Pacific Island Deckhand

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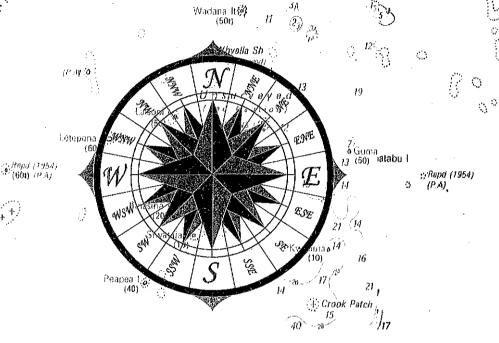
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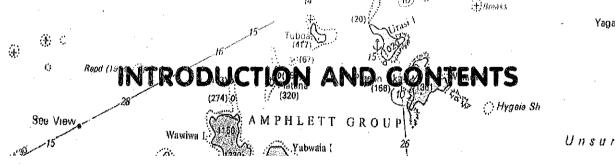
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Polaris Patch

A TRAINING COURSE MANUAL FOR LEARNERS AND TEACHERS



Coastal Fisheries Program Training Section



These resource materials were produced with financial assistance from the United Nations Development Project.



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THE PACIFIC ISLAND QUALIFIED FISHING DECKHAND CERTIFICATE

The syllabus for this certificate was adopted, for promotion as a regional standard for fishing-vessel crew training and assessment, by the Workshop on Standardised Certification for Fishing Vessel Crews (Forum Secretariat, Suva, Fiji, September 1994)

In support of the development and promotion of the Pacific Island Qualified Fishing Deckhand (PIQFD), the Workshop also recommended the preparation and distribution of a teaching resource package, which would provide institutions with guidance and resource materials for the delivery of a fishing deckhand course appropriate to the syllabus. All materials in this package have been produced by the Fisheries Training Section of the South Pacific Commission with funding provided by the United Nations Development Project.

The focus of the PIQFD syllabus is on the safe operation of vessels with only three modules being fisheries-specific. Although the PIQFD syllabus is intended for the certification of fishing vessel crews, much of the content is common to the operation of other types of vessel. It is envisaged, with the addition of modules specific to the merchant service, that qualified fishing deckhands meeting these additional competencies, would be equally able to work as merchant vessel ratings.

ABOUT THE MANUAL

This manual is designed to be a complete guide to the implementation of a PIQFD training and examination programme. It will:

- Summarise the learning content required for PIQFD examination
- Provide appropriate tutor notes and student-handout material
- · Provide visual aids for teaching
- List appropriate additional teaching aids required
- Outline lesson plans
- Suggest exercises and practical activities related to each Module
- List competencies required by students in relation to each syllabus Module
- Outline desirable outcomes for each syllabus Module
- List examples of possible oral and written examination questions

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Each numbered Module in the syllabus is presented in the manual as an individual teaching module. A common series of headings is used, in each Module, to summarise the content, as follows:

Learning Outcomes: a statement of the required capabilities associated

with the Module.

Content Outline: a summary of the learning content headings.

Learning Content: a graphic referenced text explaining the subject

matter.

Teaching Notes: notes on lesson planning, delivery methods, useful

materials and teaching aids, suggested exercises,

competencies and list of overheads.

HOW TO USE THE MANUAL

This manual has been written for use by both tutors and students. As each module is addressed, the relevant content outline and learning content for each module should be provided to students, as copied handouts. These handouts will form the basis of classroom teaching sessions.

In addition, the manual provides the teacher with additional teaching notes to aid in delivery of information in support of the handout contents. All figures are referenced in the learning content and some are provided as overhead sheets for tutor use. This manual does not aspire to present all the options an institution or individual tutors might use to conduct any specific lesson. It is designed to give, to those inexperienced with teaching such material, a suggested method of delivery and advice on ways of conducting practical sessions.

Each module is provided with student exercises, to be completed by the student as part of the Module, or used by the teacher for assessment purposes.

AGE 4 _	INTRODUCTION AND CONTENT	S
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STUDENT ASSESSMENT AND EXAMINATION

Each Pacific Island country, which adopts the PIQFD qualification as a statutory requirement, will have different criteria for assessment and examination. Because of this, no definitive examination procedures are advocated in this training manual. However, advisory group meetings have recommended that examinations for the PIQFD qualification should be competency based and be administered by the training institution that runs the course. To assist institutions in deciding how they may assess their students for the PIQFD Qualification, a suggested procedure of examination is described in the Appendix of this manual. As follows:

Appendix 1 QFDH Assessment and Examination Procedures

Appendix 1a Practical Skills Checklist

Appendix 1b QFDH Specimen Examination paper

Appendix 1c QFDH Oral Examination Guide

NOTES ON COURSE STRUCTURE AND DELIVERY

The length of the course and the depth at which the tutor delivers the subject will depend on the knowledge, experience and educational background of the student.

