

RESOLUTION A.539(13)

*Adopted on 17 November 1983
Agenda item 10(b)*

**CERTIFICATION OF SKIPPERS AND OFFICERS IN CHARGE
OF A NAVIGATIONAL WATCH ON FISHING VESSELS
OF 24 METRES IN LENGTH AND OVER**

THE ASSEMBLY,

RECALLING Article 16(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations concerning maritime safety,

NOTING regulation 13, chapter V of the International Convention for the Safety of Life at Sea, 1974, which requires Contracting Governments to undertake, each for its national ships, to maintain or, if necessary, to adopt measures for the purpose of ensuring that from the point of view of safety of life at sea all ships shall be sufficiently and efficiently manned,

CONSIDERING that the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, is not applicable to fishing vessels,

CONSIDERING ALSO resolution 8 of the International Conference on Safety of Fishing Vessels, 1977, which invites the Organization to consider training and certification of crews of fishing vessels,

DESIRING to promote safety of life at sea and protection of the marine environment,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its forty-eighth session,

1. ADOPTS the recommendations on minimum requirements for certification of skippers and officers in charge of a navigational watch on fishing vessels of 24 metres in length and over, set out in the Annexes to this resolution;
2. URGES Member Governments to implement these recommendations;
3. REQUESTS the Maritime Safety Committee to keep this resolution under review and to report as necessary to the Assembly.

ANNEX 1

DEFINITIONS

For the purpose of this resolution the following definitions apply:

- 1 "Approved" means approved by the Administration.
- 2 "Fishing vessel" means any vessel used commercially for catching fish, whales, seals, walrus or other living resources of the sea.
- 3 "Limited waters" means those waters having limits defined by the Administration within which a degree of safety is considered to exist which enables the standards of qualification and certification for skippers and crews of fishing vessels to be set at a lower level than for service outside the defined limits.

In determining the extent of limited waters the Administration should take into consideration the following factors:

- .1 the size of the fishing vessels concerned;
 - .2 the distance from a port of refuge;
 - .3 the provision of electronic position-fixing devices;
 - .4 the provision of rescue services and communication facilities;
 - .5 the provision of meteorological broadcast services;
 - .6 the weather conditions normally prevailing in the waters;
 - .7 the limitations imposed due to ice accretion;
 - .8 normal navigational hazards;
 - .9 traffic conditions.
- 4 "Unlimited waters" means waters beyond limited waters.

ANNEX 2

RECOMMENDATION ON MINIMUM REQUIREMENTS FOR CERTIFICATION OF SKIPPERS ON FISHING VESSELS OF 24 METRES IN LENGTH AND OVER OPERATING IN UNLIMITED WATERS

- 1 Every skipper on a fishing vessel of 24 metres in length and over operating in unlimited waters should hold an appropriate certificate.
- 2 Every candidate for certification should:
 - .1 satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
 - .2 meet the requirements for certification as an officer in charge of a navigational watch on fishing vessels of 24 metres in length and over and have approved seagoing service of not less than 12 months as an officer in charge of a navigational watch on fishing vessels of not less than 12 metres in length. However, an Administration may allow the substitution of a period of approved seagoing service as an officer in charge of a navigational watch on merchant ships;
 - .3 have passed an appropriate examination or examinations to the satisfaction of the Administration. Such examination or examinations should include the material set out in the appendix to this recommendation. A candidate for examination who holds a valid certificate of competency issued in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, need not be re-examined in those subjects listed in the appendix which were passed at a higher or equivalent level for issue of the Convention certificate.

APPENDIX

MINIMUM KNOWLEDGE REQUIRED FOR CERTIFICATION OF SKIPPERS ON FISHING VESSELS OF 24 METRES IN LENGTH AND OVER OPERATING IN UNLIMITED WATERS

1 The syllabus given below is compiled for examination of candidates for certification as skippers on fishing vessels of 24 metres in length and over operating in unlimited waters. Bearing in mind that the skipper has ultimate responsibility for the safety of the vessel and its crew at all times including during fishing operations, examination should be designed to test the candidate's ability to assimilate all available information that affects the safety of the vessel and its crew in accordance with the syllabus.

