



NIPPON KAIJI KYOKAI

Certificate No. 15-034-2

## Statement of Product Quality

THIS IS TO CERTIFY that the below-mentioned simulator is found  
to comply with the NK Standard for Certification of Maritime Education & Training  
Simulator Systems and the following applicable standards:

Product description:  
**Liquid Cargo and Ballast Handling Simulator**

Type designation:  
**LCHS 5000 TechSim**

Manufacture:  
**Transas Marine Limited**  
10 Eastgate Avenue, Eastgate Business park, Little Island, Cork, Ireland

### Applicable Standards:

- |                                |   |
|--------------------------------|---|
| 1) STCW 2010 Manila amendments | Regulation I/12   |
| 2) STCW 2010 Manila amendments | Code A -I/12, B-I/12  |
| 3) IMO model course 1.01       | Basic Training for Oil and Chemical Tanker Cargo Operations             |
| 4) IMO model course 1.02       | Specialized Training for Oil Tankers                                    |
| 5) IMO model course 1.04       | Basic Training for Liquefied Gas Tanker Cargo Operations                |
| 6) IMO model course 1.06       | Specialized Training for Liquefied Gas Tankers                          |
| 7) IMO model course 1.35       | Liquefied Petroleum Gas (LPG) Tanker Cargo & Ballast Handling Simulator |
| 8) IMO model course 1.36       | Liquefied Natural Gas (LNG) Tanker Cargo & Ballast Handling Simulator   |
| 9) IMO model course 1.37       | Chemical Tanker Cargo & Ballast Handling Simulator                      |
| 10) IMO model course 2.06      | Oil Tanker Cargo and Ballast Handling Simulator                         |

Date of Initial Registration : 4 August, 2015  
Validity : 3 August, 2018  
Issued at Tokyo on 4 August, 2015

NIPPON KAIJI KYOKAI

  
( T. Kotwa )  
Director of Assurance Operations Division



## APPENDIX-A

### Simulator System

#### Simulator system specification

Documentation (identity)	<p>General Product Guidelines:</p> <ul style="list-style-type: none"><li>■ TechSim 5000 ver.8.5 General Trainee Manual</li></ul> <p>Ship Model Product Guidelines:</p> <ul style="list-style-type: none"><li>■ TechSim/LCHS 5000 LPG Tanker (ver.1.0) Trainee Manual</li><li>■ TechSim/LCHS 5000 LCC Tanker (ver.1.0) Trainee Manual</li><li>■ TechSim/LCHS 5000 LNG Tanker Membrane (ver.1.1) Trainee Manual</li><li>■ TechSim/LCHS 5000 LNG Regasification Terminal (ver.1.1) Trainee Manual</li><li>■ TechSim/LCHS 5000 Product Tanker and Product Terminal (ver.1.1) Trainee Manual</li><li>■ TechSim/LCHS 5000 Chemical Tanker and Chemical Terminal (ver.1.1) Trainee Manual</li><li>■ LCHS Load Calculator Manual</li></ul>
Documentation reviewed (date)	7 July, 2015
Tests and physical inspection performed (date)	15 and 16 July, 2015 (at Portsmouth in UK)

## APPENDIX-B

### Application/Limitation (1/2)

#### Application/Limitation

The simulator system, as described above, gives the capability to simulate a realistic environment for all of the following competencies:

STCW-2010 Manila amendments	Competence
Table A-II/1.9 Table A-II/3.6	Monitor the loading, stowage, securing and unloading of cargoes and their care during the voyage
Table A-II/1.11 Table A-II/3.8 Table A-III/1.11	Maintain seaworthiness of the ship
Table A-II/2.11	Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes
Table A-II/2.12	Carriage of dangerous goods
Table A-II/2.13 Table A-III/2.12	Control trim, stability and stress
Table A-II/2.14 Table A-III/2.13	Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and protection of the marine environment
Table A-II/2.17	Use of leadership and managerial skill
Table A-II/5.3	Contribute to the handling of cargo and stores
Table A-V/1-1-1.1	Contribute to the safe cargo operation of oil and chemical tankers
Table A-V/1-1-1.2	Take precautions to prevent hazards
Table A-V/1-1-1.3	Apply occupational health and safety precautions and measures
Table A-V/1-1-1.5	Respond to emergencies
Table A-V/1-1-1.6	Take precautions to prevent pollution of the environment from the release of oil or chemicals
Table A-V/1-1-2.1	Ability to safely perform and monitor all cargo operations
Table A-V/1-1-2.2	Familiarity with physical and chemical properties of oil cargoes
Table A-V/1-1-2.3	Take precautions to prevent hazards
Table A-V/1-1-2.4	Apply occupational health and safety precautions
Table A-V/1-1-2.5	Respond to emergencies
Table A-V/1-1-2.6	Take precautions to prevent pollution of the environment
Table A-V/1-1-2.7	Monitor and control compliance with legislative requirements
Table A-V/1-1-3.1	Ability to safely perform and monitor all cargo operations
Table A-V/1-1-3.2	Familiarity with physical and chemical properties of chemical cargoes
Table A-V/1-1-3.3	Take precautions to prevent hazards
Table A-V/1-1-3.4	Apply occupational health and safety precautions
Table A-V/1-1-3.5	Respond to emergencies



STCW-2010 Manila amendments	Competence
Table A-V/1-1-3.6	Take precautions to prevent pollution of the environment
Table A-V/1-1-3.7	Monitor and control compliance with legislative requirements
Table A-V/1-2-1.1	Contribute to the safe operation of a liquefied gas tanker
Table A-V/1-2-1.2	Take precautions to prevent hazards
Table A-V/1-2-1.3	Apply occupational health and safety precautions and measures
Table A-V/1-2-1.5	Respond to emergencies
Table A-V/1-2-1.6	Take precautions to prevent pollution of the environment from the release of liquefied gases
Table A-V/1-2-2.1	Ability to safely perform and monitor all cargo operations
Table A-V/1-2-2.2	Familiarity with physical and chemical properties of liquefied gas cargoes
Table A-V/1-2-2.3	Take precautions to prevent hazards
Table A-V/1-2-2.4	Apply occupational health and safety precautions
Table A-V/1-2-2.5	Respond to emergencies
Table A-V/1-2-2.6	Take precautions to prevent pollution of the environment
Table A-V/1-2-2.7	Monitor and control compliance with legislative requirements

NIPPON KAIJI KYOKAI

Certificate No. 15-034-2

**APPENDIX-B**  
**Application/Limitation (2/2)**

Transas Liquid Cargo and Ballast Handling Simulator (LCHS 5000 TechSim)  
contains the following ship models:

- LPG Tanker
- LCC Tanker
- LNG Tanker Membrane
- LNG Regasification Terminal
- Product Tanker and Product Terminal
- Chemical Tanker and Chemical Terminal

NIPPON KAIJI KYOKAI

  
( T. Koiwa )  
Director of Assurance Operations Division

