

Cruise Ship NCOE Recommended Practice



RP-04: Best Practice for Documenting Escape Route Deficiencies

Revision Date: July 31, 2023

References:

74 SOLAS 20 II-2/13.1.1

“Safe escape routes shall be provided.”

74 SOLAS 20 II-2/13.1.2¹

“Escape routes shall be maintained in a safe condition, clear of obstacles.”

74 SOLAS 01 II-2/28.1.2

“Above the bulkhead deck there shall be at least two means of escape from each main vertical zone or similarly restricted space or group of spaces, at least one of which shall give access to a stairway forming a vertical escape.”

74 SOLAS 01 II-2/28.1.5.3

“Doorways and corridors and intermediate landings included in means of escape shall be not less than 900 mm in clear width.”

74 SOLAS 20 II-2/13.3.1.5

“Doors in escape routes shall, in general, open in way of the direction of escape.”

74 SOLAS 20 II-2/13.3.2.5.1²

“The means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck at all points of the escape route, including angles and intersections. Escape route marking must enable passengers to identify the routes of escape and readily identify the escape exits.”

74 SOLAS 20 II-2/13.3.2.5.2

“In passenger ships carrying more than 36 passengers, the requirements of the paragraph 3.2.5.1 shall also apply to the crew accommodation areas.”

74 SOLAS 20 II-2/13.3.2.6.2

“Escape doors from public spaces³ that are normally latched shall be fitted with a means of quick release. Such means shall consist of a door-latching mechanism incorporating a device that releases the latch upon the application of force in the direction of escape flow.”

Discussion: During COC exams, PSCOs verify means of escape throughout the vessel for compliance with SOLAS and the ship’s approved escape plan. PSCOs should examine clear escape routes, escape signage, low location lighting, and emergency lighting. The Marine Safety Center reviews the escape plan as part of the ICOC plan review process, and the ICOC team completes a visual verification of the

¹ This requirement does not apply to ships constructed before 1 July 2012. Obstructed escape routes must be evaluated for compliance with regulation 28.1.5.3 for older ships, providing at least 900 mm clear width.

² The requirements in regulation 28 for ships constructed before 1 July 2012 are similar.

³ Public spaces are those portions of the accommodation which are used for halls, dining rooms, lounges and similar permanently enclosed spaces.

means of escape for compliance with SOLAS. Still, PSCOs have observations such as obstructed escape routes, blocked or inoperable low location lighting, missing exit signage, and other escape route safety issues.

Best Practice for Documenting Obstruction of Escape Routes: PSCOs that observe obstructed escape routes should take a picture of the obstruction and note the specific obstruction items and location of the route. The condition of obstruction is subjective because routes are typically found to be partially blocked. The PSCO should determine if the obstruction renders the escape route less than the required minimum 900 mm in passenger areas, and 800 mm in spaces below the bulkhead deck. Additionally, the PSCO should ask the escorting officer to have the ship’s escape plan available for review upon return to the bridge or conference room. The PSCO should review the specific area of concern to confirm it is an escape route. If the plan indicates that the area of concern is an escape route, then a deficiency should be recorded. If it is not an escape route, then the SOLAS requirements do not apply. For newer ships, the applicable standard is SOLAS 20 II-2/13.1.2., but this is not an all-ships cite. Deficiencies on ships built before 1 July 2012 must be documented as noncompliant with SOLAS 97 or 01 II-2/28.1.5.3, the regulation specifying minimum clear widths of escape route stairways, doorways, corridors, and intermediate landings.

Vessel System: 07 – Fire Safety
 Vessel SubSystem: N/A – No Subsystem
 Vessel Component: 07120 – Means of Escape
 Deficiency Cite: 74 SOLAS 20 II-2/13.1.2

Example:

No.	Code	Description	Cite (<i>Convention</i>)
1	07120	Escape routes shall be maintained in a safe condition, clear of obstacles. PSCO observed stack of boxes obstructing escape route corridor from theater backstage area.	74 SOLAS 20 II-2/13.1.2

No.	Code	Description	Cite (<i>Convention</i>)
2	07120	Doorways and corridors and intermediate landings included in means of escape shall be not less than 900 mm in clear width. PSCO observed escape route corridor on deck 5, MVZ 3 starboard side obstructed by tables, rendering it less than 900 mm in clear width.	74 SOLAS 01 II-2/28.1.5.3

Best Practice for Documenting Low Location Lighting (LLL) Deficiencies: PSCOs that observe inoperable LLL, missing LLL, or blocked LLL should first determine if LLL is required in the noted space. The PSCO should take a picture, note the location of the route, and follow up with the ship’s escape plan as mentioned earlier. The proper way to document noncompliance for this item is as follows:

Vessel System: 07 – Fire Safety
 Vessel SubSystem: N/A – No Subsystem
 Vessel Component: 07120 – Means of Escape
 Deficiency Cite: 74 SOLAS 20 II-2/13.3.2.5.1

Example:

No.	Code	Description	Cite (<i>Convention</i>)
3	07120	The means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck at all points of the escape route, including angles and intersections. PSCO observed 3 meters of electrically powered low location lighting inoperable on deck 0 crew accommodation corridor, MVZ 3.	74 SOLAS 20 II-2/13.3.2.5.1

No.	Code	Description	Cite (<i>Convention</i>)
4	07120	The means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 0.3 m above the deck at all points of the escape route, including angles and intersections. PSCO observed 3 meters of low location lighting on deck 0 crew accommodation corridor, MVZ 3 blocked by pallets of engineering parts.	74 SOLAS 01 II-2/28.1.10