2 Navigation and position determination

2.1 Voyage planning and navigation for all conditions:

- .1 by acceptable methods of determining ocean tracks;
- .2 within restricted waters;
- .3 where applicable, in ice;
- .4 in restricted visibility;
- .5 where applicable, in traffic separation schemes;
- .6 in areas affected by tides or currents.

2.2 Position determination:

- .1 by celestial observations;
- .2 by terrestrial observations, including the ability to use bearings from landmarks and aids to navigation such as lighthouses, beacons and buoys in conjunction with appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix;
- .3 using, to the satisfaction of the Administration, modern ship electronic navigational aids as provided in fishing vessels, with specific reference to knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing.

3 Watchkeeping

3.1 Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, including those Annexes concerned with safe navigation.

3.2 Demonstrate knowledge of Recommended Basic Principles to be Observed in Keeping a Navigational Watch on Board Fishing Vessels.*

* Assembly resolution A.484(XII).

4 Radar equipment

4.1 Demonstrate in conjunction with the use of radar simulator* or, when not available, manoeuvring board, knowledge of the fundamentals of radar and ability in the operation and use of radar, and in the interpretation and analysis of information obtained from the equipment, including:

- .1 factors affecting performance and accuracy;
- .2 setting up and maintaining displays;
- .3 detection of misrepresentation of information, false echoes, sea return, etc.;
- .4 range and bearing;
- .5 identification of critical echoes;
- .6 course and speed of other ships;
- .7 time and distance of closest approach of crossing, meeting or overtaking ships;
- .8 detecting course and speed changes of other ships;
- .9 effect of changes in own vessel's course or speed or both;
- .10 application of the International Regulations for Preventing Collisions at Sea, 1972.

5 Magnetic and gyro-compasses

5.1 Ability, using terrestrial and celestial means, to determine and apply the errors of the magnetic and gyro-compasses.

6 Meteorology and oceanography

6.1 Knowledge of meteorological instruments and their application.

6.2 Ability to apply meteorological information available.

6.3 Knowledge of characteristics of various weather systems, including, at the discretion of the Administration, tropical revolving storms and avoidance of storm centres and the dangerous quadrants.

6.4 Knowledge of weather conditions liable to endanger the vessel including, at the discretion of the Administration, fog, icebergs, ice accretion.

6.5 Ability to use appropriate navigational publications on tides and currents.

6.6 Ability to calculate times and heights of high and low water and estimate the direction and rate of tidal streams.

7 Fishing vessel manoeuvring and handling

7.1 Manoeuvring and handling of a fishing vessel in all conditions including the following:

- .1 berthing, unberthing and anchor work under various conditions of wind and tide;
- .2 manoeuvring in shallow water;

* Attention is drawn to resolution 18 of the 1978 STW Conference.

- .3 management and handling of fishing vessels in heavy weather, including appropriate speed, particularly in following and quartering seas, assisting a ship or aircraft in distress, means of keeping an unmanageable vessel out of a sea trough, lessening drift and use of oil;
- .4 manoeuvring the vessel during fishing operations with special regard to factors which could adversely affect the vessel's safety during such operations;
- .5 precautions in manoeuvring for launching boats or liferafts in bad weather;
- .6 methods of taking on board survivors from lifeboats or liferafts;
- .7 where applicable, practical measures to be taken when navigating in ice or conditions of ice accretion on board the vessel;
- .8 the use of, and manoeuvring in, traffic separation schemes;
- .9 the importance of navigating at reduced speed to avoid damage caused by own vessel's bow or stern wave;
- .10 transferring fish at sea to factory ships or other vessels.

8 Fishing vessel construction and stability

- 8.1 General knowledge of the principal structural members of a vessel and the proper names of the various parts.
- 8.2 Knowledge of the theories and factors affecting trim and stability and measures necessary to preserve safe trim and stability.
- 8.3 Demonstrate use of stability and trim tables and pre-calculated operating conditions.
- 8.4 Knowledge of effects of free surfaces and ice accretion, where applicable.
- 8.5 Knowledge of effects of water on deck.
- 8.6 Knowledge of the significance of weathertight and watertight integrity.