These course notes, and this timetable, have been developed to reflect the recommendation made at advisory group meetings that eighteen months sea service should be a pre-requisite to sitting the PIQFD qualification. Based on this level of student, a course length of four weeks is suggested as the minimum time it will take to cover the materials. Should the program be used for students who have less experience, considerably more time will be needed.

In the case where this is part of a pre-sea course, the explanations shall be more detailed. Time will be needed to give the student chances for practical experience, either at school or through workplace visits. In this case the complete course could last two or three months, depending to what depth the materials are developed

SPECIMEN COURSE OUTLINE FOR A FOUR WEEK COURSE

This specimen course outline uses a five-day working week, with seven hours of class contact worked each day. Each day is divided into four teaching sessions. Evening assignments to be given on a minimum of three days at the discretion of the tutor.

The outline is based on the premise that more difficult subjects should be learned earlier in the day. Thus, theoretical subjects are addressed in the morning, leaving the practical sessions for the afternoon.

AGE 6	INTRODUCTION AND CONTEN	ITS
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WEEK 1

Day 1

SESSION	CONTENT
Session 1	Introduction, administration and opening ceremony.
Session 2	Parts of a ship and nautical terms, Module 1.
Session 3	Introduce knots, Module 7.
Session 4	Introduce knots, Module 7.

Day 2

SESSION	CONTENT
Session 1	The marine compass, Module 3.
Session 2	The marine compass, and auto pilot, Module 3.
Session 3	Knots and splices, Module 7.
Session 4	Knots and splices, Module 7.

Day 3

SESSION	CONTENT
Session 1	Anchors and anchoring, Module 10.
Session 2	Derricks, winches and surge drum, Module 10
Session 3	Ship visit all afternoon, revise and practical experience on, vessel parts, terminology, anchoring, wheelhouse, compass, surge drum and winches.
Session 4	Ship visit all afternoon, revise and practical experience on, vessel parts, terminology, anchoring, wheelhouse, compass, surge drum and winches.

Day 4

SESSION	CONTENT
Session 1	How to keep a proper lookout, Module 4
Session 2	How to keep a proper lookout, Module 4
Session 3	Knots and splices, Module 7.
Session 4	Knots and splices, Module 7.

Day 5

SESSION	CONTENT
Session 1	Prepare a vessel for sea or heavy weather, Module 11.
Session 2	Boat and personal cleanliness, Module 12
Session 3	Knots and splices, Module 7.
Session 4	Knots and splices, Module 7.

WEEK 4

Day 1

SESSION	CONTENT	
Session 1	Introduction to fish handling, Module 19.	
Session 2	Introduction to fish handling, Module 19.	
Session 3	Introduction to fish handling, Module 19.	
Session 4	Introduction to fish handling, Module 19.	

Day 2

SESSION	CONTENT	
Session 1	The proper use of distress signals, Module 15	
Session 2	The proper use of radio telephone and VHF, Module 16	
Session 3	Names and functions of parts of a fishing vessel, Module 2.	
Session 4	Overview of Pacific Offshore Fisheries, Module 18.	

Day 3

SESSION	CONTENT
Session 1	All this day IMO course on Medical Emergency
	IMO Model Course 1.13: Medical Emergency – Basic Training.
Session 2	IMO Model Course 1.13: Medical Emergency - Basic Training.
Session 3	IMO Model Course 1.13: Medical Emergency - Basic Training.
Session 4	IMO Model Course 1.13: Medical Emergency - Basic Training.

Day 4

SESSION	CONTENT
Session 1	How to steer, Module 9.
Session 2	Revision on Rule of the road, compass and keeping a proper lookout.
Session 3	Practicals on steering if possible, otherwise practical revision
Session 4	Practicals on steering if possible, otherwise practical revision

Day 5

SESSION	CONTENT
Session 1	Revision and individual preparation of students for the oral examination.
Session 2	Revision and individual preparation of students for the oral examination.
Session 3	Revision and individual preparation of students for the oral examination.
Session 4	Revision and individual preparation of students for the oral examination.

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THE EXAMINATION SYLLABUS

PACIFIC ISLAND QUALIFIED FISHING DECKHAND

MODULE 1

THE MEANING OF COMMON NAUTICAL TERMS WHICH WOULD APPLY TO THE WORK AND BASIC NAVIGATION OF A FISHING VESSEL

MODULE 2

THE NAMES AND FUNCTIONS OF THE VARIOUS PARTS
OF A FISHING VESSEL INCLUDING GEAR AND
EQUIPMENT

Given a diagram of a fishing vessel, identify the main compartments, strength members, structures and equipment. State the functions of these parts.

Given a diagram of a purse seine net, a long-line, gill net, trolling gear, identify the main components.

