



NOTA MAKLUMAT DAN PANDUAN MERIN

MARINE INFORMATION AND GUIDANCE NOTE

NMPM 1/99

JABATAN LAUT SEMENANJUNG MALAYSIA

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KREDITASI PUSAT LATIHAN DAN KURSUS

ACCREDITATION OF TRAINING CENTRES AND COURSES

Pemakluman kepada Pusat Latihan Maritim dan mereka yang bersangkutan dengan latihan pelaut.
Information to Maritime Training Institutions and those related to training of seamen.

Penambahan bilangan pusat-pusat latihan maritim dan permulaan standard baru seperti yang ditetapkan oleh Konvensyen STCW, dipinda 1995, memerlukan Jabatan Laut mengeluarkan cara yang boleh mencapai konsistensi dan juga untuk mencapai standard yang ditentukan.

Nota ini dikeluarkan untuk memberi kemudahan kepada pusat-pusat latihan di Malaysia untuk memahami keperluan dan membuat penyerahan serta juga untuk menyediakan pusat-pusat latihan untuk diudit oleh pengaudit Jabatan. Nota panduan disematkan bersama ini.

Pusat-pusat latihan dikehendaki menyampaikan permohonan untuk:

- (a) penubuhan pusat latihan;
- (b) cadangan untuk kursus;
- (c) pertukaran dalam isi kandungan kursus, struktur atau tenaga pengajar;
- (d) penubuhan cawangan atau kampus; dan
- (e) perkara lain yang melibatkan kelulusan yang lepas.

Ketua Pengarah Laut

Tarikh: 6 April 1999

The increase in the numbers of maritime training institutions and the introduction of new standards as determined by the STCW Convention, amended in 1995, necessitates the Marine Department to introduce means of achieving consistency and reaching the prescribed standards.

This note is introduced to facilitate the training institutions in Malaysia to understand the requirements and make the necessary submission and also prepare the institution for auditing by the Marine Department auditors. The guidance note is attached.

Training institutions are required to forward applications for:

- (a) establishment of a training institution;
- (b) proposal for courses;
- (c) changes in course contents, structures or instructors;
- (d) establishment of branch centres or campuses; and
- (e) other matters affecting previous approvals.

Director-General of Marine

Dated: 6 April 1999

ATTACHMENT

GUIDELINES FOR ACCREDITATION OF TRAINING INSTITUTIONS OFFERING APPROVED COURSES TO SEAMEN

1. PURPOSE.

1.1 The Marine Department has identified several ways of improving the certification of seamen program. One of the ways is an increased emphasis on formal training through Marine Department's approved courses and accreditation of training institutions for conducting training of the approved courses.

1.2 This Guidelines provides guidance to training institutions concerning:

- (a) application for establishment and accreditation of training institution;
- (b) application for establishment of branch of training institution;
- (c) application procedures for accreditation of a training institution to conduct an approved course;
- (d) required administrative procedures and record keeping for course;
- (e) Marine Department accreditation procedures to ensure the courses are taught in accordance with the approved course and along the established guidelines; and
- (f) renewal procedures.

2. ESTABLISHMENT OF TRAINING INSTITUTION

2.1 Application for establishment of Training Institution

(a) Any person or corporation intending to establish -

- (i) a training institution for the purpose of training seamen to serve on ships;
- (ii) a scheme, division or a faculty in its existing training institution for the purpose of training seamen to serve on ships; or
- (iii) a branch or additional campus of an approved training institution for the purpose of training seamen to serve on ships,

shall apply to the Director General for approval.

(b) The application for new establishment of training institution shall be submitted with the following –

- (i) proposals as to the objective and reasons for establishment of the training institution;
- (ii) location of the training institution with detailed drawing;
- (iii) design drawing of lecture, laboratory, demonstration and practical rooms or areas;
- (iv) other facilities such as simulator, survival equipment, radar, engines, etc.;
- (v) list of instructors or lecturers with their qualifications and experiences;
- (vi) list of reference materials already available for use by students, instructors and lecturers; and
- (vii) projected intake of students for the next five years.

(c) The application by existing training institution intending to establish branch or other campus - shall be submitted with the following –

- (i) proposals as to the objective and reasons for establishment of the branch or other campus;
- (ii) location of the branch or other campus with detailed drawing;
- (iii) design drawing of lecture, laboratory, demonstration and practical rooms or areas;
- (iv) other facilities such as simulator, survival equipment, radar, engines, etc.;
- (v) list of instructors or lecturers for the branch or other campus with their qualifications and experiences;
- (vi) list of reference materials already available at the branch or other campus for use by students, instructors and lecturers; and
- (vii) projected intake of students at the branch or other campus for the next five years.

