport.

‘**Wildlife hazard**’ means any risk posed to seaplane operations by birds, marine animals, or other wildlife, which may cause damage to aircraft or obstruct safe aircraft movement.

ARTICLE 3 — ESSENTIAL REQUIREMENTS FOR SEAPLANE OPERATIONS

(A) This Regulation establishes comprehensive provisions governing air operations involving seaplane operations. Operators shall ensure full compliance with all applicable national and international aviation regulations, including those specific to water aerodromes, temporary take-off and landing areas on water, water runways, waterways, floating platforms, seaplane operations, and aviation safety. Operators are required to regularly review and update their practices to align with evolving regulatory standards.

(B) This Regulation outlines comprehensive provisions that establish the criteria for granting the privilege to engage in commercial seaplane operations to holders of an Air Operator Certificate. Additionally, it defines the privileges and responsibilities associated with such certification and stipulates the conditions under which these operations may be prohibited, restricted, or subjected to specific requirements in order to ensure aviation safety.

(C) This Regulation shall not apply to air operations with products, parts, appliances, personnel and organisations while carrying out military, customs, police, search and rescue, firefighting, coastguard or similar activities or services. All such activities or services shall have due regard as far as practicable to the objectives of this Regulation.

SUBPART GEN - GENERAL REQUIREMENTS

1. GENERAL

(A) Operators seeking to conduct commercial seaplane operations shall hold an Air Operator Certificate (AOC) issued by the Civil Aviation Authority of Thailand (CAAT). The operator shall meet the required safety and operational standards in accordance with applicable regulations.

(B) Unless otherwise determined, operators engaged in commercial seaplane operations shall demonstrate their capability and means of discharging the responsibilities associated with their privileges. These capabilities and means shall be recognised through the issuance of a certificate. The privileges granted to the operator and the scope of the operations shall be specified in the certificate.

(C) The operation of a seaplane shall comply with the essential requirements for seaplane operations and be conducted in a manner that prioritizes the safety of passengers, crew, and third parties, taking into account the unique risks associated with water aerodrome or temporary take-off and landing area on water including environmental protection and public interest.

(D) Operator shall establish standards operating procedures (SOPs) to address risk associated with water aerodrome or temporary take-off and landing area on water, including take-off, landing and docking.

(E) Operator shall maintain effective communication and coordination with maritime authority and other relevant agencies to ensure operations safety.

(F) VFR Seaplanes operations intending to carry dangerous goods shall get the necessary approvals from CAAT and the procedures shall be outlined in the operations manual.

(G) Seaplane cabin coordinator and personnel involved in seaplane platform operations for commercial seaplane operation shall comply with the essential requirements to their duties.

(H) Training organisations when conducting flight training, shall comply with the relevant CAAT approved training organization regulations.

(I) Unless otherwise determined, operators engaged in the non-commercial operation of complex motor-powered aircraft shall declare their capability and means of discharging the responsibilities associated with the operation of that aircraft.

2. FLIGHT PREPARATION

A seaplane flight shall not be commenced unless it has been ascertained by every reasonable means available that all the following conditions are complied with:

(A) Adequate facilities directly required for the flight and for the safe operation of the aircraft, including communication facilities and navigation aids, are available for the execution of the flight, taking into account available Aeronautical Information Services documentation.

(B) The crew member shall be familiar with, and passengers informed of the location and use of relevant emergency equipment. Sufficient related information regarding emergency procedures and use of cabin safety equipment shall be made available to crew and passengers using specified information.

(C) The pilot-in-command shall be satisfied that:

(a) the aircraft is airworthy as specified in paragraph 6.;

(b) if required, the aircraft is duly registered and the appropriate certificates with respect thereto are aboard the aircraft;

(c) instruments and equipment as specified in paragraph 5., required for the execution of that flight are installed in the aircraft and are operative, unless waived by the applicable Minimum Equipment List (MEL) or equivalent document;

(d) the mass of the aircraft and centre of gravity location are such that the flight can be conducted within limits prescribed in the airworthiness documentation;

(e) all cabin baggage, hold luggage and cargo is properly loaded and secured; and

(f) the aircraft operating limitations as specified in paragraph 4., will not be exceeded at any time during the flight.

(D) Information regarding meteorological conditions for departure, destination and, where applicable, alternate aerodromes, as well as en-route conditions, shall be available to the flight crew. Special attention shall be given to potentially hazardous atmospheric conditions

(E) For a seaplane flight based on visual flight rules, meteorological conditions along the route to be flown shall be such as to render compliance with these flight rules possible.

(F) The amount of fuel and oil on board shall be sufficient to ensure that the intended flight can be completed safely, taking into account the meteorological conditions, any element affecting the performance of the aircraft and any delays that are expected in flight. In addition, a fuel reserve shall be carried to provide for contingencies. Procedures for inflight fuel management shall be established when relevant.

3. FLIGHT OPERATIONS

With regard to commercial seaplane operations, all the following conditions shall be complied with:

(A) Operator shall establish a comprehensive safety management system to identify, access, and mitigate risks specific to commercial seaplane operations. A pre-flight planning shall include and assessment of water condition, weather forecasts, obstacle and hazard in water operating areas. For emergency landing sites, the pilot-on-command shall conduct a visual check before water takeoff and landing to avoid conflicts with maritime traffic.

(B) Where relevant for the type of aircraft, during take-off and landing, and whenever deemed necessary by the pilot-in-command in the interest of safety, each crew member shall be seated at their designated seats and shall use the provided restraint systems, taking into account the type of aircraft;

(C) Where relevant for the type of aircraft, all flight crew members required to be on flight deck duty shall be and remain at their station, with their seatbelts fastened except en-route for physiological or operational needs;

(D) Where relevant for the type of aircraft and the type of operation, before take-off and landing, during taxiing and maneuvering whenever deemed necessary in the interest of safety within the movement area, the pilot-in-command shall ensure that each passenger is properly seated and secured;

(E) A seaplane flight shall be performed in such a way that appropriate separation from other aircraft, or vessels on the waterways is maintained in accordance with the right of way. Adequate obstacle clearance shall be maintained during all phases of the flight. Such separation shall, at a minimum, comply with the applicable rules of the air and rule of the sea;

(F) A flight shall not be continued unless known conditions continue to be at least equivalent to those in paragraph (C).

(G) In an emergency, the pilot-in-command shall ensure that all passengers are instructed in such emergency action as may be appropriate to the circumstances;

(H) A pilot-in-command shall take all necessary measures so as to minimize the consequences on the flight of disruptive passenger behavior;

(I) An aircraft shall not be taxied on the movement area of water aerodrome, on temporary take-off and landing area on water or its propeller shall not be turned under power, unless the person at the controls is appropriately competent.

(J) Passenger must receive a safety briefing before arriving and departure, including instruction on seatbelts use, life vest donning and inflation, emergency exit locations, and water evacuation procedures. For infants, elderly passengers, or persons with disabilities, the operator must be provided with adequate assistance and additional safety measure.

4. AIRCAFT PERFORMANCE AND OPERATING LIMITATIONS

(A) A seaplane shall be operated in accordance with its airworthiness documentation and all related operating procedures and limitations as expressed in its approved flight manual or equivalent documentation, as the case may be. The flight manual or equivalent documentation shall be accessible to the crew and kept up to date for each aircraft.

(B) The aircraft shall be operated in accordance with the applicable environmental documentation.

Note: the applicable environmental documentations may include but are not limited to aircraft flight manual (AFM) related to environmental limitations, Noise certification standards, Emission control requirements, Local environmental laws and airport restrictions e.g. noise abatement procedures, engine run-up limitations.

(C) A seaplane flight shall not be commenced or continued unless the aircraft's scheduled performance, considering all factors that significantly affect its performance level, allows all phases of flight to be executed within the applicable distances, areas and obstacle clearances at the planned operating mass. Seaplanes must be operated within their approved performance limitations, considering factors such as weight, center of gravity, environmental conditions, and water surface characteristics. Performance factors which significantly affect take-off, en-route and approach/landing include, in particular:

(a) operating procedures;

(b) pressure altitude of the aerodrome;

(c) temperature;

(d) wind;

(e) sea state

(f) Height of waves

(g) direction of waves

(h) tide

(i) size, slope and condition of the take-off/landing area; and

(j) the condition of the airframe, the power plant or the systems, the floats, taking into account possible deterioration or flooding in the floats.

(k) Such factors shall be taken into account directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data, as appropriate to the type of operation.

5. INSTRUMENTS, DATA AND EQUIPMENT

(A) An aircraft shall be equipped with all navigation, communication and other equipment necessary for the intended flight, taking account of air traffic regulations and rules of the air applicable during any phase of the flight.

(B) When relevant, an aircraft shall be equipped with all necessary safety, medical, evacuation and survival equipment, taking account of the risks associated to the areas of operation, the routes to be flown, the flight altitude and the duration of the flight.

(C) All data necessary for the execution of the flight by the crew member shall be updated and available on board the aircraft taking account of applicable air traffic regulations, rules of the air, flight altitudes and areas of operation.

6. CONTINUING OF AIRWORTHINESS

(A) The seaplane shall not be operated unless:

(a) the aircraft is in an airworthy condition;

(b) the operational and emergency equipment necessary for the intended flight is serviceable;

(c) the airworthiness document of the aircraft is valid; and

(d) the maintenance of the aircraft is performed in accordance with its maintenance programme.

(B) Before each flight or consistent series of consecutive flights, the aircraft shall be inspected, through a pre-flight check, to determine whether it is fit for the intended flight.

(C) The maintenance programme shall contain in particular, maintenance tasks and intervals, especially those that have been specified as mandatory in the instructions for continuing airworthiness.

(D) The aircraft shall not be operated unless it is released to service by qualified persons or organisations, after maintenance. The signed release to service shall contain in particular, the basic details of the maintenance carried out.

(E) All records demonstrating the airworthiness of the aircraft shall be kept until the information contained has been superseded by new information equivalent in scope and detail but not less than 24 months in the case of detailed maintenance records. When the aircraft is leased, all records demonstrating the airworthiness of the aircraft shall be kept at least for the length of the lease.

(F) All modifications and repairs shall comply with the essential requirements for airworthiness. The substantiating data supporting compliance with the airworthiness requirements shall be retained.

(G) The operator shall ensure that all seaplanes are equipped with appropriate flotation devices, emergency exit markings, and water survival equipment.

7. CREW MEMBERS

(A) The number and composition of the flight crew shall be determined taking into account:

(a) the certification limitations of the aircraft, including if applicable, the relevant emergency evacuation demonstration;

(b) the aircraft configuration; and

(c) the type and duration of operations.

(B) Seaplane cabin coordinator shall:

(a) be trained and checked on a regular basis to attain and maintain an adequate level of competency in order to perform their assigned safety duties; and

(b) be periodically assessed for medical fitness to safely exercise their assigned safety duties. Compliance shall be shown by appropriate assessment based on aero-medical best practice.

(C) The pilot-in-command shall have the authority to give all commands and take any appropriate actions for the purpose of securing the operation and the safety of the aircraft and of persons and/or property carried therein.

(D) In an emergency situation, which endangers the operation or the safety of the aircraft and/or persons on board, the pilot-in-command shall take any action he/she considers necessary in the interest of safety. When such action involves a violation of

local regulations or procedures, the pilot-in-command shall be responsible for notifying the appropriate local authority without delay.

(E) Emergency abnormal situations shall not be simulated when passengers or cargo are being carried.

(F) No crew member shall allow their task achievement/decision making to deteriorate to the extent that flight safety is endangered because of the effects of fatigue, takin- into-account, *inter alia*, fatigue accumulation, sleep deprivation, number of sectors flown, night duties at overnight stops at temporary take-off and landing area on waters. Rest periods shall provide sufficient time to enable crewmembers to overcome the effects of the previous duties and to be well rested by the start of the following flight duty period.

(G) A crew member shall not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to injury, fatigue, medication, sickness or other similar causes.

8. ADDITIONAL REQUIREMENTS FOR OPERATION FOR COMMERCIAL PURPOSES AND OPERATIONS OF COMPLEX MOTOR-POWERED AIRCRAFT

(A) The operation for commercial seaplane purposes and the operation of complex motor-powered aircraft shall not be undertaken unless the following conditions are met:

(a) The operator shall have directly or indirectly through contracts the means necessary for the scale and scope of the operations. These means comprise but are not limited to the following: aircraft, facilities, management structure, personnel, equipment, documentation of tasks, responsibilities and procedures, access to relevant data and recordkeeping;

(b) The operator shall use only suitably qualified and trained personnel and implement and maintain training and checking programmes for the crew members and other relevant personnel including seaplane handling agents in accordance with the related CAAT Regulations.

(c) The operator shall establish a MEL or equivalent document, taking account of the following:

1) the document shall provide for the operation of the aircraft, underspecified

conditions, with particular instruments, items of equipment or functions inoperative at the commencement of the flight;

2) the document shall be prepared for each individual aircraft, taking account of the operator's relevant operational and maintenance conditions; and

3) the MEL shall be based on the Master Minimum Equipment List (MMEL), if available, and shall not be less restrictive than the MMEL;

(d) The operator shall implement and maintain a management system to ensure compliance with these essential requirements for operations and aim for continuous improvement of this system; and

(e) The operator shall establish and maintain an accident prevention and safety programme, including an occurrence reporting programme, which shall be used by the management system in order to contribute to the aim of continuous improvement of the safety of operations.

(B) The operation for commercial seaplane purposes and the operation of complex motor-powered aircraft shall only be undertaken in accordance with an operator's operations manual. Such manual shall contain all necessary instructions, information and procedures for all aircraft operated and for operations personnel to perform their duties. Limitations applicable to flight time, flight duty periods and rest periods for crew members shall be specified. The operations manual and its revisions shall be compliant with the approved flight manual and be amended as necessary.

(C) The operator shall establish procedures, as appropriate, so as to minimise the consequences to safe flight operations of disruptive passenger behavior.

(D) The operator shall develop and maintain security programmes adapted to the aircraft and the type of operation including particularly:

(a) security of the flight crew compartment whenever applicable

(b) aircraft search procedure checklist;

(c) training programmes;

(d) protection of electronic and computer systems to prevent intentional system interference and corruption; and

(e) reporting acts of unlawful interference.

When security measures may adversely affect the safety of operations, the risks shall be assessed and appropriate procedures developed to mitigate safety risks, this may necessitate the use of specialist equipment.

(E) The operator shall designate one pilot amongst the flight crew as the pilot-in-command.

(F) The prevention of fatigue shall be managed through a rostering system. For a flight, or series of flights, such a rostering system needs to address flight time, flight-duty periods, duty and adapted rest periods. Limitations established within the rostering system shall take-into- account all relevant factors contributing to fatigue such as, in particular, number of sectors flown, sleep deprivation, night hours, positioning, cumulative duty time for given periods of time, sharing of allocated tasks between crew members.

(G) The tasks specified in paragraph (A) and those described in paragraph (D) and (E) shall be controlled by an organisation responsible for the continuing airworthiness management that shall meet, in addition to those essential requirements of airworthiness, the following conditions:

(a) the organisation shall be qualified for the maintenance of products, parts and appliances under its responsibility or have established a contract with such a qualified organisation for these products, parts and appliances; and

(b) the organisation shall establish an organisation manual providing, for use and guidance of personnel concerned, a description of all continuing airworthiness procedures of the organisation including when applicable a description of administrative arrangements between the organisation and the approved maintenance organisation.

SUBPART ORS — ORGANISATION REQUIREMENTS FOR SEAPLANE OPERAITONS

SECTION 1 — GENERAL REQUIREMENTS

SEA.ORS.105 Competent Authority

For the purpose of this Regulation, the Civil Aviation Authority of Thailand (CAAT) is the competent authority and it shall be the authority for exercising comprehensive oversight over operators authorised for seaplane operations whose principal place of business is located within the Kingdom of Thailand.

SEA.ORS.110 Operator Responsibilities

(a) The operator is responsible for the operation of the aircraft in accordance with these Regulations.

(b) Every seaplane flight shall be conducted in accordance with the provisions of the operations manual.

(c) The operator shall establish and maintain a system for exercising operational control over any flight operated under the terms of its certificate.

(d) The operator shall ensure that its aircraft are equipped and its crew members are qualified as required for the area and type of operation.

(e) The operator shall ensure that all personnel assigned to, or directly involved in, ground, water and flight operations are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

(f) The operator shall establish procedures and instructions for the safe operation of each aircraft type, containing ground staff and crew member duties and responsibilities for all types of operation on the ground, water and in flight. Those procedures and instructions shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft. Procedures and instructions for a sterile flight crew compartment shall also be included wherever applicable.

(g) The operator shall ensure that all personnel are made aware that they shall comply with the laws, regulations and procedures of Thailand in which operations are conducted and that are pertinent to the performance of their duties.

(h) The operator shall establish a checklist system for each aircraft type for seaplane operations to be used by crew members in all phases of flight under normal, abnormal and emergency conditions in order to ensure that the operating procedures in the operations manual are followed. The design and usage of checklists shall observe human factors principles and take into account the latest relevant documentation from the design approval holder.