9 Catch handling and stowage

- 9.1 The stowage and securing of catch on board vessels, including fishing gear.
- 9.2 Loading and discharging operations, with special regard to heeling moments from gear and catch.

10 Fishing vessel power plants

- 10.1 Operating principles of marine power plants in fishing vessels.
- 10.2 Vessel's auxiliary machinery.
- 10.3 General knowledge of marine engineering terms.

11 Fire prevention and fire-fighting appliances

- 11.1 Organization of fire drills.
- 11.2 Classes and chemistry of fire.
- 11.3 Fire-fighting systems.

11.4 Attendance at an approved fire-fighting course.

11.5 Knowledge of provisions concerning fire-fighting equipment.

12 Emergency procedures

12.1 Precautions when beaching a vessel.

12.2 Action to be taken prior to, and after, grounding.

12.3 Action to be taken when the gear becomes fast to the ground or other obstruction.

12.4 Floating a grounded vessel, with and without assistance.

12.5 Action to be taken following a collision.

12.6 Temporary plugging of leaks.

12.7 Measures for the protection and safety of crew in emergencies.

12.8 Limiting damage and salvaging the vessel following a fire or explosion.

12.9 Abandoning ship.

12.10 Emergency steering, rigging and use of jury steering and the means of rigging a jury rudder, where practicable.

12.11 Rescuing persons from a ship in distress or from a wreck.

12.12 Man-overboard procedures.

12.13 Towing and being towed.

13 Medical care

13.1 Knowledge of first aid.

13.2 Knowledge of procedures for obtaining medical advice by radio.

13.3 A thorough knowledge of the use of the following publications:

- .1 International Medical Guide for Ships or equivalent national publications.
- .2 Medical section of the International Code of Signals.

14 Maritime law

14.1 A knowledge of international maritime law as embodied in the international agreements and conventions as they affect the specific obligations and responsibilities of the skipper, particularly those concerning safety and the protection of the marine environment. Particular regard should be paid to the following subjects:

- .1 certificates and other documents required to be carried on board fishing vessels by international conventions, how they may be obtained and the period of their legal validity;
- .2 responsibilities under the relevant requirements of the Torremolinos International Convention for the Safety of Fishing Vessels, 1977;
- .3 responsibilities under the relevant requirements of chapter V of the International Convention for the Safety of Life at Sea, 1974;

- .4 responsibilities under international conventions for the prevention of pollution from ships;
- .5 maritime declarations of health; the requirements of the international health regulations;
- .6 responsibilities under the Convention on the International Regulations for Preventing Collisions at Sea, 1972;
- .7 responsibilities under other international instruments affecting the safety of the ship and crew.

14.2 The extent of knowledge of national maritime legislation is left to the discretion of the Administration but should include national arrangements for implementing applicable international agreements and conventions.

15 English language

15.1 Adequate knowledge of the English language enabling the skipper to use charts and other nautical publications, to understand meteorological information and measures concerning the vessel's safety and operation and to express himself clearly in his communications with other ships or coast stations. Ability to understand and use the IMO Standard Marine Navigational Vocabulary.

16 Communications

16.1 Ability to transmit and receive messages by Morse light and to use the International Code of Signals; where the Administration has examined candidates in these subjects at lower levels of certification, they may have the option of not re-examining in these subjects.

16.2 Knowledge of procedures used in radiotelephone communication and ability to use radio-telephone equipment, in particular with respect to distress, urgency, safety and navigational messages.

16.3 Knowledge of the adverse effect of misuse of the radiotelephone equipment.

16.4 Where appropriate, a knowledge of the procedures for emergency distress signal by radiotelegraphy as prescribed in the Radio Regulations.

17. Life-saving

17.1 A thorough knowledge of the regulations on life-saving appliances and on emergency procedures, musters and drills (the Torremolinos International Convention for the Safety of Fishing Vessels, 1977), organization of abandon ship drills, lifeboats, liferafts and other life-saving equipment.

