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Maritime Transport Agency of Georgia

Training Record Book

Requirements for Applicants to the Advanced Tanker Courses

1st Edition
April, 2013

Record of Changes

Number	Date of Issue	Pages modified	Author	Brief Description

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List of Annexes to be attached

.1 Copy of completed Safety Familiarization form
.2 Ship's Particulars
.3 Drawings of fixed cargo-specific FF equipment
.4 RA dealing with Enclosed Space Entry and Hot Work Permit
.5 Vessel's General Arrangement Plan
.6 Cargo Tank Arrangement
.7 Drawing of Cargo Manifold
.8 Drawing of Vapour Recovery System
.9 Drawing of cargo and ballast systems
.10 Copy of Loading/Discharging Plan
.11 Drawing of IGS (or principle scheme)

Introduction

1.1 Purpose

- To inform the applicants to the advanced tanker courses the requirement to successfully complete an approved training record book as a part of the alternative mandatory entry standard to the mentioned courses.

- To provide details of the on-board training during the required seagoing service.

- To provide an approved model Training Record Book, that may be used by applicants to the advanced tanker courses

1.2 Scope

- This requirement applies to applicants to the certificate of respective advanced tanker courses, in compliance with Chapter V of the Seafarers' Training, Certification and Watchkeeping Code (STCW Code) of the Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW Convention), as amended.

1.3 Effective date

- This document enters into force on April 15th, 2013

1.4 Authority

- Maritime Transport Agency is responsible for approval of this training record book

1.5 Background

- Law of Georgia on Education and Certification of Seafarers
- International Convention on Standard of Training, Certification and Watchkeeping for Seafarers

Requirements

2.1 Standards of entry to advanced tanker training courses

The article 40 of the "Law of Georgia on Education and Certification of Seafarers" is referring to regulation V of the STCW Convention.

2.1.1 Standards of entry in advanced training for OIL tankers

Regarding **OIL TANKER** Item 4 of the Regulation V/1-1 of the STCW Convention states that:

"Every candidate for a certification in advanced training for oil tanker cargo operations shall:

.1 meet the requirements for certification in basic training for oil and chemical tanker cargo operations; and

.2 While qualified for certification in basic training for oil and chemical tanker cargo operations, have:

.2.1 at least three months of approved seagoing service on oil tankers, or

.2.2 at least one month of approved onboard training on oil tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and

.3 have completed approved advanced training for oil tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 2 of the STCW Code."

2.1.2 Standards of entry in advanced training for CHEMICAL tankers

Regarding **CHEMICAL TANKER** Item 6 of the Regulation V/1-1 of the STCW Convention states that:

"Every candidate for a certificate in advanced training for chemical tanker cargo operations shall:

.1 meet the requirements for certification in basic training for oil and chemical tanker cargo operations; and

.2 while qualified for certification in basic training for oil and chemical tanker cargo operations, have:

. 2.1 at least three months of approved seagoing service on chemical tankers, or

.2.2 at least one month of approved onboard training on chemical tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and

.3 have completed approved advanced training for chemical tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 3 of the STCW Code."

2.1.3 Standards of entry in advanced training for LIQUIFIED GAS Tankers

Regarding **LIQUIFIED GAS TANKER** Item 4 of the Regulation V/1-2 of the STCW Convention states that:

"Every candidate for a certificate in advanced training for liquefied gas tanker cargo operations shall:

.1 meet the requirements for certification in basic training for liquefied gas tanker cargo operations; and

.2 while qualified for certification in basic training for liquefied gas tanker cargo operations, have:

.2.1 at least three months of approved seagoing service on liquefied gas tankers, or

.2.2 at least one month of approved onboard training on liquefied gas tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and

.3 have completed approved advanced training for liquefied gas tanker cargo operations and meet the standard of competence specified in section A-V/1-2, paragraph 2 of the STCW Code."

2.2 Purpose of the Training Record Book

This TRB successfully completed in accordance to instructions provided herein and countersigned by the master will provide unique evidence that a structured programme of onboard training has been completed leading towards the issue of a relevant Certificate in Advanced Training for Tanker Cargo Operations.

