

CHAPTER 21 - FISHING MASTER, FOURTH-CLASS

PART I - GENERAL REQUIREMENTS OF APPLICANTS

- 21.1 Every applicant for a certificate as Fishing Master, Fourth-Class, shall:
- (a) complete 12 months service on a ship of not less than five tons gross tonnage engaged on voyages beyond partially smooth water limits;
 - (b) obtain a medical certificate prescribed by the Crewing Regulations;
 - (c) obtain a Restricted Operator Certificate with Maritime Commercial Qualifications (ROC-MC) issued by Industry Canada;
 - (d) obtain a certificate of completion for the Basic Safety (A1) of the Marine Emergency Duties Course, set out in TP 4957, from school listed in TP 10655;
 - (e) obtain a Marine First Aid Advanced Certificate, set out in TP 13008;
 - (f) pass an examination in each of the following subjects:
 - (i) Navigation Instruments;
 - (ii) Chartwork and Pilotage; and
 - (iii) Navigation Safety; and
 - (g) pass an oral examination in General Seamanship.

PART II - EXAMINATIONS

- 21.2 The following table indicates the examinations for the Fishing Master, Fourth-Class, Certificate, the qualifying sea service required before each examination may be attempted, and other requirements.

Examination	Qualifying Service	Other Requirements
020 Navigating Instruments	9 months	Nil
040 Chartwork and Pilotage	9 months	Nil
061 Navigation Safety	12 months	Nil
166 General Seamanship	12 months	All other examinations and MED A1 must have been passed before attempting 166.

PART III - VALIDITY OF CERTIFICATE

- 21.3 The certificate as Fishing Master, Fourth-Class, is valid for:
- (a) second mate on a fishing vessel without restriction; and
 - (b) Master of a fishing vessel not exceeding 100 gross tons on a fishing voyage class III, or First Mate on any fishing vessel on a fishing voyage class III.
- 21.4 WKM (F) can be exchanged for Fishing Master, Fourth-Class, by passing examination 061 and an oral examination in the command aspects (item 4 in examination 166). This refers to the WKM (F) certificate obtained under the regulations that came into effect in September 1976. Certificates issued prior to September 1976 cannot be exchanged.

PART IV - SYLLABUSES OF EXAMINATIONS

21.5 Navigation Instruments

Examination number 020

Companion to Sections 15.16, 16.14 and 20.6

ITEM	COLUMN
1.	Radar Use of all radar operator controls; correct setting up and shutting down of equipment; performance check and recognition of malfunctions; recognition and correction of maladjustments of controls; periodic operator checks and determination of heading marker, bearing marker, range ring and range marker error; obtaining ranges and bearings from equipment using proper reporting procedures and recognition of targets of all types; recognition of meteorological phenomena and false, multiple, and second-trace echoes, side lobes and interference; knowledge of the limitations of radar, sufficient to ensure safe navigation; correcting range and bearing data for known errors; use of radar data (i.e. position fixing, following a track, matching radar image to chart, radar plotting restricted to ability to determine CPA and time); use of reflection plotter, radar horizon and extreme range charts and tables, operator's manual and radar logbook.
2.	Decca Use of all Decca operator controls; correct setting up and shutting down of equipment; performance check and recognition of malfunctions; periodic operator checks and determination of errors in the fraction, lane, and zone indicators, and in the L.I. Lamp sequence meter; obtaining readings from equipment; limitations of Decca sufficient to ensure safe navigation; correcting readings for fixed and variable errors; use of Decca data for position fixing, use of Decca over-printed charts, and minimizing effect of variable errors; use of Decca data sheets and operator's manual.
3.	Loran Use of all Loran operator controls; correct setting up and shutting down of equipment; performance check and recognition of malfunctions; recognition and correction of maladjustment of controls; periodic operator checks and knowledge of compensation for measurement and instrument errors; obtaining readings from equipment; recognition of unwanted data, blinking and sky-waves; limitations of Loran, sufficient to ensure safe navigation; use of Loran data for position fixing, use of Loran over-printed charts, minimizing effect of variable errors; use of operator's manual.
4.	Echo-Sounding Machine Use of echo-sounder controls and interpretation of display.