18 Search and rescue

18.1 A thorough knowledge of the IMO Merchant Ship Search and Rescue Manual (MERSAR).

19 The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels

19.1 Knowledge of part A.

20 Methods for demonstration of proficiency

20.1 Navigation.

20.1.1 Demonstrate the use of sextant, pelorus, azimuth mirror, ability to plot position course, bearings.

- 20.2 Convention on the International Regulations for Preventing Collisions at Sea, 1972
 - 20.2.1 Use of small models displaying proper signals or lights, or navigation light simulator.
 - 20.2.2 Manoeuvring board or radar simulator.
- 20.3 Radar
 - 20.3.1 Radar simulator or manoeuvring board.
- 20.4 Fire-fighting.
 - 20.4.1 Attendance at an approved fire-fighting course.
- 20.5 Communications.
 - 20.5.1 Visual and vocal practical test.
- 20.6 Life-saving.
 - 20.6.1 Handling of life-saving appliances, including the donning of lifejackets.

ANNEX 3

RECOMMENDATION ON MINIMUM REQUIREMENTS FOR CERTIFICATION OF OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH ON FISHING VESSELS OF 24 METRES IN LENGTH AND OVER OPERATING IN UNLIMITED WATERS

- 1 Every officer in charge of a navigational watch on a fishing vessel of 24 metres in length and over operating in unlimited waters should hold an appropriate certificate.
- 2 Every candidate for certification should:
 - .1 be not less than 18 years of age;
 - .2 satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
 - .3 have approved seagoing service in the deck department on fishing vessels of not less than 24 months; however, the Administration may allow the substitution of:
 - .3.1 a short period of special training which is at least equivalent in value to the period of the required seagoing service it replaces;
 - .3.2 a period of approved seagoing service on merchant ships;
 - .4 have passed an appropriate examination or examinations to the satisfaction of the Administration. Such examination or examinations should include the material set out in the appendix to this Recommendation. A candidate for examination who holds a valid certificate of competency issued in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 need not be re-examined in those subjects listed in the appendix which were passed at a higher or equivalent level for issue of the Convention certificate.

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1 The syllabus given below is compiled for examination of candidates for certification as officers in charge of a navigational watch on fishing vessels of 24 metres in length and over operating in unlimited waters.

2 Celestial navigation

Ability to use a celestial body to determine compass errors.

3 Terrestrial and coastal navigation

3.1 Ability to determine the vessel position by the use of:

- .1 landmarks;
- .2 aids to navigation, including lighthouses, beacons and buoys;
- .3 dead reckoning, taking into account winds, tides, currents and speed by propeller revolutions per minute and by log.

3.2 Thorough knowledge of and ability to use navigational charts and publications such as sailing directions, tide tables, notices to mariners and radio navigational warnings.

4 Radar navigation

4.1 Knowledge of the fundamentals of radar and ability in the operation and use of radar and ability to interpret and analyse information obtained by use of radar including the following:

- .1 factors affecting performance and accuracy;
- .2 setting up and maintaining displays;
- .3 detection of misrepresentation of information, false echoes, sea return, etc.;
- .4 range and bearing;
- .5 identification of critical echoes;
- .6 course and speed of other ships;
- .7 time and distance of closest approach of crossing, meeting or overtaking ships;
- .8 detecting course and speed changes of other ships;
- .9 effect of changes in own vessel's course or speed or both;
- .10 application of the International Regulations for Preventing Collisions at Sea, 1972.

5 Watchkeeping

5.1 Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, including those Annexes concerned with safe navigation.

5.2 Demonstrate knowledge of the content of the Recommended Basic Principles to be Observed in Keeping a Navigational Watch on board Fishing Vessels.*

6 Electronic systems of position fixing and navigation

6.1 Ability to determine the ship's position by the use of electronic navigational aids to the satisfaction of the Administration.

7 Radio direction-finders and echo-sounders

7.1 Ability to operate the equipment and apply the information correctly.

8 Meteorology

8.1 Knowledge of shipborne meteorological instruments and their application.

8.2 Knowledge of the characteristics of the various weather systems.

9 Magnetic and gyro-compasses

9.1 Care and use of compasses and associated equipment.

10 Radiotelephony and visual signalling

.1 Ability to transmit and receive messages by Morse light.

.2 Ability to use the International Code of Signals.

.3 Knowledge of procedures used in radiotelephone communications and ability to use radiotelephone equipment, in particular with respect to distress, urgency, safety and navigational messages.