2.2 Approval process for the establishment of Training Institution

- (a) The Marine Department will conduct an assessment of the application and evaluating all the documentation submitted.
- (b) A visit to the proposed location and physical evaluation will be made on the premise, location, equipment, reference material and supporting facilities.
- (c) A report will be prepared for the decision of the Government.

3. APPROVED COURSES AND NEW COURSE.

3.1 Definition:

- (a) An approved course means a course that has been evaluated by the Marine Department and the syllabi, course contents and duration has been developed;
- (b) A new course means a course that has not been approved by the Marine Department.

3.2 A course may be considered for approval by the Marine Department:

- (a) if the course is required by regulations (e.g. fire prevention and fire fighting, medical first aid, etc.);
- (b) if the course is to be a substitute for a Marine Department examination or assessment; or
- (c) if the course is to be a substitute for a portion of the sea service required for obtaining a certification.

3.3 Marine Department approval of a training course is as provided for in The Merchant Shipping (Training and Certification) Rule, 1998.

4. APPLICATION FOR ACCREDITATION OF AN APPROVED COURSE.

4.1 Requesting Accreditation of an approved course.

(a) Training Institutions.

A training institution desiring to have an accreditation of an approved course by the Marine Department must forward a request to the Director-General at Marine Department Headquarters. The request must meet the requirements specified in the model course outline in enclosure (1).

(b) International Maritime Organisation (IMO) Model Course Format.

The model course outline contained in enclosure (1) was developed using the IMO model course format. Any variations from the model shall be justified in the covering letter.

4.2 Requesting an approval of a new course

- (a) Any training institution or organisation who wished or intend to offer a course to a seaman whether as part of a requirement under paragraph 3.2 above or a new initiative and has a bearing on the safety of navigation, safety of life or protection of marine environment with regard to controlling discharges from ships, must forward an application as specified in the model course outline in enclosure 1.
- (b) The application is to include syllabus of any similar course that has been conducted elsewhere.

5. TRAINING UNDER THE APPROVED COURSE:-

(a) Approved Syllabi.

Approved courses must be taught from an approved syllabi and curriculum. Changes to the approved syllabi must be forwarded to the Director-General for evaluation and approval.

The Marine Department must be notified of any changes to the number or replacement of instructors. The notification of acceptance to such changes shall be made through the office of the Seamen Affairs and Port Division.

(b) Records.

A training facility offering a Marine Department approved course and has been accredited must maintain a file at the training facility for at least five years after the end of each student's enrolment. The file must contain the student's examinations, a report of practical

tests administered, and a record of classroom attendance. If the accreditation is given for more than one location for a course, then the records may be maintained at one central location identified in the accreditation package.

(c) *New Training Site.*

Review for accreditation of a new training site for an approved course is done by the Director of Seamen Affairs and Port Division. See also application for setting up a branch or other campus in paragraph 2.1.

(d) *Course Completion Certificates.*

Course completion certificates must contain the signature of the approved course instructor/director or equivalent, the name of the course, the name of the training institution and the date of completion. The format for the certificate shall be approved by the Marine Department.

6. Marine Department Accreditation and Audits.

6.1 Purpose of Marine Department Accreditation.

The Marine Department considers accreditation of training programs to be of critical importance in ensuring compliance with the standards of competence and ensuring that seafarers are provided training that meets at least the minimum standards requirements. Accreditation audits verify that stipulations of the Marine Department's Standards of Competence and the Rules are followed, and that only accepted instructors teach the approved course.

6.2 Types of Accreditation

Three types of accreditation for a course will be used:

(i) *Minimum standards accreditation*

This is a preliminary audit of a course submitted to the Marine Department for accreditation. The documentation submitted will be audited and assessed and initial accreditation may be given based on minimum standards so that the course may be started.

(ii) *Full accreditation*

Once a course is given the initial accreditation with minimum standards, the course may be started and progress and during this time the officers of the Marine Department will be conducting full auditing processes. This may involve sitting in the course together with the candidates, visiting the lecturers and instructors, visiting the sites of demonstration and simulations, checking the equipment and inspecting the course materials of the instructors and lecturers. Course corrections and observations may be introduced in order for the course to meet the standards of competence. Once the auditing for the full accreditation has been completed, a report will be prepared for the Marine Department and also for the training institution if deemed necessary.

(iii) *Annual accreditation*

The full accreditation of a course means that the course has met with all the requirements of the Rules and the standards of competence established by the Marine Department and the International Maritime Organisation. In order for the standards to be maintained consistently throughout the times, annual auditing will be done on any of the approved courses. The types of auditing will be any of those mentioned in paragraph (c) below.