(i) The operator shall specify flight planning procedures to provide for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes or operating sites concerned. These procedures shall be included in the operations manual.

(j) The operator shall establish and maintain dangerous goods training programmes for personnel as required by the technical instructions. Such training programmes shall commensurate with the responsibilities of personnel. Training programmes of operators performing as required by the CAAT dangerous goods regulations, whether they transport dangerous goods or not.

(k) Notwithstanding paragraph (j), operators conducting commercial seaplane operations with either of a single-engined propeller-driven aeroplane having an MCTOM of 5,700 kg or less and a MOPSC of 5 or less, operated in a flight taking-off and landing at the same aerodrome or operating site, or a water aerodrome or a temporary take-off and landing area on water under VFR, shall ensure that the flight crew has received appropriate dangerous goods training or briefing to enable them to recognise undeclared dangerous goods brought on board by passengers or as cargo.

SEA.ORS.125 Terms of approval and privileges of an AOC – Seaplane operations

A certified operator shall comply with the scope and privileges defined in the operations specifications attached to the operator's certificate.

(a) Any change affecting:

(1) the scope of the certificate or the operations specifications of an operator; or

(2) any of the elements of the operator's management system as required in SEA.ORS.200 (a) (1) and (a) (2), shall require prior approval by CAAT.

(b) For any changes requiring prior approval in accordance with these Regulations, the operator shall apply for and obtain an approval issued by CAAT. The application shall be submitted before any such change takes place, in order to enable CAAT to determine continued

compliance with Regulations and to amend, if necessary, the operator certificate and related terms of approval attached to it.

(1) The operator shall provide CAAT with any relevant documentation.

(2) The change shall only be implemented upon receipt of formal approval by CAAT.

(3) The operator shall operate under the conditions prescribed by CAAT during such changes, as applicable.

(4) All changes not requiring prior approval shall be managed and notified to CAAT as defined in the procedure approved by CAAT.

(5) In case of introduction of the new aircraft type in the company, while the Authority does not have type-rated officer or have type-rated officer but not adequately meet the overall number of such aircraft type, the AOC holder shall provide aircraft type training for the new aircraft type to the Authority's Officers, at the expense of the AOC holder at the earliest convenience.

SEA.ORS.135 Continued validity of an AOC – Seaplane operations

(a) The operator's certificate shall remain valid subject to all of the following:

(1) the operator remaining in compliance with the relevant requirements of Regulations, taking into account the provisions related to the handling of findings as specified under SEA.ORS.150;

(2) CAAT being granted access to the operator as defined in SEA.ORS.140. to determine continued compliance with the relevant requirements of Regulations; and

(3) the certificate not being surrendered or revoked.

(b) Upon revocation or surrender the certificate shall be returned to CAAT without delay.

SEA.ORS.140 Access

(a) For the purpose of determining compliance with the relevant requirements of Regulations, the operator shall grant access at any time to any facility, aircraft, document, records, data, procedures or any other material relevant to its activity subject to certification, to any person authorised by CAAT.

SEA.ORS.150 Findings

(a) Level of findings

(1) A level 1 finding shall be issued by the CAAT when any significant non-compliance is detected with the applicable requirements, with the organisation's procedures and manuals or with the terms of an approval, or certificate which lowers safety or seriously endangers flight safety.

(2) A level 2 finding shall be issued by the CAAT when any non-compliance is detected with the applicable requirement, with the organisation's procedures and manuals or with the terms of an approval, or certificate which could lower safety or seriously hazards flight safety.

(3) An observation is an opportunity for improvement which is minor gap, mostly documented and implemented. The management system that may be weak, cumbersome, redundant, overly complex, or in some other manner, may, in the opinion of the auditor, offer an opportunity for an organisation to improve its current status. An observation is not subject to any corrective actions unless it is accepted by auditee for improvement.

(b) After receipt of notification of findings, the operator shall:

(1) identify the root cause of the non-compliance;

(2) define a corrective action plan; and

(3) demonstrate corrective action implementation to the satisfaction of CAAT within a period agreed with that authority.

SEA.ORS.155 Immediate reaction to a safety problem

The operator shall implement:

(a) any safety measures mandated by CAAT; and

(b) any relevant mandatory safety information issued by CAAT, including airworthiness directives.

SEA.ORS.160 Occurrence reporting

(a) The operator shall report to CAAT, and to any other organisation required by CAAT to be informed, any accident, serious incident and occurrence as defined in section 61 of The Air Navigation Act B.E. 2497 and Kingdom of Thailand Civil Aviation Regulations, including Kingdom of Thailand Civil Aviation Occurrence Reporting Regulations.

(b) Without prejudice to paragraph (a) the operator shall report to CAAT and to the organisation

responsible for the design of the aircraft any incident, malfunction, technical defect, exceeding of technical limitations, occurrence that would highlight inaccurate, incomplete or ambiguous information contained in data established or other irregular circumstance that has or may have endangered the safe operation of the aircraft and that has not resulted in an accident or serious incident.

(c) The reports referred in paragraphs (a) and (b) shall be made in a form and manner, established by CAAT and shall contain all pertinent information about the condition known to the operator.

(d) Reports shall be made as soon as practicable, but in any case within 72 hours of the operator identifying the condition to which the report relates, unless exceptional circumstances prevent this.

(e) Where relevant, the operator shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified. This report shall be produced in a form and manner established by CAAT.

SECTION 2 – MANAGEMENT

SEA.ORS.200 Management System

(a) The operator shall establish, implement and maintain a management system that includes:

(1) clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager;

(2) a description of the overall philosophies and principles of the operator with regard to safety, referred to as the safety policy;

(3) the identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness;

(4) maintaining personnel trained and competent to perform their tasks;

(5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation; and

(6) a function to monitor compliance of the operator with the relevant requirements.

Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary.

(b) The management system shall correspond to the size of the operator and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.

SEA.ORS.205 Contracted activities

(a) When contracting or purchasing any services or products as a part of its activities, the operator shall ensure all of the following:

(1) that the contracted or purchased services or products comply with the applicable requirements;

(2) that any aviation safety hazards associated with contracted or purchased services or products are considered by the operator's management system.

(b) When the certified operator contracts any part of its activity to an organisation that is not itself certified or authorised in accordance with this Part to carry out such activity, the contracted organisation shall work under the approval of the operator. The contracting organisation shall ensure that CAAT is given access to the contracted organisation, to determine continued compliance with the applicable requirements.

SEA.ORS.210 Personnel requirements

(a) The operator shall appoint an accountable manager, who has the authority for ensuring that all activities can be financed and carried out in accordance with the applicable requirements. The accountable manager shall be responsible for establishing and maintaining an effective management system.

(b) A person or group of persons shall be nominated by the operator, with the responsibility of ensuring that the operator remains in compliance with the applicable requirements. Such person(s) shall be ultimately responsible to the accountable manager.

(c) The operator shall have sufficient qualified personnel for the planned tasks and activities to be performed in accordance with the applicable requirements.

(d) The operator shall maintain appropriate experience, qualification and training records to show compliance with paragraph (c).

(e) The operator shall ensure that all personnel are aware of the rules and procedures relevant to the exercise of their duties.

SEA.ORS.215 Facility requirements

The operator shall have facilities allowing the performance and management of all planned tasks and activities in accordance with the applicable requirements.

SEA.ORS.220 Record-keeping

(a) The operator shall establish a system of record-keeping that allows adequate storage and reliable traceability of all activities developed, covering in particular all the elements indicated in SEA.ORS.200.

(b) The format of the records shall be specified in the operator's procedures.

(c) Records shall be stored in a manner that ensures protection from damage, alteration and theft.

SEA.ORS.310 Use of aircraft listed on an AOC for non-commercial operations

(a) The AOC holder providing the aircraft and the operator using the aircraft shall establish a procedure:

(1) clearly identifying which operator is responsible for the operational control of each flight and to describe how the operational control is transferred between them;

(2) describing the handover procedure of the aircraft upon its return to the AOC holder.

That procedure shall be included in the operations manual of each operator or in a contract between the AOC holder and the operator using the aircraft. The AOC holder shall establish a template of such contract. The operator shall maintain all the records of these contracts.

SUBPART AOS — VARIATION OF AN AOC'S OPERATIONS SPECIFICATION

SEA.AOS.100 Application for variation of an AOC's Operations Specification

(a) Prior to commencing commercial seaplane operations, the operator shall apply for and obtain a variation of an AOC's Operations Specification issued by CAAT.

(b) The operator shall provide the following information to CAAT:

(1) the official name and business name, address, and mailing address of the applicant;

(2) a description of the proposed operation, including the type(s), and number of aircraft to be operated, the requested flight routes, estimated operational frequency, type of flight operations, and designated water aerodrome or temporary take-off and landing area on water for seaplane take-off and landing;

(3) a description of the management system, including organizational structure;

(4) the names of the nominated persons required by SEA.AOS.135 (a) together with their qualifications and experience includes the establishment of training programs and the methodologies for recording and maintaining training records for these personnel;

(5) relevant information on flight crew license and flight experience, includes detailed records of flight crew member, their respective licenses, and individual flight experience.

(6) the operations manual related to seaplane operations required by SEA.MLR.100;

(7) a statement that all the documentation sent to CAAT have been verified by the applicant and found in compliance with the applicable requirements.

(c) Applicants shall demonstrate to CAAT that:

(1) they comply with all the requirements in compliance with these Regulations;

(2) all aircraft operated have a certificate of airworthiness (C of A) in accordance with the TCAR Airworthiness; and

(3) its organisation and management are suitable and properly matched to the scale and scope of the operation.

SEA.AOS.135 Personnel requirements

(a) In conjunction with SEA.AOS.100 (b)(4), the operator shall also nominate persons responsible for the management and supervision of the following areas:

(1) flight operations;

(2) crew training;

(3) ground operations;

(4) continuing airworthiness or for the continuing airworthiness management.

(b) Adequacy and competency of personnel

(1) The operator shall employ sufficient personnel for the planned ground and flight operations.

(2) All personnel assigned to, or directly involved in, ground and flight operations shall:

(i) be properly trained;

(ii) demonstrate their capabilities in the performance of their assigned duties; and

(iii) be aware of their responsibilities and the relationship of their duties to the operation as a whole.

(c) Supervision of personnel

(1) The operator shall appoint a sufficient number of personnel supervisors, taking into account the structure of the operator's organisation and the number of personnel employed.

(2) The duties and responsibilities of these supervisors shall be defined, and any other necessary arrangements shall be made to ensure that they can discharge their supervisory responsibilities.

(3) The supervision of crew members and personnel involved in the operation shall be exercised by individuals with adequate experience and the skills to ensure the attainment of the standards specified in the operations manual.

(d) in conjunction with paragraph (a)(3), the assessment of the adequacy and competency of ground operations personnel shall include the competency and capabilities of understanding of the distinctions between seaplane operations and wheel-based aircraft operations, handling seaplane operations for floating platform/fixed platform, related Marine Department regulations and Rules of the Sea and Collision Avoidance on Seas.

(e) in conjunction with paragraph (a)(3), the person who has been nominated as the head of ground operations shall have the adequacy and competency comprehensive as follows:

(1) an understanding of the distinctions between seaplane operations and wheel-based aircraft operations;

(2) accountable for the oversight and management of the seaplane handling agent, the passenger transfer boat, and the driver of the passenger transfer vessel; and

(3) ensureing the proper maintenance of the floating platforms and ensure compliance with all operational requirements pertaining to standard wheel-based aircraft operations as outlined in the Ground Operations Manual.

SEA.AOS.140 Facility requirements

In accordance with SEA.ORS.215, the operator shall:

(a) make use of appropriate ground handling facilities to ensure the safe handling of its flights;

(b) arrange operational support facilities at the main operating base, appropriate for the area and type of operation; and

(c) ensure that each operating base provides sufficient working space for all personnel whose responsibilities may impact the safety of flight operations. This includes ground crew and personnel involved in operational control. The working space shall also accommodate the secure storage and clear display of essential operational records, and provide appropriate facilities for flight crew to conduct flight planning.

SEA.AOS.150 Documentation requirements

(a) The operator shall make arrangements for the production of manuals and any other documentation required and associated amendments.

(b) The operator shall be capable of distributing operational instructions and other information without delay.

SEA.AOS.160 Approvals to provide seaplane cabin coordinator training

(a) When intending to provide the training course required in these Regulation, subpart SCC – seaplane cabin coordinator, the operator shall apply for and obtain an approval issued by CAAT. For this purpose, the applicant shall demonstrate compliance with the requirements for the conduct and content of the training course, the operator shall provide CAAT with:

(1) the date of intended commencement of activity;

(2) the personal details and qualifications of the instructors as relevant to the training

elements to be covered;

(3) the name(s) and address(es) of the training site(s) at which the training is to be conducted;

(4) a description of the facilities, training methods, manuals and representative devices to be used; and

(5) the syllabi and associated programmes for the training course.

Upon successful completion of the classroom training, the operator shall be authorized to issue the seaplane cabin coordinator certification to participants in accordance with the approved training programme.

SUBPART MLR — MANUALS, LOGS AND RECORDS

SEA.MLR.100 Operations manual — general

(a) The operator shall establish an operation manual (OM) in accordance with these Regulations.

(b) The content of the OM for seaplane operations shall align with the requirements set out in SEA.MLR.101. and may be issued in separate parts.

(c) All operations personnel shall have easy access to the portions of the OM that are relevant to their duties.

(d) The OM shall be kept up to date. All personnel shall be made aware of the changes that are relevant to their duties.

(e) Each crew member shall be provided with a personal copy of the relevant sections of the OM pertaining to their duties. Each holder of an OM, or appropriate parts of it, shall be responsible for keeping their copy up to date with the amendments or revisions supplied by the operator.

(f) The operator shall incorporate all amendments and revisions required by CAAT.

(g) The operator shall ensure that information taken from approved documents, and any amendment thereof, is correctly reflected in the Operations Manual. This does not prevent the operator from publishing more conservative data and procedures in the Operations Manual.

(h) The operator shall ensure that all personnel are able to understand the language in which those parts of the Operations Manual which pertain to their duties and responsibilities are written. The content of the Operations Manual shall be presented in a form that can be used without difficulty and observes human factors principles.

SEA.MLR.101 Operations manual — structure for commercial seaplane operations

The main structure of the Operations Manual shall be as follows:

(a) Part A: General/Basic, comprising all non-type-related operational policies, instructions and procedures;

(b) Part B: Aircraft operating matters, comprising all type-related instructions and procedures, taking

into account differences between types/classes, variants or individual aircraft used by the operator;

(c) Part C: Commercial seaplane operations, comprising route, role, and area specifications, the instruction and information about aerodrome and operating site instructions and information, aerial chart information for temporary take-off and landing areas on water, take-off climb/approach surface charts, seaplane floating platforms, and seaplane emergency response planning.

(d) Part D: Training required for all personnel involved in seaplane operations, comprising all necessary training instructions to ensure seaplane safe operation.

SEA.MLR.105 Minimum equipment list

(a) A minimum equipment list (MEL) shall be established as specified under the Air Navigation Act B.E. 2497 and the Civil Aviation Regulations of The Kingdom of Thailand. Essential Requirements, based on the relevant master minimum equipment list (MMEL).

(b) The MEL and any amendment thereto shall be approved by CAAT.

(c) The operator shall amend the MEL after any applicable change to the MMEL within the acceptable timescales.

(d) In addition to the list of items, the MEL shall contain:

(1) a preamble, including guidance and definitions for flight crews and maintenance personnel using the MEL;

(2) the revision status of the MMEL upon which the MEL is based and the revision status of the MEL;

(3) the scope, extent and purpose of the MEL.

(e) The operator shall:

(1) establish rectification intervals for each inoperative instrument, item of equipment or function listed in the MEL. The rectification interval in the MEL shall not be less restrictive than the corresponding rectification interval in the MMEL;

(2) establish an effective rectification programme;

(3) only operate the aircraft after expiry of the rectification interval specified in the MEL when:

(i) the defect has been rectified; or

(ii) the rectification interval has been extended in accordance with (f).

(f) Subject to approval of CAAT, the operator may use a procedure for the one-time extension of category B, C and D rectification intervals, provided that:

(1) the extension of the rectification interval is within the scope of the MMEL for the aircraft type;

(2) the extension of the rectification interval is, as a maximum, of the same duration as the rectification interval specified in the MEL;

(3) the rectification interval extension is not used as a normal means of conducting MEL item rectification and is used only when events beyond the control of the operator have precluded rectification;

(4) a description of specific duties and responsibilities for controlling extensions is established by the operator;

(5) CAAT is notified of any extension of the applicable rectification interval; and

(6) a plan to accomplish the rectification at the earliest opportunity is established.

(g) The operator shall establish the operational and maintenance procedures referenced in the MEL taking into account the operational and maintenance procedures referenced in the MMEL. These procedures shall be part of the operator's manuals or the MEL.