.4 Knowledge of the adverse effect of misuse of radiotelephone equipment.

11 Fire prevention and fire-fighting appliances

.1 Knowledge of classes and chemistry of fire.

.2 Knowledge of fire-fighting systems and procedures.

.3 Attendance at an approved fire-fighting course.

12 Life-saving

Ability to direct abandon ship drills and knowledge of the operations of life-saving appliances and their equipment, including portable radio apparatus. Survival at sea techniques including attendance at an approved survival at sea course.

13 Emergency procedures and safe working practices for fishermen

Knowledge of the items listed in the appropriate sections of the FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels, part A, and in chapter VIII of the Annex to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977.

14 Fishing vessels manoeuvring and handling

Basic knowledge of manoeuvring and handling a fishing vessel, including the following:

* Assembly resolution A.484(XII).

- .1 berthing, unberthing, anchoring and manoeuvring alongside other vessels at sea;
- .2 manoeuvring during fishing operations with special regard to factors which could adversely affect the vessel's safety during such operations;
- .3 effects of wind and tide/current on ship handling;
- .4 manoeuvring in shallow water;
- .5 management of fishing vessels in heavy weather;
- .6 rescuing persons and assisting a ship or aircraft in distress;
- .7 towing and being towed;
- .8 man overboard procedure;
- .9 where applicable, practical measures to be taken when navigating in ice or in conditions of ice accretion on board the vessel.

15 Fishing vessels construction

General knowledge of the principal structural members of a vessel.

16 Vessel stability

Knowledge of factors affecting stability and the use of stability information.

17 Catch handling and stowage

Knowledge of safe handling and stowage of catch and the effect of these factors on the safety of the vessel.

18 English language

Adequate knowledge of the English language enabling the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship's safety and operation. Ability to understand and use the IMO Standard Marine Navigational Vocabulary.

19 Medical aid

Knowledge of first aid procedures. Practical application of medical guides and advice by radio.

20 Search and rescue

Adequate knowledge of search and rescue procedures based on the IMO Merchant Ship Search and Rescue Manual (MERSAR).

21 Prevention of pollution of the marine environment

Knowledge of the precautions to be observed to prevent pollution of the marine environment.

ANNEX 4

**RECOMMENDATION ON MINIMUM REQUIREMENTS
FOR CERTIFICATION OF SKIPPERS ON FISHING
VESSELS OF 24 METRES IN LENGTH AND OVER
OPERATING IN LIMITED WATERS**

1 Every skipper on a fishing vessel of 24 metres in length and over operating in limited waters should, unless he holds a certificate issued in compliance with Annex 2, hold an appropriate certificate issued in compliance with at least the provisions of this Annex.

2 Every candidate for certification should:

- .1 satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
- .2 meet the requirements for certification as an officer in charge of a navigational watch on fishing vessels of 24 metres in length and over operating in limited waters and have approved seagoing service as an officer in charge of a navigational watch on fishing vessels of not less than 12 metres in length. However, an Administration may allow the substitution of a period of approved seagoing service as officer in charge of a navigational watch on merchant ships;
- .3 have passed an appropriate examination or examinations to the satisfaction of the Administration. Such examination or examinations should include the material set out in the appendix to this Recommendation.

The Administration, bearing in mind the effect on the safety of all ships and structures which may be operating in the same limited waters, should consider the limited waters it has defined in accordance with Annex 1 to this resolution and determine any additional material that should be included in the examination or examinations.

A candidate for examination who holds a valid certificate of competency issued in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, need not be re-examined in those subjects listed in the appendix which were passed at a higher or equivalent level for issue of the Convention certificate.

APPENDIX

**MINIMUM KNOWLEDGE REQUIRED FOR CERTIFICATION OF
SKIPPERS ON FISHING VESSELS OF 24 METRES IN LENGTH
AND OVER OPERATING IN LIMITED WATERS**

1 The syllabus given below is compiled for examination of candidates for certification as skippers on fishing vessels of 24 metres in length and over operating in limited waters. Bearing in mind that the skipper has ultimate responsibility for the safety of the vessel and its crew at all times including during fishing operations, examination should be designed to test the candidate's ability to assimilate all available information that affects the safety of the vessel and its crew in accordance with the syllabus.