6.3 Types of Audits

There are three types of audits: announced, unannounced and customer survey. An announced audit may be conducted either with or without prior notification. The purpose of an announced audit is to review the records and to monitor a course with the knowledge of school

personnel. An *unannounced audit* is conducted when officers from the Marine Department, attend the course anonymously. A *customer survey audit* is conducted by officers of the Marine Department who interview applicants when a certificate of completion from an approved course is submitted with a license application.

6.4 Results.

All accreditation audits are followed-up by a letter discussing the results of the audit. If an announced audit is conducted, the results will be discussed with training institution personnel prior to the auditors departing the training institution.

7. RENEWAL OF ACCREDITATION

7.1 Period of Approval.

(i) *Initial accreditation* approvals are effective for a period of one year. Within that period of one year the training institution should obtain full accreditation and if no attempt is made to obtain full accreditation, then the initial accreditation will lapse.

(ii) *Full accreditation* approvals are effective for five year subject to *annual accreditation*.

(iii) Subsequent renewal of full accreditation may be granted subject to a written request to Director-General of Marine Department and upon conditions that he may imposed.

7.2 Approval Renewal Requests.

A request for the renewal of the accreditation of an approved course should be forwarded to the Marine Department at least 90 days before the current approval expires. Courses requested for renewal of the accreditation shall be in the same format as original submittal. To facilitate the renewal process, all changes should be highlighted. If there have been no changes since the last annual auditing, a statement to the effect that the curriculum, instructors and facilities are the same should accompany the submittal.

7.3 Marine Department Officers Visit.

When a training institution with an existing approved course request a renewal of accreditation, Marine Department Officers will visit the training institution as part of their auditing and note their findings in the forwarding letter to Director-General.

ENCLOSURE 1

MODEL COURSE OUTLINE

INTRODUCTION:

The course curriculum package must include the following:

- a. Cover Letter.
- b. Course Framework.
- c. Course Schedule.
- d. Detailed Teaching Syllabus.
- e. Course Outline.
- f. Instructor Manual.
- g. Examination.
- h. Course critique.

COVER LETTER: The cover letter from the school must contain the name of the course, the location where it will be held, a general description of the course, and what type of approval is being sought:

- a. To satisfy a specific regulatory requirement (e.g. radar, firefighting, first aid, etc.).
- b. To qualify for sea service credit.
- c. To substitute for an examination requirement.

COURSE FRAMEWORK:

This section provides an overview of the purpose, nature, and individual components of the course.

- Scope.** A brief description of the course.
- Objective.** A statement discussing the goal(s) and learning objective(s) of the course.
- Entry standards.** A list of the prerequisites for a student to attend the course.

Class limitations.

Class size: State the maximum class size for classroom lessons and, if appropriate, for practical demonstrations or simulation program lessons, along with the number of the students per simulator.

Student/teacher ratio: State the student/teacher ratio and discuss the organisation's policy for circumstances when more than one instructor will be present during any of the lessons.

Instructors.

A list of instructors with a description of their experience, background and qualifications to demonstrate they have the capability to impart the required information to the students. Instructors should have experience in teaching or have attended a course in instruction techniques. In addition, the instructor must hold a valid Marine Department document or certificate appropriate to the course(s) being taught or have experience specific to the subject(s) being taught.

Teaching facilities and equipment.

Facility: The address and a description of the facility at which the training will be held.

Course equipment: A description of the equipment that will be used during the course. This includes all equipment to be used during hands-on training and/or testing, and any simulators or simulation programs to be used. If a simulator or simulation program is to be used, include technical specifications and brochures provided by the manufacturer.

Teaching aids.

Visual aids: Copies of all visual aids and a discussion of how audio-visual and other aids will be used during the training course, and which performance objectives they will impact. This information may be a part of the curriculum documentation that discusses the make up of the lesson plans.

Textbooks: Copies of all student handouts, homework assignments, workbooks, and a bibliography of the student textbooks to be used. The Marine Department may ask for copies of textbooks it does not have access to, and will return the texts after the course has been audited.

DETAILED TEACHING SYLLABUS:

The Detailed Teaching Syllabus is written in learning objectives format in which the objective describes what the student must do to demonstrate that the specific knowledge or skill has been learned. References should be made against the learning objectives to indicate which publications and teaching aids the instructor may use when preparing and presenting the course material. The syllabus shall include the total length of each subject area in hours. See the sample of teaching syllabus at the end of this enclosure.

