Introduction.
Resolution MSC.256(84) adopted by the IMO in 2008 made a number of important changes to SOLAS including the introduction of a new Regulation 3.9 in Chapter II-1.

Requirements.
Regulation 3.9 says:

“1 Ships constructed on or after 1 January 2010 shall be provided with means of embarkation on and disembarkation from ships for use in port and in port related operations, such as gangways and accommodation ladders, in accordance with paragraph 2, unless the Administration deems that compliance with a particular provision is unreasonable or impractical”.

2 The means of embarkation and disembarkation required in paragraph 1 shall be constructed and installed based on the guidelines developed by the Organization.

3 For all ships the means of embarkation and disembarkation shall be inspected and maintained in suitable condition for their intended purpose, taking into account any restrictions related to safe loading. All wires used to support the means of embarkation and disembarkation shall be maintained as specified in regulation III/20.4”

MSC.1 Circ 1331 was issued to provide guidance on the construction, testing and maintenance of these means of embarkation. The text of the IMO Circular is annexed to this Circular.

Operators are asked to note that sub-paragraph 3 of regulation 3-9 applies to “ALL SHIPS”, hence the maintenance and inspection requirements as well as the marking requirements are to be followed in ships constructed before 1st January 2010 as well as those constructed after that date.
Regulation III/20.4 which is referred to in .3 above states:

“4 Maintenance of falls

Falls used in launching shall be inspected periodically* with special regard for areas passing through sheaves, and renewed when necessary due to deterioration of the falls or at intervals of not more than 5 years, whichever is the earlier.”

“Periodically*” in this context is regarded by the Antigua and Barbuda administration in this case as meaning monthly and it is recommended that any falls used in gangway systems are included in the monthly checks of lifesaving equipment required by other parts of SOLAS.

Ships constructed before 1st January 2010 and which have gangways and other means of embarkation replaced should ensure that the replacements comply with MSC.1/1331 as far as is practical.

SOLAS permits an administration to deem compliance impractical and to accept alternative means in cases where:

1. A vessel has low freeboards and is provided with boarding ramps, or

2. A vessel is engaged in voyages between designated ports where appropriate shore accommodation / embarkation ladders (platforms) are provided.

ADOMS will accept these relaxations on application by owners / managers in any case where they are considered to apply.

April 2013.
ANNEX 1

Text of MSC.1 Circ.1331

GUIDELINES FOR CONSTRUCTION, INSTALLATION, MAINTENANCE AND INSPECTION/SURVEY OF MEANS OF EMBARKATION AND DISEMBARKATION

1 APPLICATION
This document is intended to provide Guidelines for the construction, installation, maintenance and inspection/survey of means of embarkation and disembarkation required under regulation II-1/3-9 of the 1974 SOLAS Convention, adopted by resolution MSC.256 (84). Where means of embarkation and disembarkation other than those specifically covered by these Guidelines are fitted, an equivalent level of safety should be provided.

2 CONSTRUCTION
2.1 Accommodation ladders and gangways for means of embarkation and disembarkation which are provided on board ships constructed on or after 1 January 2010 should meet applicable international standards such as

ISO 5488:1979, Shipbuilding – accommodation ladders,

ISO 7061:1993, Shipbuilding – aluminium shore gangways for seagoing vessels and/or national standards and/or other requirements recognized by the Administration.

Such accommodation ladders and gangways fitted on ships constructed before 1 January 2010, which are replaced after that date, should, in so far as is reasonable and practicable, comply with these Guidelines.

2.2 The structure of the accommodation ladders and gangways and their fittings and attachments should be such as to allow regular inspection, maintenance of all parts and, if necessary, lubrication of their pivot pin. Special care should be taken to ensure that the welding connection works are properly performed.

2.3 The construction and test of accommodation ladder winches should be in accordance with applicable international standards such as;


3 INSTALLATION
3.1 Location
As far as practicable, the means of embarkation and disembarkation should be sited clear of the working area and should not be placed where cargo or other suspended loads may pass overhead.

3.2 Lighting
Adequate lighting should be provided to illuminate the means of embarkation and disembarkation, the position on deck where persons embark or disembark and the controls of the arrangement.
3.3 Lifebuoy
A lifebuoy equipped with a self-igniting light and a buoyant lifeline should be available for immediate use in the vicinity of the embarkation and disembarkation arrangement when in use.

3.4 Arrangement
3.4.1 Each accommodation ladder should be of such a length to ensure that, at a maximum design operating angle of inclination, the lowest platform will be not more than 600 mm above the waterline in the lightest seagoing condition, as defined in SOLAS regulation III/3.13.

3.4.2 The arrangement at the head of the accommodation ladder should provide direct access between the ladder and the ship’s deck by a platform securely guarded by handrails and adequate handholds. The ladder should be securely attached to the ship to prevent overturning.

3.4.3 For ships on which the height of the embarkation/disembarkation deck exceeds 20 m above the waterline specified in paragraph 3.4.1 and on other ships for which the Administration considers compliance with the provisions of paragraph 3.4.1 impractical, an alternative means of providing safe access to the ship or supplementary means of safe access to the bottom platform of the accommodation ladder may be accepted.

3.5 Marking
Each accommodation ladder or gangway should be clearly marked at each end with a plate showing the restrictions on the safe operation and loading, including the maximum and minimum permitted design angles of inclination, design load, maximum load on bottom end plate, etc.

Where the maximum operational load is less than the design load, it should also be shown on the marking plate.

3.6 Test
3.6.1 After installation, the winch and the accommodation ladder should be operationally tested to confirm proper operation and condition of the winch and the ladder after the test.