2 Navigation and position determination

2.1 Voyage planning and navigation for all conditions:

- .1 by acceptable methods of determining tracks;
- .2 within restricted waters;
- .3 where applicable, in ice;
- .4 in restricted visibility;
- .5 where applicable, in traffic separation schemes;
- .6 in areas affected by tides or currents.

2.2 Position determination:

- .1 by terrestrial observations, including the ability to use bearings from landmarks and aids to navigation such as lighthouses, beacons and buoys in conjunction with appropriate charts, notices to mariners and other publications and assessment of the accuracy of the resulting position fix;
- .2 using, to the satisfaction of the Administration, modern ship electronic navigational aids as provided in the fishing vessels concerned.

3 Watchkeeping

3.1 Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972 including those Annexes concerned with safe navigation.

3.2 Demonstrate knowledge of Recommended Basic Principles to be Observed in Keeping a Navigational Watch on Board Fishing Vessels.*

4 Radar equipment

4.1 The Administration should decide whether or not to incorporate the radar syllabus below in the general requirements for certification of skippers. If the Administration decides not to include the syllabus in the general requirements, it should ensure that the syllabus is taken into account for purposes of certification of skippers serving on vessels fitted with radar equipment and plying within limited waters.

4.2 Knowledge of the fundamentals of radar and ability in the operation and use of radar, and in the interpretation and analysis of information obtained from the equipment, including:

- .1 factors affecting performance and accuracy;
- .2 setting up and maintaining displays;
- .3 detection of misrepresentation of information, false echoes, sea return, etc.;
- .4 range and bearing;
- .5 identification of critical echoes;
- .6 course and speed of other ships;
- .7 time and distance of closest approach of crossing, meeting or overtaking ships;

* Assembly resolution A.484(XII).

- .8 detecting course and speed changes of other ships;
- .9 effect of changes in own vessel's course or speed or both;
- .10 application of the International Regulations for Preventing Collisions at Sea, 1972.

5 **Compasses**

- 5.1 Ability to determine and apply compass errors.

6 **Meteorology and oceanography**

- 6.1 Knowledge of meteorological instruments and their application.
- 6.2 Ability to apply meteorological information available.
- 6.3 Knowledge of characteristics of various weather systems affecting the limited waters concerned, at the discretion of the Administration.
- 6.4 Knowledge of weather conditions affecting the limited waters concerned liable to endanger the vessel, at the discretion of the Administration.
- 6.5 Where applicable, ability to use appropriate navigational publications on tides and currents.

7 **Fishing vessel manoeuvring and handling**

- 7.1 Manoeuvring and handling of a fishing vessel in all conditions including the following:
 - .1 berthing, unberthing and anchor work under various conditions of wind and tide;
 - .2 manoeuvring in shallow water;
 - .3 management and handling of fishing vessels in heavy weather, including appropriate speed, particularly in following and quartering seas, assisting a ship or aircraft in distress, means of keeping an unmanageable vessel out of a sea trough, lessening drift and use of oil;
 - .4 manoeuvring the vessel during fishing operations with special regard to factors which could adversely affect the vessel's safety during such operations;
 - .5 precautions in manoeuvring for launching boats or liferafts in bad weather;
 - .6 methods of taking on board survivors from lifeboats or liferafts;
 - .7 where applicable, practical measures to be taken when navigating in ice or conditions of ice accretion on board the vessel;
 - .8 where applicable, the use of, and manoeuvring in, traffic separation schemes;
 - .9 the importance of navigating at reduced speed to avoid damage caused by own vessel's bow or stern wave;
 - .10 transferring fish at sea to factory ships or other vessels.

8 **Fishing vessel construction and stability**

- 8.1 General knowledge of the principal structural members of a vessel and the proper names of the various parts.
- 8.2 Knowledge of the theories and factors affecting trim and stability and measures necessary to preserve safe trim and stability.
- 8.3 Demonstrate use of stability information as supplied to fishing vessels.