Definitions and clarifications

For the purpose of the Training Record Book, unless expressly provided otherwise:

a) *Oil Tanker* means a ship constructed and used for the carriage of petroleum and petroleum products in bulk;
b) *Chemical Tanker* means a ship constructed or adapted and used for the carriage in bulk of any liquid product listed in chapter 17 of the International Bulk Chemical Code;
c) *Liquefied Gas Tanker* means a ship constructed or adapted and used for the carriage in bulk of any liquefied gas or other product listed in chapter 19 of the International Gas Carrier Code;
d) The term *"Shipboard Training Officer"* means a qualified seagoing officer who, under the authority of the master, should organize and supewise the programme of training;
e) The term "*Company training officer*" means a person nominated by the company who should have an overall responsibility for the training programme and for coordination with training organizations;
f) *Company* means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed on the company by these regulations

Guidance regarding onboard training:

1. The trainee should be carried in a supernumerary capacity (i.e. the trainee will have no other duties than that of undertaking the training programme and emergency duties).

2. The programme of onboard training should be managed and coordinated by the company which manages the ship on which the seagoing service is to be performed and be a vessel nominated by the company as a training vessel. A nominated training vessel is a trading vessel named by the company that is suitable for the purpose of this guidance, as applicable.

3. At all times, the trainee should be aware of two identifiable individuals who are immediately responsible for the management of the programme of onboard training. The first of these is a qualified seagoing officer, referred to as the "shipboard training officer", who, under the authority of the master, should organize and supervise the programme of training. The second should be a person nominated by the company, referred to as the "company training officer", who should have an overall responsibility for the training programme and for coordination with training organizations.

4. During the approved onboard training programme the trainee should be instructed in the loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations of the tanker to ensure that the experience gained is at least equal to that which would be obtained in three months' normal service.

5. If the three-loading and three-unloading criteria cannot be achieved within the one-month onboard training period, then the period of onboard training should be extended until these criteria have been satisfactorily achieved.

6. As much use as possible should be made of shipboard operation and equipment manuals, films and suitable visual aids, and the opportunity should be taken to introduce discussion of the part to be played by the safety organization on board ship and the role of safety officers and safety committees.

Familiarization training for all tanker personnel

Every Company – under ISM Code chapter 6.3 – is obliged to "establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the environment are given proper familiarization with their duties. Instructions which are essential to be provided prior to sailing should be identified, documented and given."

The familiarization procedure for tanker personnel should at least cover the matters set out below:

- familiarization training on board before being assigned to shipboard duties, which should be given by qualified personnel experienced in the handling and characteristics of oil, chemical or liquefied gas cargoes, as appropriate, and the safety procedures involved, namely:
    - In respect of regulations: Knowledge of the ship's rules and regulations governing the safety of personnel on board a tanker in port and at sea.
    - In respect of health hazards and precautions to be taken: Dangers of skin contact; inhalation and accidental swallowing of cargo; the harmful properties of the cargoes carried, personnel accidents and associated first aid; lists of do's and don'ts.
    - In respect of fire prevention and fire fighting: Control of smoking and cooking restrictions; sources of ignition; fire and explosion prevention; methods of fire fighting; portable fire extinguishers and fixed installations.
    - In respect of pollution prevention: Procedures to be followed to prevent air and water pollution and measures which will be taken in the event of spillage.
    - In respect of safety equipment and its use: The proper use of protective clothing and equipment, resuscitators, escape and rescue equipment.
    - In respect of emergency procedures: Familiarization with the emergency plan procedures.