Best Practice for Documenting Escape Route Signage Deficiencies: PSCOs that observe escape exits with missing or obstructed signage should take a picture and note the space which has the deficiency. A best practice to evaluate escape route signage is to stand at different points within the accommodation space to see if exit signs are visible. The proper way to document noncompliance for this item is as follows:

Vessel System: 07 – Fire Safety

Vessel SubSystem: N/A – No Subsystem

Vessel Component: 07120 – Means of Escape

Deficiency Cite: 74 SOLAS 20 II-2/13.3.2.5.1⁴

Example:

No.	Code	Description	Cite (<i>Convention</i>)
5	07120	Escape route marking must enable passengers to identify the routes of escape and readily identify the escape exits. In passenger ships carrying more than 36 passengers, the requirements of the paragraph 3.2.5.1 shall also apply to the crew accommodation areas. PSCO observed missing escape signage in crew cabin corridors on deck 2, MVZs 1 and 2.	74 SOLAS 20 II-2/13.3.2.5.2

No.	Code	Description	Cite (<i>Convention</i>)
6	07120	Escape route marking must enable passengers to identify the routes of escape and readily identify the escape exits. PSCO observed electrically illuminated exit sign for aft escape route from deck 5 casino as inoperable.	74 SOLAS 01 II-2/28.1.10

⁴ The corresponding SOLAS requirement in crew accommodation areas, II-2/13.3.2.5.2 is not in the Scorecard, and must be entered manually.

Best Practice for Documenting Deficiencies Regarding Escape Doors Without Means for Quick Release: PSCOs that observe thumb-turn latches, locks, and other devices that do not open when a force is applied in the direction of escape, should consider potential noncompliance when such doors are within or leading from public spaces. However, the PSCO should use judgement in considering the intent of the regulation to facilitate evacuation of large amounts of people. A best practice is to document the absence of a means for quick release for any public spaces that is greater than 50 m² or has an occupancy of more than 50 persons. The proper way to document noncompliance for this item is as follows:

Vessel System: 07 – Fire Safety
 Vessel SubSystem: N/A – No Subsystem
 Vessel Component: 07120 – Means of Escape
 Deficiency Cite: 74 SOLAS 20 II-2/13.3.2.6.2⁵

Example:

No.	Code	Description	Cite (<i>Convention</i>)
7	07120	Escape doors from public spaces that are normally latched shall be fitted with a means of quick release. Such means shall consist of a door-latching mechanism incorporating a device that releases the latch upon the application of force in the direction of escape flow. PSCO observed forward escape door from Excelsior Lounge equipped with a locking device that prevents the release of the latch when pressure is applied to the releasing device.	74 SOLAS 20 II-2/13.3.2.6.2

Best Practice for Documenting Deficiencies Regarding Escape Doors Opening in the Direction Opposite of Escape: PSCOs that observe escape doors in accommodation spaces that do not open in the way of the direction of escape should consider the potential for noncompliance. The relevant SOLAS regulatory language inserts the phrase “in general”, which has allowed Flag Administrations to approve cases of doors opening in the direction opposing escape. The PSCO should take a picture, note the location of the door, and ask for documentation of Flag approval of the arrangement. If no documentation can be provided, then the observation should be recorded as a deficiency. The proper way to document noncompliance for this item is as follows:

Vessel System: 07 – Fire Safety
 Vessel SubSystem: N/A – No Subsystem
 Vessel Component: 07120 – Means of Escape
 Deficiency Cite: 74 SOLAS 20 II-2/13.3.1.5⁵

Example:

No.	Code	Description	Cite (<i>Convention</i>)
8	07120	Doors in escape routes shall, in general, open in way of the direction of escape. PSCO observed escape door in Explorers Lounge opening in the direction opposite of escape.	74 SOLAS 20 II-2/13.3.1.5

⁵ This requirement may not be applied to ships built before 1 July 2012.

Best Practice for Documenting Deficiencies Regarding Safe Escape Routes from Spaces in Which the Crew is Normally Employed Within Other Spaces: PSCOs that observe room-in-room configurations without safe escape routes should consider the potential for noncompliance. Acceptable means of escape are stairways, corridors, and open deck escape routes. In cases where acceptable means of escape are not provided for a space within a space, an equivalent level of safety may be considered, such as immediate notification in the occupied interior space of a fire in the surrounding space. PSCOs should be concerned about spaces that are passenger and crew accommodation spaces, and spaces in which the crew are normally employed. The proper way to document noncompliance for this item is as follows:

Vessel System: 07 – Fire Safety
 Vessel SubSystem: N/A – No Subsystem
 Vessel Component: 07120 – Means of Escape
 Deficiency Cite: 74 SOLAS 20 II-2/13.1.1

Example:

No.	Code	Description	Cite (<i>Convention</i>)
9	07120	Safe escape routes shall be provided. Galley workshop in deck 4 galley is equipped with an equivalent level of safety for immediate notification for escape of the crew normally employed in the space. PSCO observed the notification alarm inoperable.	74 SOLAS 20 II-2/13.1.1

No.	Code	Description	Cite (<i>Convention</i>)
10	07120	Above the bulkhead deck there shall be at least two means of escape from each main vertical zone or similarly restricted space or group of spaces, at least one of which shall give access to a stairway forming a vertical escape. PSCO observed a galley workshop within the deck 4 galley without a safe escape route to a stairway, nor an acceptable means to notify crew normally employed in the space of a fire in the surrounding space.	74 SOLAS 01 II-2/28.1.2