8.4 Where applicable, knowledge of effects of free surfaces and ice accretion.

8.5 Knowledge of effects of water on deck.

8.6 Knowledge of the significance of weathertight and watertight integrity.

9 Catch handling and stowage

9.1 The stowage and securing of catch on board vessels, including fishing gear.

9.2 Loading and discharging operations, with special regard to heeling moments from gear and catch.

10 Fishing vessel power plants

10.1 Operating principles of marine power plants in fishing vessels.

10.2 Vessel's auxiliary machinery.

10.3 General knowledge of marine engineering terms.

11 Fire prevention and fire-fighting appliances

11.1 Organization of fire drills.

11.2 Classes and chemistry of fire.

11.3 Fire-fighting systems.

11.4 Attendance at an approved fire-fighting course.

11.5 Knowledge of provisions concerning fire-fighting equipment.

12 Emergency procedures

12.1 Precautions when beaching a vessel.

12.2 Action to be taken prior to, and after, grounding.

12.3 Action to be taken when the gear becomes fast to the ground or other obstruction.

12.4 Floating a grounded vessel, with and without assistance.

12.5 Action to be taken following a collision.

12.6 Temporary plugging of leaks.

12.7 Measures for the protection and safety of crew in emergencies.

12.8 Limiting damage and salvaging the vessel following a fire or explosion.

12.9 Abandoning ship.

12.10 Emergency steering, rigging and use of jury steering and the means of rigging a jury rudder, where practicable.

12.11 Rescuing persons from a ship in distress or from a wreck.

12.12 Man-overboard procedures.

12.13 Towing and being towed.

13 Medical care

13.1 Knowledge of first aid.

13.2 Practical application of medical guides and advice by radio, including the ability to take effective action based on such knowledge in the case of accidents or illnesses that are likely to occur on board the vessel.

14 Maritime law

14.1 Taking into account the limited waters as defined by the Administration, a knowledge of international maritime law as embodied in the international agreements and conventions as they affect the specific obligations and responsibilities of the skipper in the waters concerned, particularly those related to safety and the protection of the marine environment.

14.2 The extent of knowledge of national maritime legislation is left to the discretion of the Administration but should include national arrangements for implementing applicable international agreements and conventions.

15 Communications

15.1 Knowledge of radiotelephony and visual signalling to the extent required by the Administration.

15.2 Knowledge of the adverse effect of misuse of the radiotelephone equipment.

16 Life-saving

16.1 Knowledge of life-saving appliances provided on fishing vessels. Organization of abandon ship drills and the use of the equipment.

17 Search and rescue

17.1 Knowledge of search and rescue procedures.

18 The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels, Part A

18.1 Knowledge of such sections as may be required by the Administration.

19 Methods for demonstration of proficiency

19.1 The Administration should prescribe appropriate methods for demonstration of proficiency in relevant requirements of this appendix.

ANNEX 5

RECOMMENDATION ON MINIMUM REQUIREMENTS FOR CERTIFICATION OF OFFICERS IN CHARGE OF A NAVIGATIONAL WATCH ON FISHING VESSELS OF 24 METRES IN LENGTH AND OVER OPERATING IN LIMITED WATERS

- 1 Every officer in charge of a navigational watch on a fishing vessel of 24 metres in length and over operating in limited waters should, unless he holds a certificate issued in compliance with Annex 3, hold an appropriate certificate issued in compliance with at least the provisions of this Annex.
- 2 Every candidate for certification should:
 - .1 be not less than 18 years of age;
 - .2 satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
 - .3 have approved seagoing service in the deck department on fishing vessels of not less than 24 months; however, the Administration may allow the substitution of:
 - .3.1 a short period of special training which is at least equivalent in value to the period of the required seagoing service it replaces;
 - .3.2 a period of approved seagoing service on merchant ships;
 - .4 have passed an appropriate examination or examinations to the satisfaction of the Administration. Such examination or examinations should include the material set out in the appendix to this Recommendation. A candidate for examination who holds a valid certificate of competency issued in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, need not be re-examined in those subjects listed in the appendix which were passed at a higher or equivalent level for issue of the Convention certificate.