(h) The operator shall amend the operational and maintenance procedures referenced in the MEL after any applicable change to the operational and maintenance procedures referenced in the MMEL.

(i) Unless otherwise specified in the MEL, the operator shall complete:

(1) the operational procedures referenced in the MEL when planning for and/or operating with the listed item inoperative; and

(2) the maintenance procedures referenced in the MEL prior to operating with the listed item inoperative.

(j) Subject to a specific case-by-case approval by CAAT, the operator may operate an aircraft with inoperative instruments, items of equipment or functions outside the constraints of the MEL but within the constraints provided that;

(1) the concerned instruments, items of equipment or functions are within the scope of

the MMEL as defined in the data established in accordance with TCARs;

(2) the approval is not used as a normal means of conducting operations outside the constraints of the approved MEL and is used only when events beyond the control of the operator have precluded the MEL compliance;

(3) a description of specific duties and responsibilities for controlling the operation of the aircraft under such approval is established by the operator; and

(4) a plan to rectify the inoperative instruments, items of equipment or functions or to return operating the aircraft under the MEL constraints at the earliest opportunity is established.

SEA.MLR.110 Journey log

Particulars of the aircraft, its flight crew and each journey shall be retained for each flight, or series of flights, in the form of a journey log, or equivalent.

SEA.MLR.115 Record-keeping

(a) The operator shall maintain records of the activities referred to in SEA.ORS.220. The records shall be stored for at least five (5) years.

(b) The following information used for the preparation and execution of a flight, and associated reports, shall be stored for three (3) months:

(1) The operational flight plan;

(2) Route-specific notice(s) to airmen (NOTAM) and aeronautical information services (AIS) briefing documentation, if edited by the operator;

(3) Mass and balance documentation;

(4) Notification of special loads, including written information to the commander/pilot-in-command about dangerous goods, if applicable;

(5) The journey log, or equivalent; and

(6) Flight report(s) for recording details of any occurrence, or any event that the commander/pilot-in-command deems necessary to report or record;

(c) Personnel records shall be stored for the periods indicated below:

Flight crew license and other crew license	As long as the crew member is exercising the privileges of the license for the aircraft operator.
Crew member training checking and qualifications.	3 years
Records on crew member recent experience.	15 months
Crew member route and aerodrome/task and area competence, as appropriate.	3 years
Dangerous goods training, as appropriate.	3 years
Training/qualification records of other personnel for whom a training programme is required.	Last 2 training records

(d) The operator shall:

(1) maintain records of all training, checking and qualifications of each crew member, as prescribed in these regulations; and

(2) make such records available, on request, to the crew member concerned.

(e) The operator shall preserve the information used for the preparation and execution of a flight and personnel training records, even if the operator ceases to be the operator of that aircraft or the employer of that crew member, provided this is within the timescales prescribed in (c).

(f) If a crew member becomes a crew member for another operator, the operator shall make the crew member's records available to the new operator, provided this is within the timescales prescribed in (c).

SUBPART FC - FLIGHT CREW

SEA.FC.010 Minimum Experience requirement and prerequisites for seaplane pilot

(a) The operator shall designate a pilot-in-command (PIC) or commander to conduct seaplane operations in accordance with this Subpart.

(b) A pilot assigned as a pilot-in-command (PIC) or commander for seaplane operations shall meet the following minimum requirements:

(1) Hold a valid commercial pilot license (CPL) or higher and hold a valid sea class rating in accordance with TCAR PEL, Part FCL.

(2) Have a minimum flight hour as follows:

Table A : First Officer to Pilot in command

Total Flight (hrs.)	Pilot in Command (hrs.)	Class rating (hrs.) ex. C208B (hrs.)	Seaplane course	Float (hrs.) Same on type or class rating	PIC course
≥250	≥100	-		1,250	
≥500	≥100	-		1,000	
		≥200		900	
≥1,000	≥100	-		1,000	
		≥200		800	

Table B: Pilot in Command

Total Flight (hrs.)	Pilot in Command (hrs.)	Class rating (hrs.) *ex. C208B (hrs.)*	Seaplane course	Float (hrs.) On Type or class rating and/or Minimum Sector (hrs. or sectors)
>4,000	≥2,000	≥200		500 hrs. or 150 sectors
>3,000 ≤ 4,000	≥1,500	≥200		500 hrs. or 200 sectors
>2,000 ≤ 3,000	≥1,000	≥200		500 hrs. or 250 sectors
>1,500 ≤ 2,000	≥500	≥200		500 hrs. or 300 sectors
≤1,500	≥ 500	-		500 hrs. or 350 sectors

SEA.FC.100 Composition of flight crew

(a) The composition of the flight crew and the number of flight crew members at designated crew stations shall be not less than the minimum specified in the aircraft flight manual or operating limitations prescribed for the aircraft.

The minimum flight crew for commercial seaplane operations is required for two pilot.

(b) All flight crew members shall hold a licence and ratings issued or accepted in accordance with TCAR PEL Part FCL and appropriate to the duties assigned to them.

SEA.FC.105 Designation as pilot-in-command/commander

(a) In accordance with these Regulations, one pilot amongst the flight crew, qualified as pilot-in-command in accordance with this subpart shall be designated by the operator as pilot-in-command or, for commercial air transport operations, as commander.

(b) The operator shall only designate a flight crew member to act as pilot-in-command/commander if he/she has:

(1) the minimum level of experience specified in the operations manual;

(2) Comprehensive knowledge of the route or area to be flown, including water aerodromes, temporary take-off and landing areas on water, water runways, waterways, floating platforms, facilities, and procedures to be followed. This includes understanding of obstacles, preferred take-off and landing areas, protected zones, docks, moorings, water hazards, depths, reefs, taxiing procedures, and arrival and departure protocols.

(3) Search and rescue services for the areas over which the aircraft will be flown;

(4) Navigational facilities and procedures associated with the route along which the flight is to take place; VFR navigation procedures; GPS navigation and programming procedures; Flight planning, including fuel requirements, W&B calculations, weather minimums, daylight and grounding times, and tide considerations (if applicable); Procedures applicable to flight paths over heavily populated areas and areas of high air traffic density; Water aerodrome familiarity, including obstacles, preferred take-off and landing areas, protected areas, docks, moorings, water hazards, depths, reefs, taxiing, and arrival and departure procedures;

(C) has completed an operator's command course if upgrading from co-pilot to pilot-in-

command/commander.

SEA.FC.115 Crew resource management (CRM) training

(a) Before operating, the flight crew member shall have received CRM training, appropriate to his/her role, as specified in the operations manual.

(b) Elements of CRM training shall be included in the aircraft type or class training and recurrent training as well as in the command course.

SEA.FC.120 Operator conversion training

(a) The flight crew member shall complete the operator conversion training course before commencing unsupervised line flying:

(1) when changing to an aircraft for which a new type or class rating is required;

(2) when joining an operator.

(b) The operator conversion training course shall include training on the equipment installed on the aircraft as relevant to flight crew members 'roles.

SEA.FC.125 Differences training and familiarisation training

(a) Flight crew members shall complete differences or familiarization training when required by TCAR PEL Part FCL and when changing equipment or procedures requiring additional knowledge on types or variants currently operated.

(b) The operations manual shall specify when such differences or familiarisation training is required.

(c) This training shall be done even if the pilots already have a sea class rating but have not flown sea class for 90 days and if they have been flying only wheel-based aircraft in the last 90 days. The familiarisation training to maintain competency for the seaplane rating shall be completed by performing three take-offs and three landings under the supervision of a suitably qualified sea class commander.

SEA.FC.130 Recurrent training and checking

(a) Each flight crew member shall complete annual recurrent flight and ground training relevant to the type or variant of aircraft on which he/she operates, including training on the location and use of all emergency and safety equipment carried.

(b) Each flight crew member shall be periodically checked to demonstrate competence in carrying out normal, abnormal and emergency procedures.

SEA.FC.135 Pilot qualification to operate in either pilot's seat

Flight crew members who may be assigned to operate in either pilot's seat shall complete appropriate training and checking as specified in the operations manual.

SEA.FC.140 Operation on more than one type or variant

(a) Flight crew members operating more than one type or variant of aircraft shall comply with the requirements prescribed in this Subpart for each type or variant, unless credits related to the training, checking, and recent experience requirements are defined in the data established in accordance with TCAR Airworthiness Part 21 for the relevant types or variants.

(b) Appropriate procedures and/or operational restrictions shall be specified in the operations manual for any operation on more than one type or variant.

SEA.FC.145 Provision of training

(a) All the training required in this Subpart shall be conducted:

(1) in accordance with the training programmes and syllabi established by the operator in the operations manual;

(2) by appropriately qualified personnel. In the case of flight and flight simulation training and checking, the personnel providing the training and conducting the checks shall be qualified in accordance with TCAR PEL Part FCL.

(b) When establishing the training programmes and syllabi, the operator shall include the mandatory elements for the relevant type as defined in the data established in accordance TCAR Airworthiness Part 21.

(c) For commercial seaplane operations, training and checking programmes, including details syllabi for the use of individual flight simulation training devices (FSTDs) or in-aircraft training, shall be approved by CAAT.

(d) The FSTD shall replicate the aircraft used by the operator, as far as practicable. Differences between the FSTD and the aircraft shall be described and addressed through a briefing or training, as appropriate.

(e) The operator shall establish a system to adequately monitor changes to the FSTD or in-aircraft training and to ensure that those changes do not affect the adequacy of the training programmes.

SEA.FC.200 Composition of flight crew

(a) There shall not be more than one inexperienced flight crew member in any flight crew.

(b) The commander may delegate the conduct of the flight to another pilot suitably qualified in accordance with SEA.FC.105(b)(1), (b)(2) and (c) are complied with.

SEA.FC.205 Command course

(a) The command course shall include at least the following elements:

(1) training in an aircraft or FSTD, which includes line-oriented flight training (LOFT) and/or flight training;

(2) the operator proficiency check, operating as commander;

(3) command responsibilities training;

(4) line training as commander under supervision, for a minimum of 10 take-off and landing on water; and

(5) completion of a line check as commander and demonstration of adequate knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes, water aerodrome, temporary take-off and landing area on water, facilities and procedures to be used; and

(6) crew resource management training.

SEA.FC.215 Initial operator's crew resource management (CRM) training

(a) The flight crew member shall have completed an initial CRM training course before commencing unsupervised line flying.

(b) Initial CRM training shall be conducted by at least one suitably qualified CRM trainer.

SEA.FC.220 Operator conversion training and checking

(a) CRM training shall be integrated into the operator conversion training course.

(b) Once an operator conversion course has been commenced, the flight crew member shall

not be assigned to flying duties on another type or class of aircraft until the course is completed or terminated.

(c) The amount of training required by the flight crew member for the operator's conversion course shall be determined in accordance with the standards of qualification and experience specified in the operations manual, taking into account his/her previous training and experience.

(d) The flight crew member shall complete:

(1) the operator proficiency check and the emergency and safety equipment training and checking before commencing line flying under supervision (LIFUS); and

(2) the line check upon completion of line flying under supervision.

SEA.FC.230 Recurrent training and checking

(a) Each flight crew member shall complete recurrent training and checking relevant to the type or variant of aircraft on which they operate.

(b) Operator proficiency check

(1) Each flight crew member shall complete operator proficiency checks as part of the normal crew complement to demonstrate competence in carrying out normal, abnormal and emergency procedures.

(2) The validity period of the operator proficiency check shall be six (6) calendar months.

(3) The check may be conducted by a suitably qualified commander nominated by the operator, trained in CRM concepts and the assessment of CRM skills. The operator shall inform CAAT about the persons nominated.

(c) Line check

(1) Each flight crew member shall complete a line check on the aircraft to demonstrate competence in carrying out normal line operations described in the operations manual. The validity period of the line check shall be 12 calendar months.

(2) Line checks may be conducted by a suitably qualified commander nominated by the operator, trained in CRM concepts and the assessment of CRM skills.

(d) Emergency and safety equipment training and checking

Each flight crew member shall complete training and checking on the location and use of all

emergency and safety equipment carried. The validity period of an emergency and safety equipment training and checking shall be 12 calendar months.

(e) CRM training

(1) Elements of CRM shall be integrated into all appropriate phases of the recurrent training.

(2) Each flight crew member shall undergo specific modular CRM training. All major topics of CRM training shall be covered by distributing modular training sessions as evenly as possible over each three-year period.

(f) Each flight crew member shall undergo ground training and flight training in an FSTD or an aircraft, or a combination of FSTD and aircraft training, at least every 12 calendar months.

(g) The validity periods mentioned in (b) (3), (c) and (d) shall be counted from the end of the month when the check was taken.

(h) When the training or checks required above are undertaken within the last three months of the validity period, the new validity period shall be counted from the original expiry date.

SEA.FC.235 Pilot qualification to operate in either pilot's seat

(a) Commanders whose duties require them to operate in either pilot seat and carry out the duties of a co-pilot, or commanders required to conduct training or checking duties, shall complete additional training and checking as specified in the operations manual. The check may be conducted together with the operator proficiency check.

(b) The additional training and checking shall include at least the following:

(1) engine failure during take-off;

(2) a one-engine-inoperative approach and go-around; and

(3) a one-engine-inoperative landing.

SEA.FC.240 Operation on more than one type or variant

(a) The procedures or operational restrictions for operation on more than one type or variant established in the operations manual and approved by CAAT shall cover:

(1) the flight crew members' minimum experience level;

(2) the minimum experience level on one type or variant before beginning training for

and operation of another type or variant;

(3) the process whereby flight crew qualified on one type or variant will be trained and qualified on another type or variant; and

(4) all applicable recent experience requirements for each type or variant.

SUBPART SCC - SEAPLANE CABIN COORDINATOR

SEA.SCC.005 Scope

(a) This Subpart set forth the requirements that operator shall fulfill when conducting seaplane operations with a seaplane cabin coordinator.

(b) This subpart shall comply to the operations of seaplane with a MOPSC of more than 11, at least one seaplane cabin coordinator shall be assigned when carrying one or more passenger(s).

SEA.SCC.110 Conditions for assignment to duties

(a) Seaplane cabin coordinators shall only be assigned to duties on an aircraft if they:

(1) are at least 18 years of age;

(2) have been assessed as physically and mentally fit to perform their duties and discharge their responsibilities safely; and

(3) have successfully completed all applicable training and checking required by this Subpart and are competent to perform the assigned duties in accordance with the procedures specified in the operations manual.

SEA.SCC.115 Conduct of training courses and associated checking

(a) A detailed programme and syllabus shall be established by the operator for each training course in accordance with the applicable requirements of this Subpart, to cover the duties and responsibilities to be discharged by the seaplane cabin coordinators.

(b) Each training course shall include theoretical and practical instruction together with individual or collective practice, as relevant to each training subject, in order that the seaplane cabin coordinator achieves and maintains the adequate level of proficiency in accordance with this Subpart.

(c) Each training course shall be:

(1) conducted in a structured and realistic manner; and

(2) performed by personnel appropriately qualified for the subject to be covered.

(d) During or following completion of all required training, each seaplane cabin coordinator shall undergo a check covering all training elements of the relevant training programme,

except for crew resource management (CRM) training. Checks shall be performed by personnel appropriately qualified to verify that the seaplane cabin coordinator has achieved and/or maintains the required level of proficiency.

(e) CRM training courses and CRM modules where applicable shall be conducted by a appropriately qualified CRM instructor. When CRM elements are integrated in other training, CRM instructor shall manage the definition and implementation of the syllabus.

SEA.SCC.120 Initial training course

(a) The operator shall be providing an initial training course for each new entrance of seaplane cabin coordinator as specified in these Regulation. The trainee shall be successfully completed the associated examination before proceeding with other required trainings.

(b) Elements of the initial training programme may be combined with the first aircraft type specific training and operator conversion training, provided that the requirements of Appendix A – Seaplane cabin coordinator training syllabus & Checking programme are met and any such element(s) are recorded as elements of the initial training course in the training records of the seaplane cabin coordinator concerned.

SEA.SCC.125 Aircraft type specific training and operator conversion training

(a) Seaplane cabin coordinators shall complete the required aircraft type-specific training, operator conversion training, and all the associated checks before being first assigned by the operator to perform duties as a seaplane cabin coordinator.

(b) When establishing the aircraft type specific and the operator conversion training programmes and syllabi, the operator shall include, where available, the mandatory elements for the relevant type as defined in the data established in operations manual Part D.

(c) The aircraft type specific training programme shall:

(1) involve training and practice on a representative training device or on the actual aircraft; and

(2) cover at least the following aircraft type specific training elements:

(i) aircraft description as relevant to seaplane cabin coordinator duties;

(ii) all safety equipment and systems installed relevant to seaplane cabin coordinator duties;

(iii) operation and actual opening, by each seaplane cabin coordinator, of each type or variant of normal and emergency doors and exits in the normal and emergency modes;

(iv) demonstration of the operation of the other exits including flight crew compartment windows;

(v) fire and smoke protection equipment where installed;

(vi) evacuation slide training, where fitted;

(vii) operation of the seat, restraint system.

