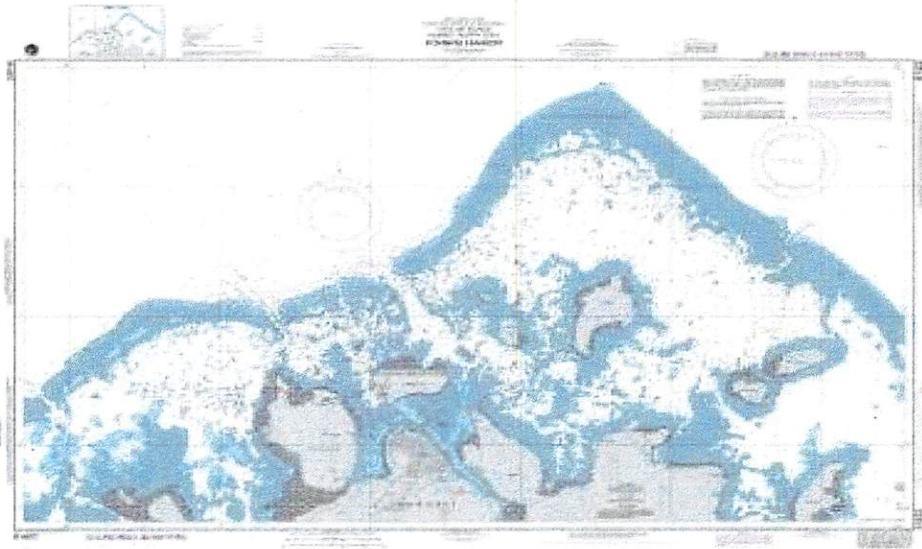




FSM Marine Pilot Exam Information

Abstract

This document contains information on marine pilot examination format, knowledge assessment topics, and evaluation criteria.

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INTRODUCTION

The FSM Pilot Training and Examination Committee (FPTEC) is responsible for setting and marking the coast pilots' exams. FPTEC is also responsible for overseeing the Pilot Familiarization Program, and the apprentice-pilot and licensed-pilot training program.

The FPTEC will be chaired by FSM TC&I Marine Division Assistant Secretary. Other committee members will include two representatives from the respective FSM pilots, a management representative from the port authorities, a representative from the FSM Maritime Institute (FMI) and an external examiner who participates in the assessment & evaluation process for the oral exams.



PREREQUISITES

The acceptable certificates of competency, minimum sea time requirements, and Familiarization Program requirements and defined in [Section 18 of the FSM Pilot Regulations.](#)

Candidates must prove that they have met all the requirements as per the FSM Pilot Regulations before they can be considered for the examination.

**Candidates may produce prove of having attended any official courses and assessments that they believe may assist them to the FPTEC for consideration as prerequisites.*

Additionally, Candidates must provide the following:

- i. Police clearance certificate
- ii. Passport copy
- iii. Recent driver's license
- iv. Recent reference letters
- v. Medical clearance certificate as per the FSM STCW

**Required before taking the exam*



GENERAL INFORMATION ON EXAMINATIONS

- i. The examination consists of two parts, a written examination and an oral examination section.
- ii. The written examination section consists of General Knowledge of the region. The examinee will have three hours to complete the exam.
- iii. The General Knowledge Paper is based on the syllabi of the FSM Pilot Regulations, Prevention of Collision at Sea Regulations, FSMC Title 19 Admiralty & Marine Code, FSM STCW, Perspective Port Authority Regulations, and general Nautical knowledge.
- iv. Candidates must obtain at least 70% in the written exam before being considered for the Oral exam.
- v. The oral examination will be a Pass/Fail based on the FPTEC's recommendation.



WRITTEN EXAM

General Knowledge Paper

Chartwork and Pilotage

- i. Familiarity with chart symbols and abbreviations.
- ii. Familiarity with lights and buoys (standard colors, shapes, and characteristics) and the precautions when using them.
- iii. The ability to determine set, drift, and rate of current.
- iv. The ability to calculate tidal heights for a particular time, as well as the height of tide required, at both the reference and secondary ports.
- v. The ability to calculate air draft of a ship.
- vi. The ability to chart courses, allowing for the effect of wind and tide and the problem of combining vectors.
- vii. A knowledge of distance measurement and the determination of speed made good and speed through the water, as well as the calculation of ETA's and speed required to ensure arrival at a given time.
- viii. An understanding of variation/deviation, and correction of compass courses.

General Seamanship

- i. Knowledge of emergency procedures, such as engine failure and blackout.
- ii. Knowledge of Bridge Procedures.
- iii. Knowledge of anchors and anchoring large vessels, including anchoring with one or both bow anchors.
- iv. A thorough understanding of ship handling including
 - a. Turning a vessel short round.
 - b. Effect of the propeller and rudder on steering, including the difference between fixed and controllable pitch propellers, as well as single and twin-screw vessels.
 - c. The effect of trim, draft, list, and squat on maneuverability.
 - d. Effect of current, wind, shallow water effect, bank cushion and bank suction effect on maneuverability.

- e. Transverse thrust effect.
- f. Pivot point
- g. The behavior of the ship when the engines are put astern.
- h. The sail effect of a superstructure.
- i. Ship squat.
- j. Advance, transfer, and directional stability.