Training Record Book

The onboard training should provide knowledge and experience, relevant to the applicable tanker type, of the matters set out in paragraphs 1 to 9 of the following:

1. Safety

.1.1 All tanker types

.1 Ship's safety-management system

▪ List types of vessels the Company is certified for management as per DoC ▪ List all Company SMS manuals and identify those dealing with cargo operations
Verified by Shipboard Training Officer
Signature: | Date:

.2 Cargo-specific fire-fighting equipment and procedures

▪ List fixed and portable cargo-specific FF equipment ▪ Describe operating procedure (including drawing) of fixed cargo-specific FF equipment ▪ Corresponding drawings to be attached to this TRB
Verified by Shipboard Training Officer
Signature: | Date:

.3 Cargo-specific first-aid procedures, including the Medical First Aid Guide for Use in accidents involving Dangerous Goods (MFAG)

▪ Describe procedure addressed in relevant SMS manual dealing with MSDS ▪ Describe first aid procedure based on MSDS of cargo carried while being onboard ▪ Based on MFAG of IMDG Code create cargo-specific first-aid procedures for cargo being carried while on board
Verified by Shipboard Training Officer
Signature: | Date:

.4 Ship-specific hazards and cargo-specific hazards, including:

▪ smoking regulations ▪ oxygen-depleted atmospheres ▪ cargo hydrocarbon narcosis
Verified by Shipboard Training Officer
Signature: | Date:

.5 Risk assessment systems

▪ Describe procedure concerning RA as is provided in Company's SMS manuals ▪ while describing system provide specific RA dealing with entry into enclosed space and hot work at undesignated area
Verified by Shipboard Training Officer
Signature: | Date:

.6 Safe working practices, including risk assessment and personal shipboard safety such as:

▪ precautions to be taken when entering enclosed spaces ▪ precautions to be taken before and during repair and maintenance work ▪ precautions for hot and cold work ▪ precautions for electrical safety ▪ use of personal protective equipment
Verified by Shipboard Training Officer
Signature: | Date:

.1.2 Additional for liquefied gas tankers

▪ Dangers and precautions related to handling and storage of cargoes at cryogenic temperatures
Verified by Shipboard Training Officer
Signature: | Date:

2. Construction, cargo, cargo tanks and pipelines

.2.1 All tanker types

.1 Hull/tank construction and limitations

- Identify type of the vessel and describe how it meets to corrsponding regulation (e.g. crude/oil/product carriers are governed by MARPOL Annex I. Trainee should identify corresponding regulations and describe how the vessel meets them)
- General arrangement and construction
- Tank arrangement and construction
- Identify factors governing the carriage limitations of the vessel, e.g. type of the vessel, coating of the tanks, acceptable temperature range, vapour pressure, etc.

Verified by Shipboard Training Officer	
Signature:	Date:

.2 Cargo connections

- Identify regulations governing cargo connections
- Describe how the vessel's cargo connection meets the regulations (e.g. "Recommentdations for Oil Tanker Manifolds and associated Equipment" for oil tankers or "Manifold Recommendations for Liquified Gas Carriers"

Verified by Shipboard Training Officer	
Signature:	Date:

.3 Properties and hazards associated with the types of cargo being carried, including use of Material Safety Data Sheets. List the hazards and control measures associated with cargo operations, including below and dangers of non-compliance with relevant control measures.:

- Flammability and explosion
- Toxicity
- Health hazard
- Electrostatic hazard

Verified by Shipboard Training Officer	
Signature:	Date:

.4 The risks that cargo operations (such as purging/gas-freeing/tank cleaning) may have on the accommodation ventilation systems and actions to mitigate these risks. For this purpose describe:

▪ Vapour recovery system ▪ Cargo area venting and accommodation ventilation
Verified by Shipboard Training Officer
Signature: Date:

.5 Configuration of cargo and ballast system

▪ Describe cargo and ballast system giving corresponding drawing where applicable
Verified by Shipboard Training Officer
Signature: Date:

.6 Pumps and associated equipment

▪ Describe pump theory and characteristics including types of cargo pumps and their safe operation
Verified by Shipboard Training Officer
Signature: Date:

.7 Specialist equipment associated with the cargo operations:

FOR OIL TANKERS

▪ Cargo heating systems ▪ Tank cleaning, gas freeing and inerting systems ▪ Slop arrangement ▪ Environmental protection equipment, including ODME ▪ Gas-detecting systems
Verified by Shipboard Training Officer
Signature: Date:

FOR CHEMICAL TANKERS

▪ Cargo heating and cooling systems ▪ Cargo tank environmental control systems ▪ Slop management
Verified by Shipboard Training Officer
Signature: Date:

FOR LIQUIFIED GAS TANKERS

▪ Cargo temperature maintenance system ▪ Tank atmosphere control systems, including storage, generation and distribution systems ▪ Cofferdam heating systems ▪ Gas-detecting systems
Verified by Shipboard Training Officer
Signature: Date:

.8 Particulars of the tanker's construction and how this affects the cargo operations

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

.2.2 Additional for liquefied gas tankers

.1 Use of segregation, separation and airlocks to maintain gas-safe areas

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

.2 Cargo tank, inter-barrier, insulation spaces, and pipeline relief valves and vapour venting systems

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

.3 Cargo vapour compressors and associated equipment

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

3. Trim and stability

.3.1 All tanker types

.1 Tanker's stability information and calculating equipment

▪ Intact stability criteria ▪ Restrictions as is given in ship's approved Stability Booklet ▪ Describe stability calculating equipment and procedure of testing/maintenance
Verified by Shipboard Training Officer
Signature: Date:

.2 Importance of maintaining stress levels within acceptable limits

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

.3 Dangers of free surface effect and "sloshing" effect

▪ Give brief description and provide drawings where applicable
Verified by Shipboard Training Officer
Signature: Date:

4. Cargo operations

.4.1 All tanker types

.1 Pre-planning of loading/in-transit care, discharge/ballast operations

- Factors governing planning of loading/discharging
- Prepare loading/discharging plan which should include:
  - Quantity and grade of each parcel
  - Density, temperature and other relevant properties;
  - A plan of the distribution, lines and pumps to be used
  - Start up/stopping procedures
  - Transfer rates and maximum allowable pressures
  - Critical stages of the operation
  - Notice of rate change
  - Venting requirements
  - Stability and stress information
  - Drafts and trims
  - Ballast operations
  - emergency shutdown
  - Emergency spill procedures and spill containment
  - Hazards of the particular cargoes
  - Monitoring of cargo during transfer, including sampling where applicable
  - Precautions against static generation
  - Initial start-up rates
  - Control of cargo heating systems where applicable
  - Line clearing
  - Under keel clearance limitations
  - Crude oil washing procedures where applicable
- Care of cargo during transit

Verified by Shipboard Training Officer	
Signature:	Date:

.2 Record keeping

- List items to be recorded concerning cargo operations and preparation of the vessel for cargo transfer

Verified by Shipboard Training Officer	
Signature:	Date:

.3 Attention required for mooring arrangements during cargo operations

▪ Describe briefly forces effecting while vessel is alongside ▪ Attention required for mooring arrangements during cargo operations
Verified by Shipboard Training Officer
Signature: Date:

.4 Purging and inerting requirements and associated hazards

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

.5 Tank gauging and alarm systems

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

.6 Dangers from electrostatic discharge and its prevention

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

.7 Maintenance requirements, including coating inspections

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

.4.2 Additional for chemical tankers

.1 Polymerization, cargo compatibility, tank coating compatibility and other reactions

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.2 Functions of inhibitors and catalysts

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.3 Vapour/gas dispersion

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.4.3 Additional for liquefied gas tankers

.1 Polymerization, cargo compatibility, tank coating compatibility and other reactions

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.2 Functions of inhibitors and catalysts

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.3 Causes of backpressure and pressure surge effects

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.4 Use of boil-off gas as a fuel

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.5 Vapour/gas dispersion

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.6 Purging and cool-down operations

▪ Give brief description	
Verified by Shipboard Training Officer	
Signature:	Date:

.7 Operation and maintenance of re-liquefaction equipment

▪ Give brief description	
Verified by Shipboard Training Officer	
Signature:	Date:

.8 Understanding and use of the custody transfer system

▪ Give brief description	
Verified by Shipboard Training Officer	
Signature:	Date:

.4.4 Additional for oil tankers

.1 Crude oil washing systems

▪ Give brief description	
Verified by Shipboard Training Officer	
Signature:	Date:

5. Tank washing/cleaning

.5.1 All tanker types

.1 Tank cleaning systems and equipment fitted on the tanker

▪ Give brief description and provide drawing where applicable
Verified by Shipboard Training Officer
Signature: / Date:

.2 Thorough description of tanks cleaning operations

▪ Cleanliness requirements ▪ Pre-planning of tank washing/cleaning operations ▪ Tank washing procedures, including purging and inerting ▪ Control of slops/waste product ▪ Electro-static hazards
Verified by Shipboard Training Officer
Signature: / Date:

.3 Maintenance requirements

▪ Give brief description
Verified by Shipboard Training Officer
Signature: / Date:

.5.2 Additional for chemical tankers

Provide information regarding:

▪ Removal of inhibitors and residues ▪ Use of absorption, cleaning agents and detergents
Verified by Shipboard Training Officer
Signature: / Date:

.5.3 Additional for liquefied gas tankers

Provide information regarding:

▪ .1 Hot-gassing/boil-off of liquid residues and regassification process
Verified by Shipboard Training Officer
Signature: / Date:

6 Inert gas systems

.6.1 All tanker types

.1 Inerting system(s) and equipment fitted to the tanker

▪ Give brief description and provide drawing where applicable ▪ Hazards associated with inerting of spaces, with particular reference to safe entry into tanks ▪ Purging, maintaining inert atmosphere and gas-freeing operations ▪ Maintenance requirements
Verified by Shipboard Training Officer
Signature: / Date:

7 Pollution prevention and control

.7.1 All tanker types

.1 International, flag State and company regulations, documentation and plans

▪ List all corresponding regulations
Verified by Shipboard Training Officer
Signature: / Date:

.2 Describe operation of:

▪ tanker's pollution-prevention systems and equipment, including discharge monitoring ▪ tanker's pollution-containment equipment
Verified by Shipboard Training Officer
Signature: / Date:

8 Gas-detection equipment and instruments

.8.1 All tanker types

.1 Use and calibration of personal, portable and fixed gas analyzers, with particular reference to oxygen and hydrocarbon monitoring equipment

▪ list all personal and fixed gas analyzers ▪ Give brief description to each analyzer (e.g. manufacturer, type, type of measurable gases and range, alarms, etc) ▪ Use and calibration of each equipment
Verified by Shipboard Training Officer
Signature: Date:

.2 Operation, maintenance and limitation of cargo tank level measuring, level alarm and temperature-measuring systems

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

.8.2 Additional for liquefied gas tankers

.1 Operation and maintenance of hull temperature measurement

▪ Give brief description
Verified by Shipboard Training Officer
Signature: Date:

9 Publications

.9.1 All tanker types

.1 International, flag State and company publications relevant to the operation of the tanker, including SOLAS, MARPOL and applicable guidance manuals

▪ Provide list of relevant publications
Verified by Shipboard Training Officer
Signature: Date:

.2 Operating and maintenance manuals specific to the equipment on board

▪ Provide list of class approved operation manual
Verified by Shipboard Training Officer
Signature: Date:

.3 Established industrial standards and code of safe working practice (e.g., ICS, OCIMF, SIGTTO)

Verified by Shipboard Training Officer
Signature: Date:

Final Acceptance of Training Record Book

Full name of designated Shipboard Training Officer:	
On board training accepted with the following result:	
Signature and Date:	

Accepted by the Master with the following result:	
Full name of the Master:	
Signature, Date and Stamp:	

საქართველოს ეკონომიკისა და მდგრადი განვითარების სამინისტროს საჯარო სამართლის იურიდიული პირის – საზღვაო ტრანსპორტის სააგენტოს დირექტორის 2013 წლის 26 აპრილის ბრძანება №04 - ვებგვერდი, 30.04.2013წ.