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NIPPON KAIJI KYOKAI

Certificate No. 15-034

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: **Engine Room Simulator**

Physical and Cloud-Based Online Installations

Type designation: **ERS TechSim**

Manufacture:

Wärtsilä Voyage Oy

c/o Wärtsilä Oyj Abp, PL 1834, 00181 Helsinki, Finland Street address: Hiililaiturinkuja 2

Applicable Standards:

1) STCW 2010 Manila amendments 2) STCW 2010 Manila amendments

3) IMO model course 2.07

4) IMO model course 7.02 5) IMO model course 7.04 6) IMO model course 7.08

7) IMO Model course 7.13

8) IMO Model course 7.14

Regulation I/12

Code A / Table A- III **Engine Room Simulator**

Chief Engineer Officer and Second Engineer Officer Officer in Charge of an Engineering Watch

Electro-Technical Officer

Basic Training for Masters, Officers, Ratings and other

Personnel on Ships Subject to IGF Code

Advanced Training for Masters, Officers, Ratings and other Personnel on Ships Subject to IGF Code

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Date of Initial Registration

3 June, 2015 18 June, 2026 Validity

Issued at Tokyo on 9 June, 2023

(Y. Yamaguchi) Director of Innovation Development Division

APPENDIX-A Simulator System

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mulator system specific	cation
	General Product Guidelines: TechSim 9 Installation and Configuration Guide TechSim 9 Instructor Manual e-Tutor Wärtsilä Evaluation and Assessment System TechSim 9 General Trainee Manual
	Ship Model Product Guidelines:
	■ ERS TechSim MAN B&W 6S50MC-C Diesel Engine, Product Tanker Ship
	■ ERS TechSim MAN B&W 6S60MC-C Diesel Engine, Tanker LCC Ship
	■ ERS TechSim MAN 8L32/40 Twin Medium Speed Engine + CPP, Ro-Pax Ferry Ship
	■ ERS TechSim AZIPOD Diesel-Electric, Cruise Ship
	■ ERS TechSim Steam Turbine (Kawasaki UA-400), LNG Carrier Ship
	■ ERS TechSim MAN L51/60DF Dual Fuel Diesel Electric, LNG Carrier Ship
Documentation	■ ERS TechSim ANZAC 2 Frigate
(identity)	■ ERS TechSim Offshore Patrol Vessel (OPV)
	■ ERS TechSim Patrol Vessel PV3000 - 4 x MTU 20V 1163 TB93 and 2 x PTI Propulsion Electric Motor Ship
	■ ERS TechSim Wartsila V46F Diesel Electric, Royal Princess Cruise Ship
	■ ERS TechSim MAN BW 11S90ME Cam-Less Electronic Engine, Containership Ship
	■ ERS TechSim MAK M43C - Azipod Diesel Electric, Eurodam Cruise Ship
	■ ERS TechSim Platform Supply Vessel
	■ ERS TechSim Caterpillar MaK 16VM46 DF, Dual Fuel (LNG), Diesel Electric, Twin Azipod Drive, Cruise Ship
	■ ERS TechSim Wartsila V46F, Diesel Electric, Twin Azipod Drive, Scarlet Lady Cruise Ship
	■ ERS TechSim Wartsila 31 with PTO / PTI Hybrid Drive
	■ ERS TechSim WinGD 7X62DF Low Speed Engine, Tanker Aframax
Documentation reviewed (date)	Initial: 15 May, 2015 Renewal: 18 April, 2018 Occasional: 11 June, 2020 Occasional: 2 February, 2021

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	Occasional: 29 May, 2023
	Initial: 21 and 22 May, 2015 (at Portsmouth in UK)
Tests and physical	Renewal: 15 May, 2018 (at Portsmouth in UK)
inspection performed	Occasional: 15 June, 2020 (at Tokyo by online)
(date)	Occasional: 2 February, 2021 (at Tokyo by online)
	Occasional: 6 June, 2023 (at Oslo)

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Director of Innovation Development Division