Meteorology

- i. A general knowledge of the weather systems, frontal systems, and wind patterns.
- ii. An understanding of weather facsimiles and instruments.

Ship Stability

- i. Knowledge of the ship's load line and its purpose and definitions.
- ii. Knowledge of ship's turning circles and their relevance to maneuvering.
- iii. An understanding of stiff and tender ships.
- iv. An understanding of the effect of water density and draft and displacement.
- v. An understanding of the ships' displacement and maneuverability.
- vi. An understanding of the effect of list and trim on ship maneuverability.

Electronic Aids to Navigation

- i. Radar plotting to calculate CPA, TCPA, courses of own and target vessels, speed of target vessels, and aspect.
- ii. Radar errors.
- iii. Use, limitations, and accuracy of electronic bridge equipment.
- iv. Parallel indexing techniques.
- v. ECDIS.
- vi. AIS.

ORAL EXAMINATIONS

The oral exam will be conducted in a CLEAN, QUIET and PROFESSIONAL atmosphere and is designed partly to serve as an interview and partly as a further examination of the candidates' knowledge. The oral exam duration is normally 3 to 3 ½ hours. The examination team consists of the chair of FPTEC, one serving pilot, a port authority representative, and an external examiner or FMI representative. An observer may also be present at the oral examination but will not interfere in the examination.

The oral exam agenda is as follows:

- i. Introduction and welcome by the chair.
- ii. Questions from the members on sea time, experience, and accidents/incidents.
- iii. A short answer question from each examiner to break the ice and put the candidates at ease. Questions could be on any topic within the syllabus.
- iv. *Collision Regulations* (external examiner). A failure in this portion will terminate the exam.
- v. Three local knowledge runs (licensed pilot, FMI representative and the chairperson).
- vi. Regulations, port information, and buoyage – Port Authority.
- vii. Three local knowledge runs (licensed pilot and the chairperson).
- viii. Questions from the candidates.
- ix. Final words from the exam committee chairperson.

Ship Handling Questions

- i. A knowledge of the properties, advantages, and disadvantages of the propulsion systems on board ships.
- ii. A knowledge of the properties, advantages, and disadvantages of aids to maneuvering aboard ships.
- iii. A knowledge of the use and operation of manual, automatic and emergency steering apparatus, and engine maneuvering control systems.

- iv. Vessels stopping and turning distances and factors involved. Methods of stopping and turning in narrow channels.
- v. The interaction of vessels meeting and overtaking in restricted and confined channels, the effect on ship maneuvers as under-keel clearance decreases, and bow and stern suction when vessels are in narrow channels or navigating close to berth.
- vi. Squat, its nature, cause and effect.
- vii. A knowledge of effect of the location of the center of gravity, the center of effort and the pivot point on the behavior of the ship.
- viii. The effect of a right-handed, left-handed, and variable pitch propeller.
- ix. The consequence of heel or list on a vessel's draft and calculation of the draft increase.

Collision Regulations: Rules of the Road

This portion of the exam is conducted by the external examiner. The candidates are expected to have an in-depth knowledge and application understanding of the *FSM Collision Regulations*. A failure in this section will terminate the oral exam.

Regulations and Buoyage

This portion will be examined by the Port Authority representative with questions asked from the following subject matters:

- i. State's Port Authority Regulations.
- ii. Pilot transfer arrangements.
- iii. Vessel traffic services.
- iv. Charts and nautical publications.
- v. Incident reporting requirements.
- vi. State's port security regulations.
- vii. Practices and procedures of the particular state's port.
- viii. Buoyage.

Local Knowledge

This section is conducted by the licensed pilot and the chairperson on the exam committee. Candidates are required to demonstrate their knowledge verbally for a run (voyage) from one location to another location within the state. There will be typically 2 runs for the candidate each run taking about 20 minutes.

The candidate will be provided with a pilot card showing the vessel's particulars, blank paper and tide tables. The candidate will have a few minutes to prepare before proceeding with each run. Candidates are expected to conduct the run from memory indicating courses steered, safe distances off conspicuous points, the various lights, local hazards and clearing marks in route. The exam committee members will stop the candidates from time to time for clarification or to ask pertinent questions about the area being transited.



Candidates are required to bring the following items to the oral examination:

- i. Certificate of Competency (COC).
- ii. Certificates of courses attended if any.
- iii. Resume.
- iv. Reference letter/s.
- v. Calculator.
- vi. Pen and pencil.



CONCLUSION

This is quite possibly the most difficult exam process that you will ever go through; however, the reward for success is knowing that you will soon attain a marine pilot license and become one of a select few chosen to look after the safety of navigation on the FSM coast.

The pinnacle of your maritime career! Piloting is a great responsibility that brings with it a great sense of achievement.

Good luck with your endeavors.



Can you identify the location?

EFFECTIVE DATE

The Secretary has approved this information, and the requirements of the FSM Pilot Regulations now having been satisfied, I hereby declare that the foregoing FSM Marine Pilot Exam information is effective on 15th September 2026.



Carlson D. Apis

Secretary

Department of Transportation,
Communications and Infrastructure



Kodak A. David

Assistant Secretary
TC&I Marine Division