MODULE 3

THE MARINE COMPASS (GYRO COMPASS); ITS USE FOR STEERING; PRECAUTIONS REQUIRED WHEN USING A COMPASS AND AUTOMATIC PILOT

Using diagrams or models, use a compass to take bearings relative to compass north and ship's head.

State precautions required when using a Gyro Compass with regards to comparison to compass course.

State the dangers of relying on automatic pilot with regards to fatigue and accuracy of course.

State the circumstances under which an autopilot should not be used.

State the cardinal and inter-cardinal points of a marine compass.

Understand the effect of ferrous objects or magnetic fields on the operation of a marine compass.

MODULE 8

THE USE OF PURCHASES

Using a diagram or block identify the parts of a block.

Be able to rig: gun tackle, handy billy, two-fold purchase, three-fold purchase.

State the purpose of tackles with regards to power gained.

State the precautions to be taken when using a snatch block

State procedures to inspect and maintain wire or top toppinglifts, runners and guys.

MODULE 9

HOW TO STEER

Identify common helm orders:

- hard to port
- hard to starboard
- ease the wheel
- midships
- check her
- meet her
- · steady as she goes
- steady

Demonstrate above to examiner during practical exam.

MODULE 10

THE USE OF WINCH AND WINDLASS; THE RIGGING AND USE OF DERRICKS

State precautions to be taken when driving a winch or surge drum.

State the procedure for anchoring and weighing anchor on all sizes of vessels.

Identify the parts of a derrick rig (from a diagram or model).

MODULE 11

PREPARE A FISHING VESSEL FOR SEA AND FOR HEAVY WEATHER State procedures to prepare a vessel for sea with regard to fish holds, tanks, stores and ship's equipment.

State procedures to prepare a vessel for heavy weather.

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MODULE 12 BOAT CLEANLINESS

State procedures and reasons for maintaining vessel cleanliness, and for maintaining personal hygiene.

MODULE 13 DECK MAINTENANCE

Understand the need for regular maintenance on winches, windlasses, derricks and all ancillary deck equipment.

Understand the practices necessary for maintaining vessel maintenance and appropriate surface treatments.

MODULE 14 PERSONAL SAFETY

Identify protective clothing and circumstances in which it should be used.

State measures to be taken to avoid falling or being swept overboard.

State hazards of refrigerant gases and precautions to take.

Identify hazard areas on deck and precautions to take.

Identify the dangers of entering unventilated, closed spaces.

State the hazards of working in areas of extreme low temperatures.

MODULE 15 THE PROPER USE OF DISTRESS SIGNALS CARRIED BY FISHING VESSELS

State all distress signalling equipment carried on a fishing vessel and correct procedure for its use.

Demonstrate all methods of signalling distress carried on a fishing vessel.

MODULE 16 THE PROPER USE OF RADIO TELEPHONE AND VHF IN AN EMERGENCY

Demonstrate the correct MAYDAY procedure.

Demonstrate the correct PAN PAN and SECURITEE' procedure and be aware that the use of radio and transmitting equipment is illegal without appropriate operating licences, except in the case of an emergency.

MODULE 17 PROFICIENCY IN SURVIVAL CRAFT AND PERSONAL SURVIVAL TECHNIQUES

Candidates for Qualified Fishing Deckhand are required to satisfactorily complete the following safety-related courses:

- IMO Model Course 1.13: Medical Emergency Basic Training
- IMO Model Course 1.19: Personal Survival
- IMO Model Course 1.20: Basic Fire-fighting

MODULE 18 THE PREVENTION OF MARINE POLLUTION

Know the potential impact of Marine Pollution on the surrounding environment.

Know the basic principles of the MARPOL Convention as promoted by the International Maritime Organisation.

Be aware of precautions to take to avoid accidents, which may lead to Marine Pollution.

Disposal of ships' waste as outlined in the MARPOL Know the procedures and practices appropriate to deck duties in the Convention.

Know the required action and procedures to follow in the event of a chemical or oil related spill.

MODULE 19

INTRODUCTION TO FISH HANDLING

State reasons for keeping fish in good conditions.

State important factors influencing spoilage and quality.

State visual changes in quality of caught fish.

State methods of handling fish and processing on board.

State methods of chilling and making ice slurries.

State preparation procedures for sashimi tuna.

MODULE 20

THE MAINTENANCE AND OPERATION OF FISHING GEAR AND EQUIPMENT

MODULE 21

OVERVIEW OF PACIFIC FISHERIES

Demonstrate knowledge of common fishing vessel types in the Pacific Region.

For Purse Seine, Long - line and Pole/Line Vessels demonstrate knowledge of:

- gear terminology
- target species
- fishing practices
- · fishing seasons and grounds.

MODULE 22

THE RIGHTS, RESPONSIBILITIES AND OBLIGATIONS OF FISHING VESSEL CREWS