(viii) Tying and untying of ropes during docking and mooring

(ix) movements on the float when taxing on water

(x) Hand signals with pilots during docking, mooring and taxing.

SEA.SCC.130 Differences training

(a) In addition to the training required in SEA.SCC.125 the seaplane cabin coordinator shall complete appropriate training and checking covering any differences before being assigned on:

(1) a variant of an aircraft type currently operated; or

(2) a currently operated aircraft type or variant with different:

(i) safety equipment;

(ii) safety and emergency equipment location; or

(iii) normal and emergency procedures.

(b) The differences training programme shall:

(1) be determined as necessary on the basis of a comparison with the training programme completed by the crew member, in accordance with SEA.SCC.125(c) and (d), for the relevant aircraft type; and

(2) involve training and practice in a representative training device or the actual aircraft as relevant to the difference training element to be covered.

(c) When establishing a differences training programme and syllabus for a variant of an aircraft type currently operated, the operator shall include, where available, the mandatory elements for the relevant aircraft type and its variants as defined in the data established in

operations manual part D.

SEA.SCC.135 Familiarisation

After completion of aircraft type specific training and operator conversion training on an aircraft type, each seaplane cabin coordinator shall complete appropriate supervised familiarisation on the type before being assigned to operate as a member of the minimum number of seaplane cabin coordinator required in accordance with SEA.SCC.115.

SUBPART FTLS - FLIGHT AND DUTY TIME LIMITATIONS AND REST REQUIEMENTS

SEA.FTLS.100 Scope

This Subpart establishes the requirements for commercial seaplane operators and their flight crew members regarding flight and duty time limitations and rest requirements.

SEA.FTLS.105 Definitions

For the purpose of this Subpart, the following definitions shall be applied:

Accommodation means for the purpose of standby and split duty, a quiet and comfortable place not open to the public with the ability to control light and temperature, equipped with adequate furniture that provides a crew member with the possibility to sleep, with enough capacity to accommodate all crew members present at the same time and with access to food and drink.

Suitable accommodation means, for the purpose of standby, split duty and rest, a room located in a quiet environment and equipped with a bed, which is sufficiently ventilated, has a device for regulating temperature and light intensity, and access to food and drink.

Augmented flight crew means a flight crew which comprises more than the minimum number required to operate the aircraft, allowing each flight crew member to leave the assigned post, for the purpose of in-flight rest, and to be replaced by another appropriately qualified flight crew member;

Break means a period of time within a flight duty period, shorter than a rest period, counting as duty and during which a crew member is free of all tasks;

Crew member means a person assigned by an operator to perform duties on board an aircraft, including, Flight crew member and cabin crew member.

Duty means any task that a crew member performs for the operator, including flight duty, administrative work, giving or receiving training and checking, positioning, and some elements of standby.

Duty period means a period which starts when a crew member is required by an operator to report for or to commence a duty and ends when that person is free of all duties, including postflight duty;

Fatigue means a physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/ or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety related operational duties.

Flight duty period means a period that commences when a crew member is required to report for duty that includes a flight or a series of flights, start counting at reporting time and stop when the aircraft finally comes to rest at the end of the last flight on which he/she is a crewmember and all engines or propellers are shut down or rotor blades are stopped.

Flight time/ Block Time means the total time between an aeroplane first moving from its parking place for the purpose of taking off until it finally comes to rest at the end of the flight and all engines or propellers are shut down.

Home base means the location, assigned by the operator to the crew member, from where the crew member normally starts and ends a duty period or a series of duty periods and where, under normal circumstances, the operator is not responsible for the accommodation of the crew member concerned.

Local day means a 24-hour period commencing at 00:00 local time.

Local night means a period of 8 hours falling between 22:00 and 08:00 local time.

Night means a period between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise as may be prescribed by the appropriate authority.

Positioning means the transferring of a non-operating crew member from one place to another, at the behest of the operator, excluding the time of travel from a private place of rest to the designated reporting place at home base and vice versa, and the time for local transfer from a place of rest to the commencement of duty and vice versa.

Reporting time means the local time where crew member is required by the operator to report for duty.

Reserve means a period of time during which a crew member is required by the operator to be available to receive an assignment for an FDP, positioning or other duty notified at least 10 hours in advance.

Rest period means a continuous, uninterrupted and defined period of time, following duty or prior to duty, during which a crew member is free of all duties, standby and reserve.

Roster means a list provided by the operator of the times when a crew member is required to undertake duties. The roster shall include, but not limited to the elements of Duty Period and Day Off.

Rotation is a duty or a series of duties, including at least one flight duty, and rest periods out of home base, starting at home base and ending when returning to home base for a rest period where the operator is no longer responsible for the accommodation of the crew member.

Single day free of duty means a time free of all duties and standby consisting of one day and two local nights, which is notified in advance. A rest period may be included as part of the single day free of duty.

Sectors means the segment of an FDP between an aircraft first moving for the purpose of taking off until it comes to rest after landing on the designated parking position.

Standby duty means a defined period of time during which a crew member is required by the operator to be available to receive an assignment for a specific duty without an intervening rest period.

Airport standby means a standby performed at the airport.

Other standby means a standby either at home or in a suitable accommodation.

Window of circadian low ('WOCL') means the period between 02:00 and 05:59 local time where crew member is required by the operator to report for duty.

Unforeseen operational circumstance an unexpected condition that could not reasonably have been predicted and accommodated, such as bad weather or equipment malfunction, which may result in necessary on-the-day operational adjustments.

SEA.FTLS.110 Operator responsibilities

An operator shall:

(a) Prepare and publishes duty roster sufficiently in advance to provide crew members the opportunity to plan adequate rest. Consideration shall be given to the cumulative effects of undertaking long duty hours interspersed with minimum rest, and of avoiding rosters that

result in the serious disruption of an established pattern of working and sleeping.

(b) Establish the roster which includes, but not limited to the elements of Duty period and Day free of duty.

(c) Ensure that flight duty periods are planned in a way that enables crew members to remain sufficiently free from fatigue so that they can operate to a satisfactory level of safety and manage their workload under all circumstances.

(d) Plan the flight within the allowable flight duty period taking into account the time necessary for the pre-flight duties, the flight and turnaround times, and the nature of the operation.

(e) Define the duration necessary for the post-flight duty considering the time required for aircraft-related tasks, completion of post-flight documentation, and administrative responsibilities, tailored to the specific nature of the operation.

(f) Provide rest periods of sufficient time to enable crew members to overcome the effects of previous duties and to be rested by the start of the following flight duty period and provide accommodation or suitable accommodation as appropriate to the operations.

(g) Establish a fatigue reporting process that complies with applicable regulatory requirements.

This reporting process shall enable the operational personnel to raise legitimate concerns regarding fatigue without fear of retribution or punishment from both within and outside the organization.

(h) Establish the procedures that ensure crew arrangements and day-to-day operational practices are compliant with Individual Flight Time Specification Schemes (IFTSS).

SEA.FTLS.115 Crew member responsibilities

Crew members shall:

(a) Not operate the flight when he or she knows that he or she is fatigued or feels unfit to the extent that the safety of the flight may be adversely affected, or in a state which is not ready to make a flight for reasons of health, body and mind.

(b) Make optimum use of the facilities and opportunities that are provided for rest and for the consumption of meals, and they should plan and use their rest periods properly to ensure that they are fully rested.

(c) Check their records under SEA.FTLS.245(a)(1) before performing the duty, and inform the operator if the information does not meet the requirements.

(d) Comply with all flight and duty time limitations and rest requirements applicable to their activities.

SEA.FTLS.120 Fatigue risk management (FRM)

(a) The operator shall establish, implement and maintain an FRM as an integral part of its management system.

The FRM shall ensure compliance with the Air Navigation Act B.E.2497, Kingdom of Thailand Civil Aviation Regulations and other relevant national provision. The FRM shall be described in the operations manual.

(b) The FRM established, implemented and maintained shall provide for continuous improvement to the overall performance of the FRM and shall include:

(1) a description of the philosophy and principles of the operator with regard to FRM, referred to as the FRM policy;

(2) documentation of the FRM processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;

(3) scientific principles and knowledge;

(4) a hazard identification and risk assessment process that allows managing the operational risk(s) of the operator arising from crew member fatigue on a continuous basis;

(5) a risk mitigation process that provides for remedial actions to be implemented promptly, which are necessary to effectively mitigate the operator's risk(s) arising from crew member fatigue and for continuous monitoring and regular assessment of the mitigation of fatigue risks achieved by such actions;

(6) FRM safety assurance processes;

(7) FRM promotion processes.

(c) The FRM shall correspond to the flight time specification scheme, the size of the operator and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in those activities and the applicable flight time specification scheme.

(d) The operator shall take mitigating actions when the FRM safety assurance process shows that the required safety performance is not maintained. Further guidance on FRM processes, appropriate fatigue management, the underlying scientific principles and operational knowledge may be found in ICAO Doc 9966 (Manual for the Oversight of Fatigue Management Approaches).

SEA.FTLS.125 Flight time specification schemes

(a) Operators shall establish, implement and maintain flight time specification schemes that are appropriate for the type(s) of operation performed and that comply with the air operations requirements of the Air Navigation Act B.E 2497, this Subpart and Kingdom of Thailand Civil Aviation Regulations and other applicable legislation.

(b) Before being implemented, flight time specification schemes, including any related FRM where required, shall be approved by the CAAT.

(c) To demonstrate compliance with the Air Navigation Act B.E 2497, and this Subpart, the operator shall apply the applicable certification specifications requirements.

Alternatively, if the operator wants to deviate from these requirements, the operator shall provide the CAAT with a full description of the intended deviation prior to implementing it. The description shall include any revisions to manuals or procedures that may be relevant, as well as an assessment demonstrating that the requirements are met and proving that the level of safety equivalent to, or better than, the prescriptive fatigue management requirements.

(d) In accordance with the CAAT internal oversight, certification and enforcement procedures, within 2 years of the implementation of a deviation, the operator shall collect data concerning the granted deviation or derogation and analyst that data using scientific principles with a view to assessing the effects of the deviation or derogation on aircrew fatigue. Such analysis shall be provided in the form of a report to the CAAT.

SEA.FTLS.200 Home base

An operator shall assign a home base to each crew member, from where the crew member will normally start and end a duty period or a series of duty periods. The home base shall be assigned with a degree of permanence.

SEA.FTLS.205 Flight duty period (FDP)

(a) The operator shall define reporting time appropriate to each individual operation, take into account the time required to complete safety-related ground duties.

(b) The basic maximum daily FDP

(1) The maximum daily FDP for SEA.FTLS.100 without the use of extensions for crew members shall be in accordance with the following table:

Table B

Number of Sector	1	2	3	4	5	6	7 or more
Maximum Flight Duty Period (hours)	13	13	12.30	12	11.30	11	11

(i) When the FDP starts in the WOCL, the maximum FDP stated in Table B shall be reduced by 100% of its encroachment up to a maximum of 2 hours.

(ii) When the FDP ends in or entirely in the WOCL, the maximum FDP stated in Table B shall be reduced by 50% of its encroachment.

(c) ***Reserved***

(d) ***Reserved***

(e) FDP extension without in-flight rest

The maximum daily flight duty period may be extended up to 1 hour under the following conditions;

(1) The use of the extension shall be planned in advance, and shall be limited to a maximum of:

(i) 5 sectors when the WOCL is not encroached; or

(ii) 4 sectors, when the WOCL is encroached by 2 hours or less; or

(iii) 2 sectors, when the WOCL is encroached by more than 2 hours.

(2) The minimum pre-flight and post-flight rest periods shall be increased by 2 hours, or the post-flight rest period shall be increased by 4 hours.

(3) When extensions are used for consecutive FDPs, the additional pre- and post-flight rest between the two extended FDPs required under SEA.FTLS.205(e)(2) shall be provided consecutively.

(4) The maximum number of extensions is 2 in any 7 consecutive days.

(5) When the extended FDP starts during the period of 22:00 - 04:59, the total FDP is limited to 11:45 hours.

(6) The extension of the maximum basic daily FDP without in-flight rest shall not be combined with the FDP extensions due to in-flight rest or the split duty in the same duty period.

(f) FDP extension due to in-flight rest

The operator shall provide the crew members with rest facilities that away from cockpit and passengers, to enable each flight crew member to leave the assigned post for the purpose of inflight rest. He or she shall be replaced by another appropriately qualified crew member. The maximum FDP is increased to:

Table D

Rest facility	Maximum flight duty period (hours)				
	Sectors				
	1	2	3	4	5
Reclinable seat	16	16	15:30	15	Not allowed
Bunk	18	18	Not allowed	Not allowed	Not allowed

(1) For the flight duty period of more than 18 hours, FRM shall be applied.

(2) The minimum in-flight rest period is a consecutive 90 minutes period for each crew member.

(g) FDP extension by PIC discretion due to unforeseen operational circumstance

(1) The conditions to modify the limits on flight duty, duty and rest periods only at the

discretion of the Pilot in Command (PIC) in the case of Unforeseen operational circumstances, which start at or after the reporting time, shall comply with the following:

(i) The maximum daily FDP may not be increased by more than 2 hours unless the flight crew has been augmented, in which case the maximum FDP may be increased by not more than 3 hours.

(ii) If on the final sector within an FDP the allowed increase in SEA.FTLS.205(g)(1)(i) is exceeded because of unforeseen circumstances after take-off, the flight may continue to the planned destination or alternate aerodrome; and

(iii) The rest period following the FDP may be reduced but can never be less than 10 hours.

(2) In case of unforeseen circumstances which could lead to severe fatigue, the PIC shall reduce the actual Flight Duty Period and/or increase the Rest Period to eliminate any detrimental effect on flight safety.

(3) The PIC shall consult all crew members on their alertness levels before deciding the modifications under SEA.FTLS.205(g)(1) and (2).

(4) The PIC shall submit a report to the operator when an FDP is increased or a rest period is reduced at his or her discretion.

(5) The operator shall submit the PIC's discretion report of the Flight Duty Period extension or Rest Period reduction of crew members due to Unforeseen operational circumstances to the CAAT within 28 days after the PIC's discretion.

(6) The operator shall implement a non-punitive process for the use of the discretion described under this provision and shall describe it in the operations manual.

SEA.FTLS.210 Flight times and duty periods

(a) The total flight time to which an individual crew member may be assigned shall not exceed:

(1) 34 hours in any 7 consecutive days,

(2) 110 hours in any 28 consecutive days,

(3) 1000 hours in any 365 consecutive days

(b) The total duty periods to which an individual crew member may be assigned shall not exceed:

(1) 60 hours in any 7 consecutive days,

(2) 110 hours in any 14 consecutive days,

(3) 190 hours in any 28 consecutive days

(c) Post-flight duty shall be counted as duty period. The operator shall specify the minimum time period for post-flight duties in the operations manual.

SEA.FTLS.215 Positioning

If an operator positions a crew member, the following requirements shall be applied:

(a) Positioning after reporting but prior to operating shall be counted as FDP but shall not count as a sector;

(b) All time spent on positioning shall count as duty period.

(c) The rest period under SEA.FTLS.235 start counting after the on-block time and end at the commencement of the next duty.

(d) The positioning after a flight duty period shall not be counted as a rest period.

SEA.FTLS.220 Split duty

Flight duty period including a break may be extended under the following conditions;

(a) Break shall be planned in advance.

(b) The break on the ground shall count in full as FDP;

(c) The break on ground within the FDP shall be a minimum duration of 3 consecutive hours.

(d) The break excludes the time for post-flight duties, pre-flight duties and traveling time which will not less than 30 minutes. The operator shall specify the time applicable to the type of operation in the operations manual

(e) The maximum FDP may be increased by 50% of the break duration.

(f) The split duty shall not follow a reduced rest.

(g) The split duty cannot be combined with in-flight rest.

(h) The suitable accommodation shall be provided either for a break of 6 hours or more or for

a break that encroaches the window of circadian low (WOCL).

(i) In all other cases, accommodation shall be provided.

(j) If the break is taken in the aircraft on ground, the operator shall ensure that

(1) minimum conditions in terms of noise, temperature, light and ventilation are specified in the operations manual,

(2) a crew member has an ability to control conditions specified in SEA.FTLS.220(j)(1) in the aircraft,

(3) the surrounding aircraft operations do not interfere the rest of the crew member during break,

(4) no passenger on board,

(5) an opportunity to consume meal is arranged,

(6) Fatigue Risk Management (FRM) shall be applied.

SEA.FTLS.225 Standby and duties at the airport

(a) Airport standby and duties at the airport

(1) Standby and any duty at the airport shall be in the roster and the start and end time of standby shall be defined and notified in advance to the crew members concerned to provide them with the opportunity to plan adequate rest.

(2) A crew member is considered on airport standby from reporting at the reporting point until the end of the notified airport standby period;

(3) Airport standby shall be counted in full as duty period for the purpose of SEA.FTLS.210(b) and SEA.FTLS.235.

(4) Any duty at the airport shall count in full as duty period and the FDP shall count in full from the airport duty reporting time.

(5) The operator shall provide accommodation to the crew member on airport standby.