Note: The examination is a practical test.
Duration as necessary.

21.6 Chartwork and Pilotage
Examination number 040

Companion to Sections 15.17 and 16.15

ITEM	COLUMN
1.	Charts The chart, its nature and function as an aid to navigation; practical effects of projection distortion, numbering and the presentation of information, factors affecting reliability of charts; ability to use Mercator and polyconic charts; chart, symbols and abbreviations as published in <i>Canadian Hydrographic Service Chart No. 1</i> .
2.	Publications Light characteristics and colours and sound signals used as aids to navigation, List of Lights, Buoys and Fog Signals; Canadian Buoyage System and its use; use and purpose of Canadian Notices to Shipping and Mariners, and chart corrections.
3.	Chartwork Locating a vessel's position on the chart by simultaneous true bearings and/or true bearing and distance; locating a vessel's position by two or more simultaneous distances. Determining the latitude and longitude of a given position; locating a position by its latitude and longitude, and its true bearing and distance from a given point. Laying off a course between given positions; measuring the true direction of a course laid off on the chart; measuring distance on the chart. Finding the DR position, given course, speed and time elapsed from the last observed position by plotting on a chart or by other acceptable method of the applicant's choice. Demonstrating an appreciation that current and/or wind may affect the vessel's course and speed over the ground; determining speed over the ground between observed positions; determining the true course made good between observed positions.
4.	Records and Errors Appreciation of the need for keeping an accurate record of the vessel's progress and the keeping of this record; care of dividers and parallel rulers. Periodic operator checks and determination of compass error by comparison with true terrestrial bearings or headings; determining and recording compass deviation; use of the magnetic compass to determine accuracy of the gyro compass by comparison; correcting courses and bearings for compass error, magnetic variation and deviation; use of table of deviations.

Note: The examination is oral and includes a practical chart paper.
Duration as necessary.

21.7 Navigation Safety

Examination number 061

Companion to Sections 13.12, 16.19, 18.7, 19.8 and 20.8

ITEM	COLUMN
1.	General Knowledge Knowledge of the content of the Collision Regulations with Canadian Modifications 1983; STCW Code section A-VIII/2.

Note: The examination is a multiple-choice test.
The applicant has the option of taking the examination as either an oral or written test.
Duration as necessary.

21.8 General Seamanship
Examination number 166

ITEM	COLUMN
1.	Communications Recognition and knowledge of the meanings of the lifesaving and distress signals contained in the International Code of Signals.
2.	Safe Working Practical knowledge of safe working practices aboard fishing vessels; basic knowledge of pollution prevention; knowledge of Code of Safe Working Practices as it applies to fishing vessels.
3.	Watchkeeping Duties and responsibilities of watch members; action of the officer of the watch in emergencies at sea and in port; maintenance of a proper deck log concerning navigation progress, electronic instrument use and unusual occurrences; common steering procedures, their purpose and how to put them into effect; use of azimuth circle, pelorus or any selected method of taking a bearing; familiarity with changing over between automatic and hand steering, emergency steering (referring to operator's manual); reading bearings and headings.
4.	Responsibility Master's responsibilities in emergencies; duties and responsibilities of the master of a small vessel as required by the <i>Canada Shipping Act</i> ; practical considerations of boat handling in heavy weather.
5.	Documents Understanding of ship's plans and specifications; awareness of the content and practices described in the Small Fishing Vessel Safety Manual (TP 10038); ability to use and interpret stability and trim data supplied to fishing vessels.
6.	Stability Reading draft and finding mean drafts, with and without list, and change of draft when going from salt to fresh water and vice versa; effect, in general terms and excluding calculation, of adding, removing and transferring weights on draft, list and trim and an appreciation of the meaning and characteristics of stiff and tender ships; effects of reduction in freeboard on stability and seaworthiness, and the dangers of overloading; practical appreciation of the dangers of free surfaces in tanks and when the fish load is carried in bulk; dangers due to icing effects.

Note: The examination is an oral and practical test.
Duration as necessary.