COURSE SCHEDULE:

The course schedule shall include the length of each lesson and indicate whether the lesson is a classroom lecture, practical demonstration, simulator exercise or examination. Each subject matter in the course schedule is prefaced by a number that corresponds to the subject area listed in the Detailed Teaching Syllabus and Course Outline. For example, all lessons prefaced by "8" in the course schedule directly relates to the Planning and Carrying Out a voyage subject area listed in the Detailed Teaching Syllabus and Course Outline.

COURSE OUTLINE:

The course outline is a summary of the syllabus by subject area with the number of hours for each lecture, practical demonstrations, or simulation program. This shows the focus of the course while highlighting how the course meets IMO and Marine Department time requirements.

INSTRUCTOR MANUAL:

The instructor's manual provides specific guidance on teaching strategies and techniques used during course instruction. The manual shall address the presentation strategies for each lesson identified in the course schedule.

EXAMINATION AND ASSESSMENT:

Method of examination: An explanation shall be included of how the students' performance will be evaluated throughout the course. Include whichever is applicable:

Written examinations: Copies of all written examinations, the grading procedure to be used, frequency of revision, and what will be considered a passing mark.

Practical demonstrations: Detailed descriptions of all practical or simulator examinations, tests, or exercises that describe the situation presented to the student; what the students must do to successfully complete each test; and how each student's performance will be evaluated and recorded. Provide a separate checklist to evaluate each practical examination and what is considered a passing mark.

Note: Instructors shall not assist students in any way during the evaluation process.

Determination of final grade. A discussion of how the instructor(s) will determine final grades by proportioning written and practical examination marks as appropriate.

Re-test procedures: A description of the training institution's policy on re-tests of failed examinations.

COURSE CRITIQUE: Student course evaluation form(s) are a necessary method by which students are given the opportunity to provide feedback to the training institution on the suitability of the course.

SAMPLE DETAILED TEACHING SYLLABUS USING A SHIPHANDLING COURSE AS AN EXAMPLE

Detailed Teaching Syllabus

The detailed teaching syllabus has been written in learning-objective format in which the objective describes what the trainee must do to demonstrate that the specific knowledge or skill has been transferred.

All objectives are understood to be prefixed by the words: "the expected learning outcome is that the trainee -----"

In order to assist the instructor references are shown against the learning objectives to indicate IMO references and publications and teaching aids, which the instructor may wish to use when preparing and presenting the course material. The material listed in the course framework has been used to structure the detailed teaching syllabus in particular, *Teaching aids (indicated by A)* and *IMO references (indicated by R)* will provide valuable information to instructors.

The abbreviations used are:

App.: appendix
p.,pp.: page, pages
Para.: paragraph
Reg.: regulation

Learning Objectives

1 Review of basic principles (2 hours)

- .1 states the basic principles to be observed in keeping a navigational watch as set out in Chapter VIII of Code A of STCW 1978, as amended in 1995, regarding:
 - watch arrangements
 - navigation
 - navigational equipment
 - navigational duties and responsibilities
 - navigation with pilot embarked
- .2 describes the properties of the different chart projections used for navigation
- .3 states the datums used on charts for:
 - position
 - height
 - depth
 - direction
- .4 lists methods commonly available for position fixing with an indication of their accuracy
- .5 corrections for datum shift must be known in order to obtain the position by certain navigational aids to agree with the position obtained by visual or radar observations
- .6 states the accuracy of range and bearing measurements required by the performance standards for radar equipment
- .7 describes factors affecting radar detection, including blind and shadow sectors
- .8 explains how the characteristics of targets influence their detection range
- .9 demonstrates how to obtain fix based on radar observations and possible errors and how to minimise them
- .10 demonstrates the use of parallel indexing technique for monitoring a ship's movement
- .11 demonstrates the use of nautical publication including:
 - tide tables
 - current charts
 - notices to mariners
 - lists of lights

- sailing directions

2 familiarisation with the bridge (1.5 hours)

- .1 demonstrates the operation of the different instruments on the bridge
- .2 uses the rudder and the engine controls
- .3 describes and allows for the parallax in the visual system (if any)

3 Standard manoeuvres (3.5 hours)

- .1 carries out a turning-circle trial with given initial speed and rudder angle in the loaded condition
- .2 describes how to carry out zigzag manoeuvres
- .3 carries out a crash stop
- .4 carries out a coasting stop
- .5 repeats one manoeuvre from objectives 3.1 to 3.4 for the same ship in the ballast condition
- .6 records times, positions, headings, speed and other relevant data
- .7 plots the manoeuvres from the recorded data
- .8 compares plots for loaded and ballast conditions
- .9 describes how trim affects the pivot point during turns
- .10 demonstrates how to make a pilot card and a wheelhouse poster
- .11 explains how the information in the manoeuvring information booklet can be used when planning a manoeuvre