(6) The maximum standby at the airport is 12 hours.

(7) If not leading to the assignment of an FDP, airport standby is followed by a rest period as specified in SEA.FTLS.235.

(8) If an assigned FDP starts during airport standby, the following applies:

(i) the FDP counts from the start of the FDP. The maximum FDP is reduced by any

time spent on standby in excess of 4 hours;

(ii) the maximum combined duration of airport standby and assigned FDP is 16 hours.

(b) Standby other than airport standby

(1) The maximum duration of standby other than airport standby is 16 hours;

(2) The operator's standby procedures are designed to ensure that the combination of standby and FDP do not lead to more than 18 hours awake time;

(3) 25 % of time spent on standby other than airport standby counts as duty time for the purpose of SEA.FTLS.210(b);

(4) Standby is followed by a rest period in accordance with SEA.FTLS.235;

(5) Standby ceases when the crew member reports at the designated reporting point;

(6) If standby ceases within the first 6 hours, the maximum FDP counts from reporting;

(7) If standby ceases after the first 6 hours, the maximum FDP is reduced by the amount of standby time exceeding 6 hours;

(8) If the FDP is extended due to in-flight rest or to split duty, the 6 hours of SEA.FTLS.225(b) (6) and (7) are extended to 8 hours;

(9) If standby starts between 23:00 and 07:00, the time between 23:00 and 07:00 does not count towards the reduction of the FDP under SEA.FTLS.225(b) (6), (7) and (8) until the crew member is contacted by the operator; and

(10) The response time between the call and the reporting time established by the operator allows the crew member to arrive from his/her place of rest to the designated reporting point within a reasonable time.

SEA.FTLS.230 Reserve

If an operator assigns crew members to reserve, the following requirements shall be applied:

(a) Reserve shall be in the roster.

(b) The maximum duration of any single reserve period shall be specified.

(c) The maximum number of consecutive reserve days shall be specified within the limits of SEA.FTLS.235(d).

(d) An assigned FDP counts from the reporting time.

(e) Reserve times do not count as duty period for the purpose of SEA.FTLS.210 and SEA.FTLS.235.

(f) Duty shall be notified in advance at least 10 hours between the notification of an assignment for any duty and reporting for duty to protect an 8-hour sleep opportunity, the operator rosters a period of 8 hours, taking into account fatigue management principles, for each reserve day during which a crew member on reserve is not contacted by the operator.

SEA.FTLS.235 Rest periods

(a) Minimum rest at home base

(1) The minimum rest period provided before undertaking an FDP starting at home base shall be at least as long as the preceding duty period, or 12 hours, whichever is greater.

(2) If a rotation involves at least a sector of a 4-hour time difference or more, the minimum rest after rotation shall be at least 36 hours, including two local nights.

(b) Minimum rest away from home base

(1) The minimum rest period provided before undertaking an FDP starting away from home base shall be at least as long as the preceding duty period, or 10 hours, whichever is greater. This period shall include an 8-hour sleep opportunity in addition to the time for travelling and physiological needs.

(2) If an FDP involves a 4-hour time difference or more, the minimum rest following that FDP is at least as long as the preceding duty period, or 14 hours, whichever is greater.

(c) Reduced rest

(1) Reduced rest is used under fatigue risk management.

(2) The minimum reduced rest periods under reduced rest arrangements are 12 hours at home base and 10 hours out of base.

(3) The rest period following the reduced rest is extended by the difference between the minimum rest period specified in SEA.FTLS.235(a)(1) or (b)(1) and the reduced rest.

(4) The FDP following the reduced rest is reduced by the difference between the minimum rest period specified in SEA.FTLS.235(a)(1) or (b)(1) as applicable and the reduced rest.

(5) There is a maximum of 2 reduced rest periods between 2 recurrent extended recovery

rest periods specified in accordance with SEA.FTLS.235(d).

(d) Recovery rest

(1) The recovery rest period shall be planned and notified to crew members sufficiently in advance.

(2) The minimum recovery rest period shall be 36 hours, including 2 local nights, and in any case the time between the end of one recovery rest period and the start of the next extended recovery rest period shall not be more than 168 hours.

SEA.FTLS.240 Nutrition

An operator shall arrange the opportunities to consume a meal for crew member when the flight duty period exceeds 6 hours to avoid any detriment to a crew member's performance.

SEA.FTLS.245 Records of home base, flight times, duty and rest periods

(a) The operator shall maintain records of the following information for a period of 24 months and ensure that this information is accessible by individual crew members;

(1) Individual records for each crew member including:

(i) Flight Time;

(ii) the start, duration and end of each Duty period and Flight Duty Period;

(iii) Rest Periods and Day free of all duties; and

(iv) Assigned home base.

(2) reports on extended flight duty periods and reduced rest periods.

SEA.FTLS.250 Fatigue management training

(a) The operator shall provide initial and recurrent fatigue management training to crew members, personnel responsible for preparation and maintenance of crew rosters and management personnel concerned.

(b) The training syllabus shall cover the following:

(1) applicable regulatory requirements for flight, duty and rest,

(2) the basics of fatigue including sleep fundamentals and the effects of disturbing the circadian rhythms,

(3) the causes of fatigue, including medical conditions that may lead to fatigue,

(4) the effect of fatigue on performance,

(5) fatigue countermeasures,

(6) the influence of lifestyle, including nutrition, exercise, and family life, on fatigue,

(7) familiarity with sleep disorders and their possible treatments,

(8) where applicable, the effects of long-range operations and heavy short-range schedules on individuals,

(9) the effect of operating through and within multiple time zones,

(10) the crew member responsibility for ensuring adequate rest and fitness for flight duty,

(11) the optimum use of sleep opportunities, in particular before an FDP with in-flight rest.

SUBPART CSO - COMMERCIAL SEAPLANE OPERATIONS

SECTION 1 – Motor-powered Aircraft

SEA.CSO.100 Crew responsibilities

(a) The crew member shall be responsible for the proper execution of his/her duties that are:

(1) related to the safety of the aircraft and its occupants; and

(2) specified in the instructions and procedures in the operations manual.

(b) The crew member shall:

(1) report to the commander any fault, failure, malfunction or defect which the crew member believes may affect the airworthiness or safe operation of the aircraft including emergency systems, if not already reported by another crew member;

(2) report to the commander any incident that endangered, or could have endangered, the safety of the operation, if not already reported by another crew member;

(3) comply with the relevant requirements of the operator's occurrence reporting schemes;

(4) comply with all flight and duty time limitations and rest requirements (FTLS) applicable to their activities;

(5) when undertaking duties for more than one operator:

(i) maintain his/her individual records regarding flight and duty times and rest periods as referred to in applicable FTLS requirements; and

(ii) provide each operator with the data needed to schedule activities in accordance with the applicable FTLS requirements.

(c) The crew member shall not perform duties on an aircraft:

(1) when under the influence of psychoactive substances or when unfit due to injury, fatigue, medication, sickness or other similar causes;

(2) until a reasonable time period has elapsed after deep water diving or following blood donation;

(3) if applicable medical requirements are not fulfilled;

(4) if he/she is in any doubt of being able to accomplish his/her assigned duties; or

(5) if he/she knows or suspects that he/she is suffering from fatigue as referred to in paragraph 8 (F) of Essential requirements to this regulation or feels otherwise unfit, to the extent that the flight may be endangered.

SEA.CSO.105 Responsibilities of the commander

(a) The commander, in addition to complying with SEA.CSO.100, shall:

(1) be responsible for the safety of all crew members, passengers and cargo on board, as soon as the commander arrives on board the aircraft, until the commander leaves the aircraft at the end of the flight;

(2) be responsible for the operation and safety of the aircraft, for seaplanes, from the moment the seaplane is first ready to move for the purpose of taxiing on the water runway prior to take-off, until the moment it finally comes to rest at the end of the flight and the engine(s) used as primary propulsion unit(s) is(are) shut down;

(3) have authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons and/or property carried therein in accordance with Air Navigation Act of Thailand B.E. 2497 and the Kingdom of Thailand Civil Aviation Regulations.

(4) have authority to disembark any person, or any part of the cargo that may represent a potential hazard to the safety of the aircraft or its occupants;

(5) not allow a person to be carried in the seaplanes who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered;

(6) have the right to refuse transportation of inadmissible passengers or persons in custody if their carriage increases the risk to the safety of the aircraft or its occupants;

(7) ensure that all passengers are briefed on the location of emergency exits and the location and use of relevant safety and emergency equipment;

(8) ensure that all operational procedures and checklists are complied with in accordance with the operations manual;

(9) not permit any crew member to perform any activity during critical phases of flight, except duties required for the safe operation of the aircraft;

(10) decide on acceptance of the aircraft with unserviceability in accordance with the configuration deviation list (CDL) or the minimum equipment list (MEL);

(11) ensure that the pre-flight inspection has been carried out in accordance with the requirements of continuing airworthiness;

(12) be satisfied that relevant emergency equipment remains easily accessible for immediate use;

(13) record, at the termination of the flight, utilisation data and all known or suspected defects of the aircraft in the aircraft technical log or journey log of the aircraft to ensure continued flight safety.

(b) The commander, or the pilot to whom conduct of the flight has been delegated, shall, in an emergency situation that requires immediate decision and action, take any action he/she considers necessary under the circumstances in accordance with accordance with Air Navigation Act of Thailand B.E. 2497 and the Kingdom of Thailand Civil Aviation Regulations. In such cases he/she may deviate from rules, operational procedures and methods in the interest of safety.

(c) Bird hazards and strikes:

(1) Whenever a potential bird hazard is observed, the commander shall inform the air traffic service (ATS) unit as soon as flight crew workload allows.

(2) Whenever an aircraft for which the commander is responsible suffers a bird strike that results in significant damage to the aircraft or the loss or malfunction of any essential service, the commander shall submit a written bird strike report after landing to CAAT.

(d) The commander shall, as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft**.**

SEA.CSO.110 Authority of the commander

The operator shall take all reasonable measures to ensure that all persons carried in the aircraft obey all lawful commands given by the commander for the purpose of securing the safety of the aircraft and of persons or property carried therein.

SEA.CSO.120 Common language

The operator shall ensure that all crew members can communicate with each other in a common language including hand signals when necessary.

SEA.CSO.124 Taxiing of aircraft

The operator shall establish and implement procedures for aircraft taxiing on water runways, the movement area of a water aerodrome or temporary take-off and landing area on water to ensure safety during operations. This procedure shall be designated to enhance the safety and efficiency of water runway usage and mitigate risks associated with water take-offs and landings.

SEA.CSO.125 Taxiing of seaplanes

The operator shall ensure that a seaplane is taxied on the water runways, the movement area of a water aerodrome or temporary take-off and landing area on water only if the person at the controls is an appropriately qualified pilot.

SEA.CSO.141 Use of electronic flight bag (EFBs)

Where an EFB is used on board an aircraft, the operator shall ensure that it does not adversely affect the performance of the aircraft systems or equipment, or the ability of the flight crew member to operate the aircraft. The use of electronic flight bag shall be approved by the CAAT, in accordance with TCAR Air Operations, Part SPA.

SEA.CSO.145 Information on emergency and survival equipment carried

The operator shall at all times have available for immediate communication to rescue coordination centres (RCCs) lists containing information on the emergency and survival equipment carried on board any of their aircraft.

SEA.CSO.170 Psychoactive substances

(a) The operator shall take all reasonable measures to ensure that no person enters or is in an aircraft when under the influence of psychoactive substances to the extent that the safety of the aircraft or its occupants is likely to be endangered.

(b) The operator shall develop and implement a policy on the prevention and detection of misuse of psychoactive substances by flight crew members, seaplane cabin coordinator and by other safety-sensitive personnel under its direct control, in order to ensure that the safety of the aircraft or its occupants is not endangered.

(c) Without prejudice to the applicable national legislation on data protection concerning testing of individuals, the operator shall develop and implement an objective, transparent and non-discriminatory procedure for the prevention and detection of cases of misuse of

psychoactive substances by its flight crew member, seaplane cabin coordinator and other safety-sensitive personnel.

(d) In case of a confirmed positive test result, the operator shall inform its competent authority and the authority responsible for the personnel concerned, such as a medical assessor of the licensing authority.

SEA.CSO.175 Endangering safety

(a) The operator shall take all reasonable measures to ensure that no person recklessly, intentionally or negligently acts or omits to act so as to:

(1) endanger an aircraft or person therein; or

(2) cause or permit an aircraft to endanger any person or property.

SEA.CSO.180 Documents, manuals and information to be carried

(a) The following documents, manuals and information (hard copy or electronic) shall be carried on each flight, as originals or copies unless otherwise specified:

(1) the aircraft flight manual (AFM), or equivalent document;

(2) the original certificate of registration;

(3) the original certificate of airworthiness (C of A);

(4) a certified true copy of the air operator certificate (AOC);

(5) the operations specifications relevant to the aircraft type, issued with the AOC;

(6) the original aircraft radio licence, if applicable;

(7) the third-party liability insurance certificate(s);

(8) the journey log, or equivalent, for the aircraft;

(9) the aircraft technical log;

(10) details of the filed ATS flight plan;

(11) current and suitable aeronautical charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted;

(12) procedures and visual signals information for use by intercepting and intercepted aircraft;

(13) information concerning search and rescue services for the area of the intended flight, which shall be easily accessible in the flight crew compartment;

(15) the current parts of the operations manual that are relevant to the duties of the crew members, which shall be easily accessible to the crew members;

(16) the MEL;

(17) appropriate notices to airmen (NOTAMs) and aeronautical information service (AIS) briefing documentation;

(18) appropriate meteorological information;

(19) cargo and/or passenger manifests;

(20) mass and balance documentation;

(21) the operational flight plan, if applicable;

(22) notification of special categories of passenger (SCPs) and special loads, if applicable; and

(23) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight.

SECTION 2 — OPERATING PROCEDURES

SEA.CSO.OP.105 Use of water aerodrome and temporary take-off and landing area on water

The operator shall only use the appropriate type(s) of aircraft to operate at the approved water aerodrome and/or temporary take-off and landing area on water.

SEA.CSO.OP.145 Establishment of minimum flight altitudes

(a) The operator shall establish for all route segments to be flown:

(1) Minimum flight altitudes that provide the required terrain clearance, taking into account the specific requirements of a seaplane operations;

(2) Accurate navigation charts for route planning, including aerial charts for take-off and landing areas on water, and take-off climb/approach surface chart; and

(3) A method for the flight crew to determine those altitudes.

(b) The method for establishing minimum flight altitudes shall be approved by CAAT.

SEA.CSO.OP.150 Fuel policy

(a) The operator shall establish a fuel policy for the purpose of flight planning to ensure that every flight carries sufficient fuel for the planned operation and reserves to cover deviations from the planned operation.

The fuel policy and any change to it require prior approval by CAAT.

(b) The operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes:

(1) Taxi fuel;

(2) Trip fuel;

(3) Reserve fuel consisting of:

(i) contingency fuel;

(ii) alternate fuel, if a destination alternate aerodrome is required;

(iii) final reserve fuel; and

(iv) additional fuel, if required by the type of operation; and

(4) Extra fuel if required by the commander.

SEA.CSO.OP.160 Stowage of baggage and cargo

The operator shall establish procedures to ensure that:

(a) Only hand baggage that can be adequately and securely stowed is taken into the passenger compartment; and

(b) All baggage and cargo on board that might cause injury or damage, or obstruct aisles and exits if displaced, is stowed so as to prevent movement.

SEA.CSO.OP.165 Passenger seating

The operator shall establish procedures to ensure that passengers are seated where, in the event that an emergency evacuation is required, they are able to assist and not hinder evacuation of the aircraft.

SEA.CSO.OP.170 Passenger briefing

(a) The operator shall establish a comprehensive passenger briefing procedures for seaplane operations which shall include, but not be limited to, the following elements:

(1) **Pre-Takeoff Briefing.** The operator shall brief passengers on the following safety measures:

(i) The procedures for entering and exiting the cabin, including identification of potential hazards such as propellers and the horizontal stabilizer. Passengers shall be cautioned to avoid the area near spinning propellers and the stabilizer.

(ii) Instructions for not assisting with pre- or post-flight operations unless specifically requested, with particular focus on avoiding contact with hazardous components and ensuring safety during docking.

(iii) Demonstration of proper boarding or disembarking techniques on the floating platform when the flight originates from or terminates on water surface.

(iv) Detailed instructions on how to fasten, tighten, and unfasten seat belts and shoulder harnesses, and how to stow loose seatbelt ends for emergency release.

(v) Explanation of how to recognize seatbelt rollover issues and how to resolve them to facilitate quick seatbelt release.

(vi) Instructions on seat adjustment and securing seats to ensure egress is not obstructed.

(vii) Requirement to keep adjustable seatbacks upright during take-off and landing.

(viii) Location and operation of all normal and emergency exits, demonstrated if practical.

(ix) The necessity to leave carry-on items behind during evacuation, and the importance of situational awareness in the event of an emergency.