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- 1 The syllabus given below is compiled for examination of candidates for certification as officers in charge of a navigational watch on fishing vessels of 24 metres in length and over operating in limited waters.
- 2 **Terrestrial and coastal navigation**
 - 2.1 Ability to determine the vessel's position by the use of:
 - .1 landmarks;
 - .2 aids to navigation, including lighthouses, beacons and buoys;
 - .3 dead reckoning, taking into account winds, tides, currents and speed by propeller revolutions per minute and by log.

2.2 Thorough knowledge of and ability to use navigational charts and publications such as sailing directions, tide tables, notices to mariners and radionavigational warnings.

3 Radar navigation

3.1 The Administration should decide whether or not to incorporate the radar syllabus below in the general requirements for certification of officers in charge of a navigational watch. If the Administration decides not to include the syllabus in the general requirements, it should ensure that the syllabus is taken into account for purposes of certification of officers in charge of a navigational watch serving on vessels fitted with radar equipment and plying within limited waters.

3.2 Knowledge of the fundamentals of radar and ability in the operation and use of radar and ability to interpret and analyse information obtained by use of radar, including the following:

- .1 factors affecting performance and accuracy;
- .2 setting up and maintaining displays;
- .3 detection of misrepresentation of information, false echoes, sea returns, etc.;
- .4 range and bearing;
- .5 identification of critical echoes;
- .6 course and speed of other ships;
- .7 time and distance of closest approach of crossing, meeting or overtaking ships;
- .8 detecting course and speed changes of other ships;
- .9 effect of changes in own vessel's course or speed or both;
- .10 application of the International Regulations for Preventing Collisions at Sea, 1972.

4 Watchkeeping

4.1 Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, including those Annexes concerned with safe navigation.

4.2 Demonstrate knowledge of the content of Recommended Basic Principles to be Observed in Keeping a Navigational Watch on Board Fishing Vessels.*

5 Electronic systems of position fixing and navigation

5.1 Ability to determine the ship's position by the use of electronic navigational aids, where applicable, to the satisfaction of the Administration.

6 Meteorology

6.1 Knowledge of shipborne meteorological instruments and their application.

6.2 Knowledge of the characteristics of the various weather systems affecting the limited waters concerned.

7 Compasses

7.1 Ability to determine and apply compass errors.

* Assembly resolution A.484(XII)

8 Communications

8.1 Knowledge of radiotelephony and visual signalling to the extent required by the Administration.

8.2 Knowledge of the adverse effect of misuse of radiotelephone equipment.

9 Fire-fighting

9.1 Knowledge of fire prevention and use of fire-fighting appliances.

9.2 Attendance at an approved fire-fighting course.

10 Life-saving

10.1 Knowledge of life-saving appliances provided on fishing vessels. Organization of abandon ship drills and the use of the equipment.

10.2 Attendance at an approved survival at sea course.

11 Emergency procedures and safe working practices for fishermen

11.1 Knowledge of the items listed in the appropriate sections of the FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels, part A, and in chapter VIII of the Annex to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977.

12 Fishing vessels manoeuvring and handling

12.1 Basic knowledge of manoeuvring and handling a fishing vessel, including the following:

- .1 berthing, unberthing, anchoring and manoeuvring alongside other vessels at sea;
- .2 manoeuvring during fishing operations with special regard to factors which could adversely affect the vessel's safety during such operations;
- .3 effects of wind and tide/current on ship handling;
- .4 manoeuvring in shallow water;
- .5 management of fishing vessels in heavy weather;
- .6 rescuing persons and assisting a ship or aircraft in distress;
- .7 towing and being towed;
- .8 man overboard procedure;
- .9 where applicable, practical measures to be taken when navigating in ice or in conditions of ice accretion on board the vessel.

13 Vessel stability

13.1 Knowledge of factors affecting stability and the use of stability information.

14 Catch handling

14.1 Knowledge of safe handling and stowage of catch and the effect of these factors on the safety of the vessel.

15 Fishing vessels construction

15.1 General knowledge of the principal structural members of a vessel.

16 Medical aid

16.1 Knowledge of first aid procedures. Practical application of medical guides and advice by radio.

17 Search and rescue

17.1 Knowledge of search and rescue procedures.

18 Prevention of pollution of the marine environment

18.1 Knowledge of the precautions to be observed to prevent pollution of the marine environment.