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Q. What Type of Emergency and Survival Equipment am I required to have for Overwater Flights?

- A. The type of emergency and survival equipment you are required by the FAA to carry for overwater operations depends on three things:
1. What FAR part you are operating under (91, 121, 125, or 135)? If you are operating an aircraft you must know this – It's the law!
 2. How far over the water are you flying?
 3. What FAR part your aircraft is certificated under (23, 25, 27, or 29)? If you are not sure, consult the manufacturer.

First, answer these three questions. Then, using Table 1 below, determine the equipment needed for your operation and the route you are flying. If Table 1 indicates you are required to carry a life raft, use Table 2 to determine the type of life raft (Type I or Type II) you are required to carry based on the category of aircraft you operating.

Example: You are a Part 135 air taxi operator flying a Cessna 172. You are flying a route that takes you 65 miles from shore. From Table 1, you can determine that for your operation and route, you need life preservers, a raft, and an ELT attached to the raft. Per Note {7}, you do not need a First Aid Kit since you do not have more than 19 seats on the plane. Now go to Table 2. The Cessna 172 is a 4 person, single propeller airplane certificated under Part 23. Therefore, you can use a Type I or Type II life raft.

For Part 121 operations and transport category aircraft certificated for ditching, at least two life rafts per aircraft are required. Refer to Note {4} under Table 1 and Note {b} under Table 2.

CAUTION: The tables below are intended to be used for reference only as a guide to refer operators to the applicable Federal Aviation Regulations (FARs) affecting the operator's type of operation. The tables are not intended to be used in lieu of or as a supplement to the FARs. The operator should always confirm the contents of these tables with the FARs and seek the advice and guidance of his local FAA Flight Standards District Office (FSDO) when determination of his required level of compliance needs to be made.

Eastern Aero Marine is not responsible for any violations or fines against the operator resulting from information contained in this table, be it correct, incorrect, or incomplete.

Table 1 – FAA Required Emergency and Survival Equipment for Overwater Operations.

Type of Operation		Overwater Operations					
Operating Under FAA FAR...	Description of Operation	0-50 Miles		Extended Overwater Operations {8}			
		Required Equipment	Required per FAR...	> 50 to 100 Miles		> 100 Miles	
				Required Equipment	Required per FAR...	Required Equipment	Required per FAR...
Part 91 General	Small Aircraft (Private) {8} {9}	None		None		None	
Part 91 (91.501)	Larger Aircraft (Corporate) {8} {9}	First Aid Kit	91.513(d)	First Aid Kit Flotation Device {1}	91.513(d) 91.509(a)	First Aid Kit Life Preserver {2} Life Raft {3} ELT	91.513(d) 91.509(b)(1) 91.509(b)(2) 91.509(b)(4)
Part 121	Airlines	First Aid Kit {11} Flotation Device {1}	121.309(d) 121.340(a)	First Aid Kit {11} Life Preserver {2} Life Raft {4} ELT	121.309(d) 121.339(a)(1) 121.339(a)(2) 121.339(a)(4)	First Aid Kit {11} Life Preserver {2} Life Raft {4} ELT	121.309(d) 121.339(a)(1) 121.339(a)(2) 121.339(a)(4)
Part 125	Large Private Aircraft {8}{10}	First Aid Kit Flotation Device {1}	125.207(a)(1) 25.1415(e)	First Aid Kit {7} Life Preserver {2} Life Raft {5} ELT {6}	125.207(a)(1) 125.209(a)(1) 125.209 (a)(2) 125.209(b)	First Aid Kit {7} Life Preserver {2} Life Raft {5} ELT {6}	125.207(a)(1) 125.209(a)(1) 125.209(a)(2) 125.209(b)
Part 135	Air Taxi	First Aid Kit Flotation Device {1}	135.177(a)(1) 25.1415(e)	First Aid Kit {7} Life Preserver {2} Life Raft {5} ELT {6}	135.177(a)(1) 135.167(a)(1) 135.167(a)(2) 135.167(c)	First Aid Kit {7} Life Preserver {2} Life Raft {5} ELT {6}	135.177(a)(1) 135.167(a)(1) 135.167(a)(2) 135.167(c)

Notes for Table 1:

- {1} An “approved flotation means” is required for each occupant of the aircraft. This may be an individual flotation device approved under FAA TSO-C72b or C72c which can be an inflatable type {EAM Model GA-12 for example} or non-inflatable type {seat cushion}.
- {2} An approved life preserver equipped with a survivor locator light for each occupant of the aircraft. Life preservers are approved under FAA TSO-C13d, C13e, and C13f. Locator lights are approved under TSO-C85 or C85a.
- {3} Approved life raft{s} of a rated capacity to accommodate all the occupants of the aircraft. Each raft must be equipped with an approved survivor locator light, pyrotechnic signaling device, and a survival kit appropriately equipped for the route to be flown. Rafts are approved per FAA TSO-C70a. Locator lights are approved per TSO-C85 or C85a. Refer to Table 2 to determine which “type” of life raft is required for the category of aircraft operated.