(x) Procedures for clearing the egress pathway, removing headphones and cords, and ensuring safe, hand-over-hand evacuation techniques to an exit.

(xi) Brief passenger on underwater egress procedures, ensure each passenger is located, and advise passengers that assistance may not be available when egressing the seaplane in emergency.

(xii) Emphasis on understanding directional references for egress, including how to exit in the event of an inverted seaplane.

(2) **Personal Flotation Devices (PFDs)**. The operator shall brief passengers on the type, location, and use of PFDs, including:

(i) A demonstration of proper donning and inflation methods.

(ii) Passengers must be advised not to inflate their PFDs until they are clear of wreckage to avoid obstruction during evacuation.

(iii) If flotation cushions are available, the operator shall brief passengers on their use and demonstrate proper techniques.

(3) Passenger needing special assistance. The operator shall ensure that any passengers requiring special assistance are individually briefed. These briefings shall include:

(i) Designation of personnel responsible for assisting in an emergency.

(ii) Identifying passengers who are weak or non-swimmers, with specific encouragement to wear PFDs during all operations.

(iii) Coordination with attendants to meet the special needs of passengers.

(b) The operator shall provide with a safety briefing card on which picture-type instructions indicate the operation of safety and emergency equipment and exits likely to be used by passengers.

SEA.CSO.OP.190 Submission of the ATS flight plan

(a) The operator shall submit an ATS flight plan prior to the commencement of a seaplane flight, in accordance with the Air Navigation Act B.E. 2497, as amended.

(b) When operating from a site where it is impossible to submit an ATS flight plan, the ATS flight plan shall be transmitted as soon as possible after take-off by the commander or the operator.

SEA.CSO.OP.195 Refuelling/defueling with passengers embarking, on board or disembarking

An aircraft shall not be refuelled/defueled when passengers are embarking, on board or disembarking.

SEA.CSO.OP.215 Use of headset —seaplane

(a) Each flight crew member required to be on duty in the flight crew compartment shall wear a headset with boom microphone or equivalent.

The headset shall be used as the primary device for voice communications with ATS:

(1) When on the ground:

(i) when receiving the ATC departure clearance via voice communication; and

(ii) when engines are running;

(2) Whenever deemed necessary by the commander.

SEA.CSO.OP.225 Seats, safety belts and restraint systems

(a) Crew members

(1) During take-off and landing and whenever decided by the commander in the interest of safety, each crew member shall be properly secured by all safety belts and restraint systems provided.

SEA.CSO.OP.240 Smoking on board

No person shall allow smoking on board.

SEA.CSO.OP.245 Meteorological conditions

(a) The commander shall only commence take-off when the appropriate weather reports and/or forecasts indicate that the meteorological conditions along the part of the route to be flown be at or above the VFR limits.

SEA.CSO.OP.265 Take-off conditions

Before commencing take-off, the commander shall be satisfied that:

(a) According to the information available to him/her, the weather at the aerodrome, water aerodrome and/or temporary take-off and landing area on water and the condition of the

water runway or temporary take-off and landing area on water to be used shall not prevent a safe take-off and departure; and

(b) Established aerodrome operating minima will be complied with.

SEA.CSO.OP.270 Minimum flight altitudes

The commander or the pilot to whom conduct of the flight has been delegated shall not fly below specified minimum altitudes except when:

(a) Necessary for take-off or landing; or

(b) Descending in accordance with procedures approved by CAAT.

SEA.CSO.OP.275 Simulated abnormal situations in flight

The operator shall ensure that when carrying passengers or cargo the following are not simulated:

(a) Abnormal or emergency situations that require the application of abnormal or emergency procedures; or

(b) Flight in IMC by artificial means.

SEA.CSO.OP.295 Use of airborne collision avoidance system (ACAS)

The operator shall establish operational procedures and training programmes when ACAS is installed and serviceable so that the flight crew is appropriately trained in the avoidance of collisions and competent in the use of ACAS equipment.

SECTION 3 - MASS AND BALANCE

SEA.CSO.MAB.100 Mass and balance, loading

(a) During any phase of operation, the loading, mass and centre of gravity (CG) of the aircraft shall comply with the limitations specified in the AFM, or the operations manual if more restrictive.

(b) The operator shall establish the mass and the CG of any aircraft by actual weighing prior to initial entry into service and thereafter at intervals of four years if individual aircraft masses are used, or nine years if fleet masses are used. The accumulated effects of modifications

and repairs on the mass and balance shall be accounted for and properly documented.

Aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known.

(c) The weighing shall be accomplished by the manufacturer of the aircraft or by an approved maintenance organisation.

(d) The operator shall determine the mass of all operating items and crew members included in the aircraft dry operating mass by weighing or by using standard masses. The influence of their position on the aircraft's CG shall be determined.

(e) The operator shall establish the mass of the traffic load, including any ballast, by actual weighing or by determining the mass of the traffic load in accordance with standard passenger and baggage masses.

(f) In addition to standard masses for passengers and checked baggage, the operator can use standard masses for other load items, if it demonstrates to the CAAT that these items have the same mass or that their masses are within specified tolerances.

(g) The operator shall determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the operations manual.

(h) The operator shall ensure that the loading of:

(1) Its aircraft is performed under the supervision of qualified personnel; and

(2) Traffic load is consistent with the data used for the calculation of the aircraft mass and balance.

(i) The operator shall comply with additional structural limits such as the floor strength limitations, the maximum load per running metre, the maximum mass per cargo compartment and the maximum seating limit.

(j) The operator shall specify, in the operations manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements contained in (a) to (i). This system shall cover all types aircraft of intended operations.

SEA.CSO.MAB.105 Mass and balance data and documentation

(a) The operator shall establish mass and balance data and produce mass and balance

documentation prior to each flight specifying the load and its distribution. The mass and balance documentation shall enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information:

(1) Aircraft registration and type;

(2) Flight identification, number and date;

(3) Name of the commander;

(4) Name of the person who prepared the document;

(5) Dry operating mass and the corresponding CG of the aircraft:

(6) Mass of the fuel at take-off and the mass of trip fuel;

The information above shall be available in-flight planning documents or mass and balance systems. Some of this information may be contained in other documents readily available for use.

(7) Mass of consumables other than fuel, if applicable;

(8) Load components including passengers, baggage, freight and ballast;

(9) Take-off mass, landing mass and zero fuel mass;

(10) Applicable aircraft CG positions; and

(11) The limiting mass and CG values.

(b) Where mass and balance data and documentation are generated by a computerised mass and balance system, the operator shall:

(1) Verify the integrity of the output data to ensure that the data are within AFM limitations; and

(2) Specify the instructions and procedures for its use in its operations manual.

(c) The person supervising the loading of the aircraft shall confirm by hand signature or equivalent that the load and its distribution are in accordance with the mass and balance documentation given to the commander. The commander shall indicate his/her acceptance by hand signature or equivalent.

(d) The operator shall specify procedures for last minute changes to the load to ensure that:

(1) Any last-minute change after the completion of the mass and balance documentation

is brought to the attention of the commander and entered in the flight planning documents containing the mass and balance documentation;

(2) The maximum last-minute change allowed in passenger numbers or hold load is specified; and

(3) New mass and balance documentation are prepared if this maximum number is exceeded.

SECTION 4 - INSTRUMENTS, DATA, EQUIPMENT

SEA.CSO.IDE.100 Instruments and equipment — general

(a) Instruments and equipment required by this Subpart shall be approved in accordance with the applicable airworthiness requirements except for the following items:

(1) Spare fuses;

(2) Independent portable lights;

(3) An accurate time piece;

(4) First-aid kits;

(5) Emergency medical kit;

(6) Survival and signalling equipment;

(7) Sea anchors and equipment for mooring; and

(8) Child restraint devices.

(b) Instruments and equipment not required by this Subpart as well as any other equipment which is not required under this Regulation, but carried on a flight, shall comply with the following requirements:

(1) The information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with the applicable airworthiness requirements.

(2) The instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction.

(c) If equipment is to be used by one flight crew member at his/her station during flight, it shall be readily operable from that station. When a single item of equipment is required to be operated by more than one flight crew member it shall be installed so that the equipment is readily operable from any station at which the equipment is required to be

operated.

(d) Those instruments that are used by any flight crew member shall be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision that he/she normally assumes when looking forward along the flight path.

(e) All required emergency equipment shall be easily accessible for immediate use.

SEA.CSO.IDE.105 Minimum equipment for flight

A seaplane flight shall not be commenced when any of the seaplane's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless:

(a) The seaplane is operated in accordance with the operator's MEL; or

(b) The operator is approved by CAAT to operate the seaplane within the constraints of the master minimum equipment list (MMEL).

SEA.CSO.IDE.110 Spare electrical fuses

(a) seaplanes shall be equipped with spare electrical fuses, of the ratings required for complete circuit protection, for replacement of those fuses that are allowed to be replaced in flight.

(b) The number of spare fuses that are required to be carried shall be the higher of:

(1) 10 % of the number of fuses of each rating; or

(2) three fuses for each rating.

SEA.CSO.IDE.115 Operating lights

(a) seaplanes operated by day shall be equipped with:

(1) an anti-collision light system;

(2) lighting supplied from the aeroplane's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the aeroplane;

(3) lighting supplied from the aeroplane's electrical system to provide illumination in all passenger compartments; and

(4) an independent portable light for each required crew member readily accessible to

crew members when seated at their designated stations.

(5) lights to conform to the International Regulations for Preventing Collisions at Sea.

SEA.CSO.IDE.125 Flight and navigational instruments and associated equipment

(b) Seaplanes shall be equipped with the following equipment, available at the pilot's station:

(1) A means of measuring and displaying:

(i) magnetic heading;

(ii) time in hours, minutes, and seconds;

(iii) barometric altitude;

(iv) indicated airspeed;

(v) vertical speed;

(vi) turn and slip;

(vii) attitude;

(viii) heading;

(ix) outside air temperature; and

(2) A means of indicating when the supply of power to the required flight instruments is not adequate.

SEA.CSO.IDE.170 Flight crew interphone system

Seaplanes operated by more than one flight crew member shall be equipped with a flight crew interphone system, including headsets and microphones for use by all flight crew members.

SEA.CSO.IDE.205 Seats, seat safety belts, restraint systems and child restraint devices

(a) Seaplanes shall be equipped with:

(1) a seat or berth for each person on board who is aged 24 months or more;

(2) a seat belt on each passenger seat and restraining belts for each berth except as specified.

SEA.CSO.IDE.220 First-aid kit

(a) Seaplanes shall be equipped with first-aid kits, as recorded in Table 1.

Table 1: Number of first-aid kits required

Number of passenger seats installed	Number of first-aid kits required
0-100	1
101-200	2
201-300	3
301-400	4
401-500	5
500 or more	6

(b) First-aid kits shall be:

(1) readily accessible for use; and

(2) kept up to date.

SEA.CSO.IDE.250 Hand fire extinguishers

(a) Seaplanes shall be equipped with at least one hand fire extinguisher in the flight crew compartment.

(b) At least one hand fire extinguisher shall be located in, or readily accessible for use in, the main passenger compartment.

SEA.CSO.IDE.280 Emergency locator transmitter (ELT)

Seaplanes shall be equipped with at least:

(a) One automatic ELT or one aircraft localisation

(b) An ELT of any type shall be capable of transmitting simultaneously on 121.5 MHz and 406 MHz.

SEA.CSO.IDE.285 Flight over water

(a) The Seaplanes shall be equipped with a life-jacket for each person on board or equivalent flotation device for each person on board younger than 24 months, stowed in a position that is readily accessible from the seat or berth of the person for whose use it is provided:

(1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the seaplane on water, appropriate to its size, mass and handling characteristics;

(2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

SEA.CSO.IDE.330 Radio communication equipment

(a) Seaplanes shall be equipped with the radio communication equipment required by the applicable airspace requirements.

(b) The radio communication equipment shall provide for communication on the aeronautical emergency frequency 121.5 MHz.

SEA.CSO.IDE.340 Radio equipment for operations under VFR over routes navigated by reference to visual landmarks

Seaplanes operated under VFR over routes navigated by reference to visual landmarks shall be equipped with radio communication equipment necessary under normal radio propagation conditions to fulfil the following:

(a) communicate with appropriate ground stations;

(b) communicate with appropriate ATC stations from any point in controlled airspace within which flights are intended; and

(c) receive meteorological information.

SEA.CSO.IDE.345 Communication, navigation and surveillance equipment for operations under VFR over routes not navigated by reference to visual landmarks

(a) Seaplanes operated under VFR over routes that cannot be navigated by reference to visual landmarks shall be equipped with radio communication, navigation and surveillance equipment in accordance its the applicable airspace requirements.

(b) Radio communication equipment shall include at least two independent radio communication systems necessary under normal operating conditions to communicate with an appropriate ground station from any point on the route, including diversions.

(c) Seaplanes shall have sufficient navigation equipment to ensure that, in the event of the

failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in accordance with the flight plan.

SEA.CSO.IDE.350 Transponder

Seaplanes shall be equipped with a pressure altitude reporting secondary surveillance radar (SSR) transponder and any other SSR transponder capability required for the route being flown.

SUBPART GOS - GROUND OPERATIONS STANDARDS FOR SEAPLANE OPERATIONS

SEA.GOS.005 Purpose

This regulation establishes minimum safety, operational, and compliance requirements for ground operations of commercial seaplane operator within Thailand. It ensures safe, and standardized ground handling procedures, minimizing risks during dock operations and ground handling at floating platforms, fixed platforms, moorings, ramps, beaches and designated operational area.

SEA.GOS.010 Applicability

This regulation applies to:

(a) Commercial air transport operators conducting seaplane aircraft operations within Thailand.

(b) Ground handling service providers and personnel involved in seaplane ground operations.

(c) Facilities for seaplane operations, including floating platforms, fixed docks, moorings, ramps, and water aerodromes.

(d) CAAT inspectors responsible for certification, oversight, and enforcement of seaplane ground operations.

SEA.GOS.100 Air Operator Responsibilities

Air operators shall ensure compliance with regulatory, safety, and operational requirements related to seaplane ground handling operations, this includes:

(a) Develop and implement Standard Operating Procedures (SOPs) for all ground operations, including docking, mooring, passenger and baggage handling, fueling, and aircraft movement.

(b) Ensure compliance with applicable regulatory requirements, including those issued by CAAT, and relevant authorities.

(c) Define roles and responsibilities for dock personnel involved in seaplane ground handling activities.

(d) Establish risk management procedures to mitigate hazards associated with currents, tides,

environmental factors, and foreign object debris (FOD).

(e) Maintain adequate ground handling equipment to support safe seaplane operations, such as docking facilities, passenger boarding platforms, fueling stations, and emergency response equipment.

(f) Ensure that personnel involved in ground operations receive initial and recurrent training specific to seaplane aircraft handling.

(g) Coordinate with relevant authorities and local agencies to ensure safe waterway access for seaplane operations and compliance with rules of the sea and related maritime rules and regulation.

SEA.GOS.105 Emergency Preparedness and Response

Air Operators shall:

(a) Develop an Emergency Response Plan (ERP) specific to seaplane operations, addressing coordination, emergency landings, water evacuations, and aircraft recovery procedures.

(b) Ensure emergency response equipment is available, including life vests, flotation devices, and first-aid kits at boarding and docking areas.

(c) Conduct regular emergency response exercises involving ground personnel, flight crews, seaplane cabin coordinator, and local emergency responders.

SEA.GOS.200 Training and Qualification

Air Operators shall ensure that all ground personnel receive the necessary training and qualifications to perform their duties safely. Training programs shall address seaplane-specific operational risks, including dock operations, seaplane ground handling, fueling, passenger safety, and emergency response. Ground personnel training shall cover:

(a) Seaplane Ground Handling Procedures

(1) Docking and mooring techniques.

(2) Aircraft positioning and securing procedures.

(3) Hand signals for communicating with flight crews.

(4) Water taxiing guidance and control measures.

(b) Passenger Handling and Safety

(1) Pre-boarding safety briefings.

(2) Passenger movement control on floating docks, platforms, and ramps.

(3) Procedures for assisting passengers during boarding and disembarkation.

(c) Baggage or Cargo Handling

(1) Weight and balance considerations for seaplane operations.

(2) Secure cargo loading procedures to prevent shifting in water operations.

(3) Handling of dangerous goods per ICAO Annex 18 and CAAT regulations.

(d) Fueling Procedures and Fire Safety

(1) Proper fueling techniques for seaplanes aircraft.

(2) Fuel contamination prevention measures.

(3) Fire hazards and emergency response during fueling operations.

(e) Emergency Preparedness During Passenger Handling

(f) Environmental Awareness and Hazard Mitigation

(1) Wildlife hazard management, including bird strike prevention.

(2) Foreign Object Debris (FOD) control in seaplane operational areas.

(g) Weather monitoring and operational limits

(1) Understanding the effects of tides, currents, and wind on seaplane operations.

(2) Identifying unsafe weather conditions and determining operational limits.

(h) Communication Procedures

(1) Use of radio communication protocols between seaplane ground personal / dock personnel and flight crews.