3.6.2 The winch should be tested as a part of the complete accommodation ladder unit through a minimum of two times hoisting and lowering of the accommodation ladder in accordance with the onboard test requirement specified in applicable international standards such as ISO 7364:1983.

3.6.3 Every new accommodation ladder should be subjected to a static load test of the specified maximum working load upon installation.

3.7 Positioning
3.7.1 Gangways should not be used at an angle of inclination greater than 30° from the horizontal and accommodation ladders should not be used at an angle greater than 55° from the horizontal, unless designed and constructed for use at angles greater than these and marked as such, as required by paragraph 3.5.
3.7.2 Gangways should never be secured to a ship’s guardrails unless they have been
designed for that purpose. If positioned through an open section of bulwark or railings, any
remaining gaps should be adequately fenced.

3.7.3 Adequate lighting for means of embarkation and disembarkation and the immediate
approaches should be ensured from the ship and/or the shore in hours of darkness.

3.8 Rigging (safety net)
A safety net should be mounted in way of the accommodation ladders and gangways where
it is possible that a person may fall from the means of embarkation and disembarkation or
between the ship and quayside.

3.9 Verification
Upon installation, the compliance of the entire arrangement with these Guidelines should be
verified.

4 MAINTENANCE

4.1 Accommodation ladders and gangways, including associate winch and fittings, should be
properly maintained and inspected at appropriate intervals as required by SOLAS regulation
III/20.7.2, in accordance with manufacturers’ instructions. Additional checks should be made
each time the accommodation ladder and gangway is rigged, looking out for signs of
distortion, cracks and corrosion. Close examination for possible corrosion should be carried
out, especially when an aluminium accommodation ladder/gangway has fittings made of mild
steel.

4.2 Bent stanchions should be replaced or repaired and guard ropes should be inspected for
wear and renewed where necessary.

4.3 Moving parts should be free to turn and should be greased as appropriate.

4.4 The lifting equipment should be inspected, tested and maintained paying careful
attention to the condition of the hoist wire. The wires used to support the means of
embarkation and disembarkation should be renewed when necessary, as required by
SOLAS regulation II-1/3-9.

4.5 Arrangements should also be made to examine the underside of gangways and
accommodation ladders at regular intervals.

4.6 All inspections, maintenance work and repairs of accommodation ladders and gangways
should be recorded in order to provide an accurate history for each appliance. The
information to be recorded appropriately on board should include the date of the most recent
inspection, the name of the person or body who carried out that inspection, the due date for
the next inspection and the dates of renewal of wires used to support the embarkation and
disembarkation arrangement.
5  EXAMINATION AND OPERATIONAL TEST DURING SURVEYS REQUIRED BY SOLAS REGULATIONS I/7 AND I/8

5.1 Accommodation ladders/gangways and davits

5.1.1 Accommodation ladder

5.1.1.1 The following items should be thoroughly examined during annual surveys required by SOLAS regulations I/7 and I/8 and checked for satisfactory condition of the accommodation ladder:

1. steps;
2. platforms;
3. all support points such as pivots, rollers, etc.;
4. all suspension points such as lugs, brackets, etc.;
5. stanchions, rigid handrails, hand ropes and turntables;
6. davit structure, wire and sheaves, etc.; and
7. any other relevant provisions stated in these Guidelines.

5.1.1.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.1.1.1, the accommodation ladder should be operationally tested with the specified maximum operational load of the ladder.

5.1.2 Gangway

5.1.2.1 The following items should be thoroughly examined during annual surveys required by SOLAS regulations I/7 and I/8 and checked for satisfactory condition of the gangway:

1. treads;
2. side stringers, cross-members, decking, deck plates, etc.;
3. all support points such as wheel, roller, etc.;
4. stanchions, rigid handrails, hand ropes; and
5. any other relevant provisions stated in these Guidelines.

5.1.2.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.1.2.1, the gangway should be operationally tested with the specified maximum operational load of the gangway.

5.2 Winch

5.2.1 During annual surveys required by SOLAS regulations I/7 and I/8, the following items should be examined for satisfactory condition:

1. brake mechanism including condition of brake pads and band brake, if fitted;
2. remote control system; and
3. power supply system (motor).

5.2.2 At every five-yearly survey, upon completion of the examination required by paragraph 5.2.1, the winch should be operationally tested with the specified maximum operational load of the accommodation ladder.
5.3 Tests
5.3.1 The tests specified in sections 5.1 and 5.2 are for the purpose of confirming the proper operation of the accommodation ladder, gangway and/or winch, as appropriate.

5.3.2 The load used for the test should be:
   .1 the design load; or
   
   .2 the maximum operational load, if this is less than the design load and marked as per paragraph 3.5; or
   
   .3 the load nominated by the shipowner or operator only in those cases where the design load or maximum operational load is not known (e.g., for accommodation ladders or gangways which are provided on board ships constructed prior to 1 January 2010), in which case that nominated load should be used as the maximum operational load for all purposes within these Guidelines.

5.3.3 The tests should be carried out with the load applied as uniformly as possible along the length of the accommodation ladder or gangway, at an angle of inclination corresponding to the maximum bending moment on the accommodation ladder or gangway.

5.3.4 Following satisfactory completion of the applicable test(s) without permanent deformation or damage to the tested item, the load used for that test should be marked as the maximum operational load in accordance with paragraph 3.5.

5.4 Fittings and davits
During annual surveys required by SOLAS regulations I/7 and I/8, all fittings and davits on the ship’s deck associated with accommodation ladders and gangways should be examined for satisfactory condition.

5.5 Means of access to deck
During annual surveys required by SOLAS regulations I/7 and I/8, the fittings or structures for means of access to decks such as handholds in a gateway or bulwark ladder and stanchions should be examined for satisfactory condition.