4 Wind and current effects (2 hours)

- .1 repeats a standard manoeuvre with wind and current present for the loaded condition
- .2 repeats the manoeuvre in objective 4.1 for the ballast condition
- .3 records times, positions, headings, speeds and other relevant data
- .4 plots the manoeuvres from the recorded data
- .5 compares the result with that of the same manoeuvre without wind and current
- .6 compares the results for loaded and ballast conditions
- .7 compares the difference in ship behaviour under the influence of wind, of current and of both wind and current
- .8 for various conditions of loading investigates the effect of wind in slow speed situations

5 Shallow-water effects (4 hours)

- .1 defines shallow water
- .2 states that, in shallow water, a ship:
 - has increased directional stability
 - has an increase in turning radius
 - carries her way longer and responds slowly to changes in engine speed
 - has a smaller fall of speed during turns
 - experiences a change of trim, usually by the head for a full hull form
- .3 states that shallow-water effects become more marked as the depth decreases
- .4 defines squat
- .5 determines the squat in a given set of circumstances from the manoeuvring information supplied
- .6 repeats a standard manoeuvre in shallow water
- .7 records times positions, headings, speeds and other relevant data
- .8 plots the manoeuvre from the recorded data
- .9 compares the resulting plot with that of the same manoeuvre carried out in deep water
- .10 describes the reduction in under-keel clearance resulting from rolling and pitching

6 Bank, channel and interaction effects (1.5 hours)

- .1 describes the moments and forces affecting a ship's behaviour when navigating close to a bank or in narrow channel

- .2 states that speed should be moderate in rivers, estuaries and similar channels to reduce shallow-water effects and to provide reserve power for correcting a sheer
- .3 explains the need for speed reduction to prevent damage being caused by the ship's bow wave or stem wave
- .4 describes how a passing ship affects a moored ship
- .5 describes the interaction between passing and overtaking ships
- .6 describes how to pass or overtake another ship safely in a narrow channel
- .7 applies a knowledge of bank effect and interaction in exercises in confined channels

7 Anchoring and single-buoy mooring (2.5 hours)

- .1 selects the position to anchor in a given area
- .2 takes account of advice contained in sailing directions, of the wind and of current or tidal stream in the approach to the anchorage
- .3 using the ship's manoeuvring data, prepares an anchoring containing:
 - approach tracks and courses to steer
 - "wheel-over" positions
 - points at which to reduce speed
 - the position at which to reverse the engine
 - the position to drop the anchor
 - means of monitoring progress and determining arm at critical points
- .4 prepares a contingency outlining the actions to take in the event of an engine failure or steering failure at various stages of the approach
- .5 uses a checklist for readiness for anchoring
- .6 carries out the prepared anchoring
- .7 modifies the plan, if necessary, to take account of other ships already anchored
- .8 maintains a record of engine movements and makes appropriate entries in the log-book
- .9 when anchoring is complete fixes the ship's position and enters check bearings in the log-book
- .10 prepares a planned approach to a single-buoy mooring taking account of the relevant factors in objectives 7.2 to 7.4
- .11 carries out the planned mooring

8 Planning and carrying out a voyage (13 hours)

- .1 prepares a complete passage plan from harbour to harbour, taking account of the following:
 - information from sailing directions and other navigational publications
 - draught, squat and depth of water
 - tide and current
 - weather
 - available navigational aids
 - means of monitoring progress and determining arrival at critical points
 - expected traffic
 - traffic separation schemes
 - requirements of vessel traffic services
 - contingency plans for critical points of the passage
- .2 makes use of checklists for departure for arrival and for coastal waters
- .3 using the ship's manoeuvring information prepares a detailed plan for approach to and departure from a pilot station
- .4 carries out the planned passage and monitors the progress
- .5 complies at all times with the requirements of Chapter VIII of Code A of STCW 1978, as amended in 1995, and COLREG 1972
- .6 demonstrates compliance with Rule 10 of COLREG 1972 when joining, leaving or navigating in a traffic separation scheme
- .7 demonstrates correct procedures when communicating with a vessel traffic service
- .8 demonstrates the approach to or departure from a pilot station, using plan prepared in objective 8.3
- .9 demonstrates skill in approaching or leaving berth under various conditions of wind and tide
- .10 maintains a record of engine movements and makes appropriate entries in the log-book