(2) Hand signals for non-verbal communication during docking.

SEA.GOS.300 Passenger Facilities

Air Operators shall ensure that passenger handling facilities are designed and managed to facilitate safe and suitable for embarkation and disembarkation. These facilities shall meet safety, accessibility, and emergency preparedness requirements, considering the unique operational environment of water aerodromes, floating platforms, fixed platforms, moorings, ramps, beaches or designated operational areas.

SEA.GOS.305 Passenger & Baggage Handling Procedures

Air Operators shall:

(a) Ensure an efficient check-in process, at a designated check-in point.

(b) Establish baggage weight and size limitations to ensure safe aircraft operations.

(c) Clearly communicate baggage allowances and restrictions to passengers, including weight limitations and prohibited items such as dangerous goods, flammable materials, and lithium batteries.

SEA.GOS.310 Passenger Embarkation and Disembarkation Procedures

Air Operators shall:

(a) Establish procedures ensuring passenger safety during embarkation/disembarkation.

(b) Assign trained personnel to supervise all embarkation and disembarkation activities.

(c) Ensure controlled movement of passengers to prevent slips, falls, and unsafe behavior on floating platforms.

(d) Conduct mandatory pre-boarding safety briefings, including life vest use and emergency evacuation procedures.

(e) Ensure restricted and controlled access to passenger operational areas.

SEA.GOS.315 Dangerous Goods Notification System

Operators shall implement a notification system to effectively communicate to passengers the types of dangerous goods that are prohibited for transport on board an aircraft.

SEA.GOS.330 Aircraft Loading

The operators shall establish procedures for the loading and securing of baggage or cargo inside the cabin, ensuring compliance with manufacturer specifications and state regulatory requirements. These procedures shall include but are not limited to:

(a) Baggage or cargo shall be secured with cargo nets or straps so that it cannot shift during flight or come free during a crash;

(b) Each passenger seat under which baggage or cargo is stowed shall be fitted with a means

to prevent articles of baggage stowed under it from sliding;

(c) Baggage or cargo shall be stowed in such a way as to allow passengers unrestricted access to regular and emergency exits in the aircraft.

SEA.GOS.335 Passenger and Baggage Load Confirmation

Operators shall:

(a) Ensure accurate records and confirm the final passenger and total baggage weights.

(b) Ensure passenger seat assignment and baggage compartment locations.

(c) Communicate final load data to the flight crew prior to departure.

(d) Adjust loads based on operational limitations and promptly update flight crews on any changes.

SEA.GOS.400 Airside and Dock Operations

The operators shall:

(a) Establish and implement procedures for airside and dock operations to ensure safe, and compliant handling of seaplane aircraft at all designated locations. The establish procedures shall covering:

(1) Procedures for aircraft docking, securing, and movement during both arrival and departure to ensure safe operations.

(2) Standardized communication protocols between dock personnel and flight crews, including both visual signals and verbal phraseology.

(b) Access to airside and dock areas shall be restricted to authorized personnel only to maintain operational security and prevent hazards.

(c) Ensure that seaplane ground personal / dock personnel shall be trained and qualified in seaplane-specific ground handling operations.

(d) Establish and implement procedures for handling adverse weather conditions, including significant sea waves during docking, ensuring safe seaplane operations, passenger disembarkation, and protection for both passengers and personnel.

SEA.GOS.405 Floating Platform Readiness

The operators shall ensure floating platform readiness by the following:

(a) Ensure for boarding by confirming the platform is fully prepared before scheduled departure time.

(b) Ensure Passenger Transfer Vessels shall dock at floating platforms only after the aircraft engines have been shut down.

(c) Ensure passengers are not embarking/disembarking until the Passenger Transfer Vessel is docked or moored.

(d) Ensure that no personal belonging is left behind on the Passenger Transfer Vessel.

(e) Ensure that no passengers are on board the floating platform while the aircraft engine is running

(f) Ensure passengers are not embarking/disembarking until the Passenger Transfer Vessel is docked or moored.

SEA.GOS.410 Passenger Transfer Vessel

The operators shall ensure that:

(a) Only registered and approved vessels shall be used for passenger transfer to and from floating platforms.

(b) The Passenger Transfer Vessel shall be authorized to carry a capacity of no less than twice the maximum passenger seating configuration of the aircraft.

(c) Passenger Transfer Vessels are equipped with the following mandatory safety equipment:

(1) Life jackets.

(2) Fire extinguishers.

(3) Life buoy with a 30-meter lifeline.

(4) Wire cutter.

(5) First aid kit.

(6) Axe.

(7) Passenger Transfer Vessels shall act as the primary evacuation vessel in case of an emergency at a floating platform.

SEA.GOS.415 Aircraft Fueling

Operators shall:

(a) Establish and implement procedures for the safe and compliant fueling of seaplane ~~or~~ aircraft at all designated fueling locations, including fixed platforms, docks and ramps.

(b) Ensure the personnel who perform fueling operations shall be trained and qualified personnel, in compliance with CAAT regulatory requirements.

(c) Ensure aircraft fueling is prohibited during adverse weather conditions where electrical discharge or excessive movement could pose a hazard.

(d) Ensure unauthorized personnel shall not be permitted within fueling zones during aircraft refueling operations.

(e) Ensure that fueling with passengers onboard are prohibited.

SUBPART MCF - MAINTENANCE CHECK FLIGHTS

SEA.MFC.100 Level of maintenance check flight

Before conducting a maintenance check flight, the operator shall determine the applicable level of the maintenance check flight as follows:

(a) a “Level A” maintenance check flight for a flight where the use of abnormal or emergency procedures, as defined in the aircraft flight manual, is expected, or where a flight is required to prove the functioning of a backup system or other safety devices;

(b) a “Level B” maintenance check flight for any maintenance check flights other than a “Level A” maintenance check flight.

SEA.MCF.105 Flight programme for a “Level A” maintenance check flight

Before conducting a Level, A maintenance check flight with a complex motor-powered aircraft, the operator shall develop and document a flight programme.

SEA.MCF.110 Maintenance check flight manual for a “Level A” maintenance check flight

The operator conducting a “Level A” maintenance check flight shall:

(a) describe those operations and associated procedures in the operations manual referred to SEA.MLR.100 or in a dedicated maintenance check flight manual;

(b) update the manual when necessary;

(c) inform all affected personnel of the manual and of its changes that are relevant to their duties;

(d) provide the CAAT with the manual and its updates.

SEA.MCF.115 Flight crew requirements for a “Level A” maintenance check flight

(a) The operator shall select adequate flight crew considering the aircraft complexity and the level of the maintenance check flight. When selecting flight crew for a “Level A” maintenance check flight with a complex motor-powered aircraft, the operator shall ensure all of the following:

(1) that the pilot-in-command has followed a training course in accordance with

SEA.MCF.120; if the training has been conducted in a simulator, the pilot shall conduct at least one "Level A" maintenance check flight as a pilot monitoring or as an observer before flying as a pilot-in-command on a "Level A" maintenance check flight;

(2) that the pilot-in-command has completed on aircraft of the same aircraft category as the aircraft to be flown a minimum of 1 000 flight hours, of which at least 400 hours as a pilot-in-command in a complex motor-powered aircraft and at least 50 hours on the particular aircraft type.

Notwithstanding paragraph (2) of the first paragraph, if the operator introduces a new aircraft type to its operation and has assessed the pilot's qualifications in accordance with an established assessment procedure, the operator may select a pilot having less than 50 hours experience on the particular aircraft type.

(b) A pilot-in-command shall not perform a "Level A" maintenance check flight on a complex motor-powered aircraft unless the pilot-in-command has carried out a "Level A" maintenance check flight within the preceding 36 months.

(c) Recency as pilot-in-command on a "Level A" maintenance check flight is regained after performing a "Level A" maintenance check flight as an observer or a pilot monitoring, or after acting as the pilot-in-command in a "Level A" maintenance check flight in a simulator.

SEA.MCF.120 Flight crew training course for Level A maintenance check flights

(a) The training course required for a "Level A" maintenance check flight shall be conducted in accordance with a detailed syllabus.

(b) The flight instruction for the training course shall be conducted in either of the following ways:

(1) in a simulator which, for training purposes, adequately reflects the reaction of the aircraft and its systems to the checks being conducted;

(2) during a flight in an aircraft demonstrating maintenance check flight techniques.

(c) A training course followed on one aircraft category is considered valid for all aircraft types of that category.

(d) When considering the aircraft used for the training and the aircraft to be flown during the maintenance check flight, the operator shall specify whether differences or familiarisation

training is required and describe the contents of such a training.

SEA.MCF.125 Crew composition and persons on board

(a) The operator shall establish procedures to identify the need for additional task specialists.

(b) For a “Level A” maintenance check flight, the operator shall define in its manual the policy for other persons on board.

(c) For a 'Level A' maintenance check flight, a task specialist or additional pilot is required in the flight crew compartment to assist the flight crew, unless the aircraft configuration does not permit it or the operator can justify, considering the flight crew’s workload based on the flight programme, that the flight crew does not require additional assistance.

SEA.MCF.135 Flight time limitations and rest requirements

When assigning flight crew to maintenance check flights, operators is subject to Subpart FTLS of these Regulations.

SEA.MCF.140 Systems and equipment

When a maintenance check flight is intended to check the proper functioning of a system or equipment, that system or equipment shall be identified as potentially unreliable and appropriate mitigation measures shall be agreed prior to the flight in order to minimise risks to flight safety.

APPENDIX A – A SEAPLANE CABIN COORDINATOR TRAINING SYLLABI & CHECKING PROGRAMMES

This section contains a detailed description of Seaplane Cabin Coordinator training syllabi and checking programs required by these regulations.

1. Seaplane Cabin Coordinator Basic Indoctrination Training

Scope

The Seaplane Cabin Coordinator Basic Indoctrination training course is required for conversion training programs involving initial entry to the Operator's Organisation. The purpose of this course is to ensure Seaplane Cabin Coordinator member gets adequate knowledge of the operator's administrative procedures, documents, responsibilities and the operating environment.

Training Requirement

Basic Indoctrination training for Seaplane Cabin Coordinator.

Seaplane Cabin Coordinator basic Indoctrination training shall be completed prior to commencement of familiarisation flights.

Syllabus Overview

Theory Examination: No written exam. Assessment through oral Q & A / review questions

1) Organisation Background, Vision and Mission
2) Organisational Structure
3) Arrival Checklist
4) Medical & Licensing
5) Operations Manual A, B, C, D and other related Flt Ops Publications
6) Flight Operations Administration Forms
7) Reporting Relationships, Communication Procedures and Duty Reporting / Absence
8) Seaplane Cabin Coordinator Training Program and other Requirements
9) Training Rules and Standards
10) Operational Control System, Flight Schedule
11) Operational Flight Plans - "Flight Release" and Outstation Passenger Manifests
12) Operator Quality and Safety Management Programs
13) Base/Dock Orientation and Walk Around

14) Definitions and Interpretations

2. Aviation Indoctrination Course

Scope

The aviation Indoctrination course forms part of the Seaplane Cabin Coordinator conversion training programs. The purpose of this course is to ensure adequate knowledge of basic aviation theory, CRM factors, communication, meteorology, regulations. This course is a requirement to comply with initial Seaplane Cabin Coordinator training as per Part-SEA.

Training Requirement

Aviation Indoctrination Course for Seaplane Cabin Coordinator is required under the following conditions:

- Conversion: Initial Entry
- Annual and Reactivation: Not required

Syllabus Overview

Course syllabus:

1) Operations Manual and SOP

a) General - Importance of following SOPs

b) Operations Manual and Revision Process

2) Common Definitions and Aviation Terminologies

3) Regulation and CAAT Overview Relevant to Seaplane Cabin Coordinator

a) Introduction Aviation Industry and CAAT

b) Introduction to TCAR part SEA

c) Seaplane Cabin Coordinator Relevant Regulatory Requirements

d) FTL, Health and Rest Requirements

4) Introduction to Aircraft

a) Types of Aircrafts

b) The Basic Components of Flight, relating to the Aircraft Environment

c) Surface Contamination and its Effects

d) Center of Gravity

5) Crew Coordination, Roles and Responsibilities

a) Chain of Command: PIC, Co-pilot, Seaplane Cabin Coordinator with Aircraft type specific and Operator conversion training elements.

Training Requirement

1. Type and Differences training is required under the following conditions:
2. Conversion: Initial Entry
3. Annual: Existing seaplane cabin coordinator, every 12 months. (Theory may be combined with Existing seaplane cabin coordinator training.)

Training Sequence

Type and differences training shall be conducted in the following sequence:

1. After successful completion of Aviation Indoctrination training;
2. Module E (practical instruction), may be combined with an emergency and safety equipment training practical training (ESET) and checking provided ESET theory is already completed;
3. Prior to the initial issuance of seaplane cabin coordinator certificate;
4. Prior to commencement of familiarisation flights.

Syllabus Overview: Aircraft Type

Type and differences training shall include only modules and topics applicable to the type variant(s) currently operated by the Operator.

A. Theory - Aircraft type Description and Procedures
SYLLABUS OVERVIEW Syllabus items required for Annual Training are indicated with "●" **Aircraft DESCRIPTION AND PROCEDURES** **1) Aircraft Description** a) Aircraft type Models and Variants b) Dimensions c) Propeller Danger Areas d) Speeds e) Operating Altitude

f) Range and Average Flight Times

2) Passenger Seating Capacity and Cabin Configuration

a) Standard Seat Commuter Configurations

b) Storage Areas

c) Operator Specific Features

3) Flight Crew Number and Min. Number of Req. Seaplane Cabin Coordinator

4) ● Cabin Doors and Exits (All Variants)

a) ● General

b) ● Types and Locations

i. ● Cargo Style Door

ii. ● Air-Stair Door (with and without assist mechanism)

iii. ● Emergency Exits

c) ● Normal Operation

d) ● Emergency Operation

5) Cargo and Baggage Areas

a) Cabin Baggage Loading Area

b) Tail Baggage Compartment / Exterior and Interior Access

c) Nose Baggage Compartment

6) ● Flight Crew Compartment (Cockpit)

a) General Presentation

b) ● Pilot Seats and Adjustment Mechanism

c) ● Cockpit Doors and Windows

d) Stowage Areas

e) ● Cockpit Security

7) Communications System

a) Cockpit

b) Cabin

8) Passenger Cabin

a) Cabin Lighting Systems

b) Seaplane Cabin Coordinator Stations

i. Required and Additional Stations

ii. Location and Features

c) Access to Avionics Bay / Nose Baggage Compartment (if applicable)

d) Cabin Dividers, Curtains and Partitions (if applicable)

e) Least Risk Bomb Location

STANDARD OPERATING PROCEDURES (SOPs)

9) Passenger Cabin

10) ● Normal and Abnormal Procedures

a) ● General Policy

b) ● Standard Communication Calls and Signals

i. ● Communication Requirements

ii. ● Importance of Keeping the PIC Informed

iii. ● Seaplane Cabin Coordinator Requiring Urgent Assistance

iv. ● Face to Face Communication with Cockpit Crew

v. ● Standard Hand Signals

vi. ● Standard Emergency Calls and Commands

11) Reporting Times

12) Seaplane Cabin Coordinator Compliments and Seating

a) Minimum Number Required

b) Additional Seaplane Cabin Coordinator (if required)

13) Pre-Flight Briefing (Flight Crew to Seaplane Cabin Coordinator)

14) Aircraft Logbooks

a) Tech Log

b) Float Status and Pre-Flight Check Form

15) ● Pre-Flight Duties

a) ● Safety and Emergency Equipment Check

b) ● Security Check

c) ● Float Pumping Duties

d) Other Duties Common to Seaplane Cabin Coordinator

i. Dock Hand Duties

ii. Special Flights

16) ● Fuelling

a) Fuelling with Passenger Boarding / Disembarking

b) ● Fuelling Abnormalities

17) Passenger Handling

a) Security of Passenger Information

b) Passenger Dress Guidelines

c) Passengers with Pets

d) Medical Conditions Requiring Specific Approvals for Travel

e) Contagious / Infectious Diseases

f) Special Assistance Passengers

i. Passengers with Disabilities

ii. Unaccompanied Minors

iii. Wheelchair Passengers

iv. Passengers Requiring Additional Seat

v. Passengers with Infants

vi. Infant Car Safety Seat (if applicable)