Notes for Table 1 continued on next page.

Note for Table 1 (continued):

- {4} Approved life rafts of a rated capacity to accommodate all the occupants of the aircraft. Each raft must be equipped with an approved survivor locator light, pyrotechnic signaling device, and a survival kit appropriately equipped for the route to be flown. In the event of the loss of the largest life raft, the total overload capacity of all the remaining life rafts must be sufficient to accommodate all the occupants of the aircraft. A minimum of two {2} life rafts are required per aircraft. Rafts are approved per FAA TSO-C70a. Locator lights are approved per TSO-C85 or C85a. Refer to Table 2 to determine which “type” of life raft is required for the category of aircraft operated.
- {5} Approved life raft{s} of a rated capacity to accommodate all the occupants of the aircraft. Each raft must be equipped with an approved survivor locator light, pyrotechnic signaling device, and a survival kit appropriately equipped for the route to be flown or contain a canopy, radar reflector, repair kit, bailing bucket, signal mirror, whistle, knife, pump, oars, 75 ft. retaining line, compass dye marker, flashlight, food rations, water rations, fishing kit, and survival manual. Rafts are approved per FAA TSO-C70a. Locator lights are approved per TSO-C85 or C85a. Refer to Table 2 to determine which “type” of life raft is required for the category of aircraft operated.
- {6} An approved survival type {“S” Type} ELT attached to one of the life rafts on the aircraft.
- {7} Per FAR 125.207, one approved first aid kit is required per aircraft of more than 20 seats. Per FAR 135.177, one approved first aid kit is required per aircraft of more than 19 seats. FAA approval of first aid kits is held by the aircraft manufacturer as part of the aircraft’s approval or by the operator directly. First aid kit manufacturers do not receive approval. Operators using kits that comply with the FARs (such as EAM’s part nos. RE1013-107 or S3107-101) receive approval via their local FAA FSDO.
- {8} Per FAR Part 1 Definitions.
- {9} Small aircraft are \leq 12,500 lbs. max. certified takeoff weight.
Large aircraft are $>$ 12,500 lbs. max. certified takeoff weight.
- {10} Large private aircraft which have a seating configuration of 20 or more passengers and a maximum payload capacity of 6,000 lbs. Many business operators of large, private aircraft such as the Boeing 737 (Boeing Business Jet BBJ) or MD-80/90 operate under Part 125.
- {11} Per FAR Part 121 Appendix A, the minimum number of approved first aid kits required is 1 for 0-50 passenger seats; 2 for 51 to 150 passenger seats; 3 for 151 to 250 passenger seats; and 4 for more than 250 passenger seats. FAA approval of first aid kits is held by the aircraft manufacturer as part of the aircraft’s approval or by the operator directly. First aid kit manufacturers do not receive approval. Operators using kits that comply with the FARs (such as EAM’s part nos. RE1013-104, RE1013-107 or S3107-101) receive approval via their local FAA FSDO.

Table 2 – Type of Life Raft Required by FAA by Aircraft Type and Category.

Aircraft Type	Certified under FAA FAR...	Aircraft Category	Characteristics	Type of Life Raft Required {a}
Airplane (Fixed Wing Aircraft)	Part 23	Normal, Utility, and Acrobatic Category	<ul style="list-style-type: none"> Maximum takeoff weight of 12,500 lbs. Maximum passenger seating capacity of 9 persons. 	FAA TSO-C70a, Type II Single Tube Life Raft Or Type I Twin Tube Life Raft
		Commuter Category	<ul style="list-style-type: none"> Maximum takeoff weight of 19,000 lbs. Maximum passenger seating capacity of 19 persons. Multiple engines Propeller driven 	
	Part 25	Transport Category	<ul style="list-style-type: none"> All jets with 10 or more seats or greater than 12,500 lbs. maximum takeoff weight. All propeller driven airplanes with greater than 19 seats or greater than 19,000 lbs. maximum takeoff weight. 	FAA TSO-C70a, Type I Twin Tube Life Raft {b}
Helicopters (Rotorcraft)	Part 27	Normal Category	<ul style="list-style-type: none"> Maximum weight of 7000 lbs. Maximum passenger seating capacity of 9 persons. 	FAA TSO-C70a, Type II Single Tube Life Raft Or Type I Twin Tube Life Raft
	Part 29	Transport Category	<ul style="list-style-type: none"> Weight above 7000 lbs. Passenger seating capacity of 10 or more persons. 	FAA TSO-C70a, Type I Twin Tube Life Raft {b}

Notes for Table 2:

{a} TSO-C70a defines Type I life rafts “for use in any category aircraft” and Type II life rafts “for use in non-transport category aircraft.”

{b} If the aircraft is certificated for ditching per FAR 25.801 or FAR 29.801, then per FAR 25.1415 or FAR 29.1415, in the event of the loss of the largest life raft, the total overload capacity of all the remaining life rafts must be sufficient to accommodate all the occupants of the aircraft. A minimum of two {2} life rafts are required per aircraft.