APPENDIX-B Application/Limitation (1/2)

Application/Limitation

The simulator system, as described above, gives the capability to simulate a realistic environment in physical and cloud based online installations for all of the following competencies:

STCW-2010 Manila amendments	Competence
Table A-III/1.1	Maintain a safe engineering watch
Table A-III/1.3	Use internal communication systems
Table A-III/1.4	Operate main and auxiliary machinery and associated control systems
Table A-III/1.5	Operate fuel, lubrication, ballast and other pumping systems and associated control systems
Table A-III/1.6	Operate electrical, electronic and control systems
Table A-III/1.11	Maintain seaworthiness of the ship
Table A-III/2.1	Manage the operation of propulsion plant machinery
Table A-III/2.2	Plan and schedule operations
Table A-III/2.3	Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery
Table A-III/2.4	Manage fuel, lubrication and ballast operations
Table A-III/2.5	Manage operation of electrical and electronic control equipment
Table A-III/2.8	Detect and identify the cause of machinery malfunctions and correct faults
Table A-III/2.10	Control trim, stability and stress
Table A-III/2.11	Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea and protection of the marine environment
Table A-III/2.14	Use leadership and managerial skills
Table A-III/4.2	For keeping a boiler watch: Maintain the correct water levels and steam pressures

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STCW-2010 Manila amendments	Competence
Table A-III/6.1	Monitor the operation of electrical, electronic and control systems
Table A-III/6.2	Monitor the operation of automatic control systems of propulsion and auxiliary machinery
Table A-III/6.3	Operate generators and distribution systems
Table A-III/6.4	Operate and maintain power systems in excess of 1,000 Volts
Table A-III/6.5	Operate computers and computer networks on ships
Table A-III/6.7	Use internal communication systems
Table A-III/6.9	Maintenance and repair of automation and control systems of main propulsion and auxiliary machinery
Table A-III/6.11	Maintenance and repair of electrical, electronic and control systems of deck machinery and cargo-handling equipment
Table A-V/3-1	Specification of minimum standard of competence in basic training for ships subject to the IGF Code
Table A-V/3-2	Specification of minimum standard of competence of advanced training for ships subject to the IGF Code

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Director of Innovation Development Division

APPENDIX-B Application/Limitation (2/2)

Wärtsilä Engine Room Simulator (ERS TechSim) contains the following ship models:

- ERS TechSim MAN B&W 6S50MC-C Diesel Engine, Product Tanker Ship
- ERS TechSim MAN B&W 6S60MC-C Diesel Engine, Tanker LCC Ship
- ERS TechSim MAN 8L32/40 Twin Medium Speed Engine + CPP, Ro-Pax Ferry Ship
- ERS TechSim AZIPOD Diesel-Electric, Cruise Ship
- ERS TechSim Steam Turbine (Kawasaki UA-400), LNG Carrier Ship
- ERS TechSim MAN L51/60DF Dual Fuel Diesel Electric, LNG Carrier Ship
- ERS TechSim ANZAC 2 Frigate
- ERS TechSim Offshore Patrol Vessel (OPV)
- ERS TechSim Patrol Vessel PV3000 4 x MTU 20V 1163 TB93 and 2 x PTI Propulsion Electric Motor Ship
- ERS TechSim Wartsila V46F Diesel Electric, Royal Princess Cruise Ship
- ERS TechSim MAN BW 11S90ME Cam-Less Electronic Engine, Containership Ship
- ERS TechSim MAK M43C, Diesel Electric, Twin Azipod Drive, Eurodam Cruise Ship
- ERS TechSim Platform Supply Vessel
- ERS TechSim Caterpillar MaK 16VM46 DF, Dual Fuel (LNG), Diesel Electric, Twin Azipod Drive, Cruise Ship
- ERS TechSim Wartsila V46F, Diesel Electric, Twin Azipod Drive, Scarlet Lady Cruise Ship
- ERS TechSim Wartsila 31 with PTO / PTI Hybrid Drive
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