18) Passenger Boarding

a) Passenger Manifest

b) Passenger Boarding Procedure

i. Normal

ii. One Engine Running

c) Passenger Head Count

19) Passenger Seat Allocation

a) Unserviceable Passenger Seats

b) Seating Policy

c) Able Bodied Passengers

d) Emergency Exit Row Seating

e) Boarding Cards

f) Procedure for Refusal of Boarding

20) Use of PEDs

21) Passenger Baggage and Hand Baggage

a) Baggage Loading / Offloading Procedure

b) Hand Luggage Stowage

c) Baggage Manifest

22) Admission to the Cockpit

23) ● Passenger Briefing

a) ● Emergency Exit Row Briefing (included in PSB)

b) ● Passenger Safety Demonstration

c) ● Briefing for Special Needs Passengers

24) Sterile Flight Deck Period / No Contact Period

25) ● Cabin Ready

a) ● Silent Review

b) ● Semi-Brace Position

26) Take-Off

27) ● Turbulence

a) ● Types

b) ● Procedures

28) General Surveillance during Flight

a) Cabin

29) Pre-Decent and Landing Preparation

30) After Landing Procedures

a) Dock Arrival Procedure

b) Passenger Disembarkation Procedure

c) Turn-Around Flights Procedure

d) Post Flight Duties

31) Operator Specific Post Flight Duties

a) Securing Aircraft to Floating Platform (Shutdown)

b) Buoy Procedure

c) Aircraft Mooring

d) Beaching and use of Sand Anchor for Abnormal Situations

e) Seawall Docking

32) Debriefing with Flight Crew

B. Theory - Type Variant Differences

SYLLABUS OVERVIEW

Syllabus items required for Annual Training are indicated with "●"

1) ●Series Differences

a) ● Emergency Exit Location and Operation

b) Safety Briefing (number and location of exits)

c) Safety Instruction Cards (number and location of exits)

d) Dimension of Tail Baggage Compartment Door

2) ● Wheels Landing Gear Differences

(*To be completed only if training for wheel operations is required)*

a) Propeller Danger Areas

b) Passenger Boarding and Disembarkation Routes

c) Aircraft Systems and Equipment

i. Wheels Landing Gear

ii. Jury Strut (Pogo Stick)

iii. Wheel Chocks

iv. GPU Procedure

d) Mass and Balance Considerations

e) Pre-Flight Check Procedures

f) ● Emergency Exits

g) ● Access to Nose and Tail Baggage Compartment

h) ● Door Opening / Closing Normal Procedure

i) ● Location of Emergency Equipment

C. Familiarisation Visit - "Base Aircraft"

Syllabus items required for Annual Training are indicated with "●"

ITEM		TYPE OF TRAINING/CHECKING	
1	Exterior, General Walk Around and Pre-Flight Check.	description	verbal instruction
2	Propeller Danger Areas	description	verbal instruction
3	Main Cabin Door: Cargo Style - Stairs, Hand Holds, Handle Airstair style - stairs, hand holds, handle	operation	hands-on demo
4	Tail Baggage Compartment Exterior Door	operation	hands-on demo
5	Tail Baggage Compartment, Cabin Interior Excess	operation	hands-on demo
6	Right Rear Cabin Door	operation	hands-on demo
7	Left Aft Cabin Cargo Door, Latches, Witness Wire	operation	verbal instruction (touch-drill)
8	Pilot Door, Window and Air Scoops	operation	hands-on demo
9	● Cabin Emergency Exits	operation	hands-on demo
10	Flight Crew Compartment - Operation of Equipment Related to Pilot Incapacitation: General Presentation ● Pilot Seats and Mechanisms ● Pilot Seat Belt and Shoulder Harness	a-description b-operation c-operation	a-verbal instruction b-hands-on demo c-hands-on demo
11	● Emergency Anchors, Ropes and Float Pumps	location + stowage	verbal instruction
12	● Infant Life Vest	location + stowage	verbal instruction
13	● Passenger Seat Belt	operation	hands-on demo
14	● Infant Loop Belt and Seat Belt Extension	location + stowage	hands-on demo

15	● Seaplane cabin Coordinator Station, Seat Belt and Torch	location	verbal instruction
16	● Passenger Briefing and Safety Instruction Cards	location	hands-on demo
17	● Fire Extinguishers, First Aid Kit, Life Jackets	location + stowage	verbal instruction
18	Cabin Baggage	stowage + securing	hands-on demo
19	● Right Rear Cabin Door Blocking with Baggage	access	verbal instruction

D. Familiarisation Visit - Type Variants

ITEM: Wheels Landing Gear - (if applicable)		TYPE OF TRAINING / CHECKING	
5a	Propeller danger / safety areas	description	verbal instruction
5b	Passenger Loading and Disembarkation Procedure	description	verbal instruction
5c	Wheels Landing Gear - General Components	description	verbal instruction
5d	Jury Strut (pogo-stick).	operation	hands-on demo
5e	Nose Baggage Compartment Door	operation	hands-on demo
5f	GPU Procedure	operation	hands-on demo

E. Practical Instruction & Exercises

Syllabus items required for Annual Training are indicated with "●"

1) ● **Various In-flight Emergency Situations (practical)**

   a) ● Smoke / Fire in the cabin and baggage compartment

   b) ● Medical Emergency

   c) ● Pilot Incapacitation

   d) ● Precautionary disembarkation

2) ● **Evacuation– Planned / Unplanned (practical)**

   a) ● Emergency preparation

   b) ● Immediate action during an evacuation

c) ● Applicable commands

d) ● Crowd control

e) ● Blocking unusable exits

3. Emergency and Safety Equipment Training (ESET)

Scope

Emergency and safety equipment training (ESET) specific to the aircraft type, shall be conducted for all seaplane cabin coordinator undergoing conversion and recurrent training programs. The following additional training requirements for seaplane cabin coordinator are incorporated into the ESET course syllabus:

1. Security training as per CAAT Requirments;
2. Flight crew incapacitation training;
3. Refresher fire training (theory).

ESET shall ensure that a seaplane cabin coordinator performs each emergency function or action applicable to their duties, except where these can be adequately learned through demonstration by their peers or instructors. In addition to classroom instruction and demonstrations, approved training devices such as static aircraft, life vest, life rafts and emergency anchors shall be used to simulate emergency conditions. Video or other devices may also be used, provided it ensures each seaplane cabin coordinator are adequately trained.

Training Requirement

ESET is required for the following training programs:

A. ESET Theoretical Instruction
SYLLABUS OVEVIEW **1) Definitions** a) Emergency and Evacuation b) Accident, Incident, Occurrences **2) Safety & Emergency Equipment (Pre-Flight Check, Location and Operation)** a) Tech Log / Float Status and Pre-Flight Check Forms b) Life Vests (Adult and Infant) c) Fire Extinguishers

d) First Aid Kit

e) Crew Torches

f) Crash Axe

g) Seat Belt Extensions and Infant Loop Belts

h) Passenger Safety Instruction Cards

i) Emergency Locator Transmitter (ELT)

j) Ropes, Anchor, Float Pumps

k) Safety Demo Equipment

l) Use and Installation of Stretchers (as applicable)

3) Evacuation Procedures

a) Incident and Accidents Review

b) Categories of Emergency Evacuation

c) Emergency Exits

d) Responsibilities to Command an Evacuation

e) Passenger Reaction and Panic

f) Brace Position and Signals

g) Commands in Evacuation

h) Evacuation Drills

i) Post Evacuation Duties

4) Emergency Landing Preparation

a) Emergency Briefing

b) Passenger Preparation Including;

i. Passenger Emergency Briefing

ii. ABP and PRM (persons with reduced mobility) Briefings

c) Cabin Preparation

d) Personal Preparation and Emergency Equipment Preparation

e) Final Duties

f) Brace for Impact

g) Unplanned Emergency / Evacuation

5) Other Emergencies

a) Rejected Take-Off

b) Precautionary Disembarkation

c) No Evacuation Necessary

d) No Commands from Cockpit

e) Evacuation While Aircraft on Dock

f) Crew Incapacitation (Including MCC Aspects)

g) Firefighting and Extinguishers

i. Fire Theory and Types / Types of Extinguishers and Characteristics

ii. Inflight Firefighting Procedure Including; Known and Unknown Source of Fire, Smoke in Cabin,

6) Survival

a) Survival at Sea

b) Survival on Land

c) Survival First Aid and Hygiene

7) Differences in Emergency Procedures across Type Variants

Wheels Landing Gear (If applicable)

i. Evacuation Procedures Land

ii. Evacuation Procedures Ditching

8) Security

a) Current Threat Assessment and Review of Recent Incidents

b) Operator Policy

c) Authority of Inspectors

d) Aircrew Identification Requirement

i. Company ID

ii. Airport ID

iii. Crew Bag

iv. Seaplane Cabin Coordinator ID

e) Security Checking at Aerodromes

f) Aircraft Security / Control of Access to Aircraft in Service

g) Operator Mail / Hand-of-Crew Shipments

h) HOT Principle

i) Special Category Passengers

i. VIPS / Diplomats

ii. High Risk Passengers

j) Inadmissible and Escorted People in Custody

i. Notification

ii. Seat Allocation

iii. Escort Responsibilities

k) Misplaced Passenger Baggage

l) Cockpit Security

m) Unruly Passengers

i. Threat Levels

ii. Interference on Ground

iii. Interference In-Flight

n) Bomb Threat Procedure

o) Hi-Jack Procedure

p) Sabotage

q) Security Incident Reporting

i. Reportable Incidents

ii. Reporting Methods

B. ESET Practical Instruction

Practical instruction is conducted during conversion ESET, then recurrently at periodic intervals. Base familiarisation and ditching procedure “wet drill” are conducted during

conversion ESET only.

1. Base Familiarisation:

a) Location and Function of Emergency Equipment throughout the Main Base.

2. Practical instruction

(May be combined or completed separately from theory syllabus).

a) Ditching Procedures "Wet Drill" including actual use of Life Jackets in Water.

b) Operation of all Emergency Exits.

(recurrently every 36 months)

c) Fire / Smoke and Evacuation.

(recurrently every 36 months)

4. Familiarisation Flights

Scope

Familiarisation flights shall be carried out during normal commercial air transport flights over parts of the Opoerator's route network that are typical of those which Seaplane Cabin Coordinator will be expected to operate. It involves thorough familiarisation of Operator routes, operating procedures, weather, ocean operating conditions and aerodromes and floating or fixed platforms within the normal route network.

Familiarisation flights involve on-the-job training where a new Seaplane Cabin Coordianator member will be involved first hand with daily flight operations while under the supervision of appropriate training personnel.

Training Requirement

Familiarisation flights are required for Seaplane Cabin Coordinator. The HT may assign additional block time and sectors if required and after assessing the Seaplane Cabin Coordinator on a case basis.

Familiarisation flights should be:

1. Conducted under the supervision of a SCCI or a qualified Seaplane Cabin Coordinator.
2. Structured and conducted with the Seaplane Cabin Coordinator member participating in pre-flight, in-flight and post flight safety duties
3. Operated with the Seaplane Cabin Coordinator member wearing the operator's Seaplane Cabin Coordinator uniform; and
4. Recorded in the training record of the Seaplane Cabin Coordinator member.

Training Sequence

Familiarisation flights shall be conducted after the completion of all Aircraft Type Specific and Operator Conversion trainings.

5. Refresher Training

Scope

Refresher training will re-familiarise a seaplane cabin coordinator with type specific emergency and evacuation procedures as well as operation and handling of aircraft exits, safety & emergency equipment.

Training Requirement

Seaplane Cabin Coordinator have been absent from flying duties for 6 months and remain within the validity periods of all previous training and checking.

If a Seaplane cabin coordinator member has been away from all flying duties, and is qualified to operate more than one type, then refresher training shall be carried out for each type.

Training Sequence

Theoretical and practical exercises may be conducted in any order. Refresher training must be completed prior to unsupervised line flying.

Syllabus overview

1) **Emergency and safety equipment training course** (theory only)
2) **Aircraft Exits - Demonstration and Operation**
    a) roof top emergency exit, if applicabale
    b) fuselage emergency exit, if applicabale
    c) Flight compartment doors
    d) Flight crew windows
    e) Left rear cargo style passenger door
    f) Left rear Airstair style passenger door
    g) Right rear passenger exit
    h) Rear baggage compartment access door
    i) Nose baggage compartment access door (wheel aircraft)
3) **Location and Handling of Emergency Equipment Carried On-Board**

a) Life vest (adult and infant)

b) Fire extinguishers

c) First aid kit

d) Crew torches

e) Passenger safety instruction cards

f) Seat belt extensions and infant loop belts

g) ELT

h) Ropes, anchor, float pumps

i) Wheel chalks (wheel aircraft)

j) Jury strut (wheel aircraft)

6. Seaplane Cabin Coordinator

Seaplane Cabin Coordinator shall undergo a line check during conversion and recurrent training programmes. A line check will evaluate the individual's competency to perform a complete line operation from start to finish, including pre-flight and post flight procedures and use of the equipment and documentation provided.

For conversion and reactivation programs, a line check is the final check prior to administrative release to the line for unsupervised flying duties. For conversion and reactivation line checks, the SCCCI will sign the line check form indicating eligibility for unsupervised flying duties. The FOM will assign and schedule such line flying duties as required.

Checking Requirement

Conversion: Initial Entry

Annual: Existing Seaplane Cabin Coordinator, every 12 months

Reactivation: Re-entry if previous line check is expired.

Checking Sequence

Conversion and Reactivation: Line check must be completed after familiarisation flights and prior to release to the line for unsupervised flying duties.

Annual: Line checks may be completed independently of other training and checking activities.

For annual line checks, the "flight assessment" may be conducted on separate days from the "knowledge assessment" provided both assessments have been completed within a 7 consecutive

day period. Otherwise, the line check must be started from the beginning.

Syllabus Overview

KNOWLEDGE ASSESSMENT (must be conducted by a SCC Assessor / Instructor)	
SAFETY & EMERGENCY EQUIPMENT	
1	Fire Extinguishers
2	First Aid Kit / Safety Briefing Cards
3	Life Jackets
4	Seat Belts / Extensions / Infant-loops
5	Crash Axe / ELT / Rafts
6	Doors / Exits
7	Flash Lights / Emergency Anchors
OPERATING PROCEDURES	
8	Operation Manuals
9	Flight and Duty Time Limitations
10	Crew Health & Precautions
11	Passenger & Cargo Handling
12	Anchoring / Beaching / Seawall Docking
13	Mass & Balance / Limitations
14	Handling Unruly / Disruptive Passengers
15	Bomb Threat / Hijack Handling Procedure
16	DG Incident Handling (Inflight / Ground)
17	Sterile Cockpit Procedure
FIRST AID	
18	General Principles
19	Primary & Secondary Survey

20	Physiological Effects of Flying
21	Basic First Aid
22	Inflight Medical Emergencies
23	Airway obstruction & CPR
24	Travel & Health Hygiene
ABNORMAL / EMERGENCY PROCEDURES	
25	Crew Incapacitation / Inflight Fire
26	Door Unlocked (inflight / during taxi)
27	Rejected Take-off / Rapid Disembarkation
28	Fuel Spillage (Base / Outstations)
EVACUATION PROCEDURES	
29	TEST Briefing
30	Silent Review
31	Situations SCC Initiate an Evacuation
32	Commands (Brace / Evacuation / Oppose)
33	Planned / Unplanned Evacuation
FLIGHT ASSESSMENT (may be conducted by SCCI or LTC)	
REPORTING / PREPAREDNESS	
34	Reporting for Duty
35	Grooming / Appearances
36	Required Personal Accessories
37	Aware of Operational Notices / Bulletins
PRE-FLIGHT CHECKS	
38	Safety & Emergency Equipment Checks
39	Float Pumping

40	Security Checks
41	Reporting / Documentation
GROUND / FLIGHT PREPARATION	
42	Cabin (Floor/Window/Pockets/Seats)
43	Fuelling Procedure - if applicable
44	Baggage Loading / Off-loading
45	Pax Boarding / Seating / Disembarkation
46	Collection / Storage of Cabin Bags
47	Reporting
48	Flight Documents
PASSENGER BRIEFING	
49	Passenger Safety Briefing
50	WINDOW EXIT Briefing
51	PRMs Briefing - if applicable
INFLIGHT DUTIES	
52	Inflight Routine / Service Procedure
53	Handling of Passenger Demands
54	Crew Coordination / Communication
55	General Surveillance During Flight
56	Cabin Securing (Take-off / Landing)
DOCKING PROCEDURES	
57	Hand Signals / Eye Contact with PIC
58	Rope Tying & Untying
59	Securing Aircraft to Buoy - if applicable
60	Situational Awareness

61	Post Flight Duties
ATTITUDE / BEHAVIOURAL ASSESSMENT (evaluated during flight assessment)	
62	Adaptability / Resourcefulness
63	Crew-to-Crew Rapport
64	Customer Service Attributes
65	Dependability / Reliability
66	Initiative / Responsible
67	Lively and Enthusiastic
68	Problem Solving / Decision Making
69	Professionalism
70	Quality and Efficiency
71	Team Work / Leadership

7. Emergency and Safety Equipment Checking (ESET)

Scope

Emergency and Safety Equipment checking is integrated into both the ESET and fire safety syllabi, and consists of periodic demonstration of a cabin crew members competency to use emergency and safety equipment on board the specific aircraft type. This checking may be in the form of practical or knowledge-based testing.

Checking Requirement

Conversion: Initial Entry.

Annual: Existing Seaplane cabin coordinator, every 12 or 36 months.

Reactivation: Re-entry. Previous check(s) are expired.

Checking Sequence

Either during ESET or Fire Safety training or during a line check.