NIPPON KAIJI KYOKAI

CERTIFICATE OF APPROVAL FOR FIRMS ENGAGED IN PERFORMANCE TESTS OF VOYAGE DATA RECORDERS

Certificate No. : **26EQ401VT**
Approval No. : **VT012**

THIS IS TO CERTIFY that

MACKAY MARINE, INC. - HOUSTON

921 Seaco Avenue, Deer Park, Texas 77536, U.S.A.

is approved as a firm engaged in annual performance tests of the voyage data recorders under the Society's Rules for Approval of Manufacturers and Service Suppliers incorporating IACS UR Z17, as amended.

This approval is valid until **21 December 2030**, subject to periodical assessment and the validity of the equipment manufactures' approval, and in association with the attachment to this certificate on which the applicable items to this approval are listed.

This certificate was issued at Tokyo on **14 May 2026**.

See the conditions for approval on the reverse.

NIPPON KAIJI KYOKAI

M. IRISAWA
General Manager
Material and Equipment Dept.

ClassNK

Conditions for Approval:

1. The scope of performance test of this firm is as follows;
   - VDR/S-VDR regarding SOLAS Chapter V, Regulation 20
   For the applicable items and applicable subsidiaries to this approval, refer to the attachment.

2. The service has been properly conducted and reported to the Society's surveyor in accordance with the requirements of the rules and the relevant regulations.

3. Where there is any alteration to the service approved by this certificate, the firm should notify immediately to the Society.

This is to certify that the firm has been periodically or occasionally assessed in accordance with the regulations of Chapter 2, Part 1 of the Rules for Approval of Manufacturers and Service Suppliers.

Due range of the periodical assessment: between 22 December 2027 and 21 December 2028

Periodical Assessment

Date _____

Signature _____

Surveyor to NIPPON KAIJI KYOKAI

Occasional Assessment

Date _____

Signature _____

Surveyor to NIPPON KAIJI KYOKAI

Manufacturers / Models

Japan Radio Co., Ltd.	JCY-1000, JCY-1700, JCY-1700S, JCY-1800, JCY-1850, JCY-1900, JCY-1950
Furuno Electric Co., Ltd.	VR-3000, VR-3000S, VR-5000
Netwave Systems B.V.	NW-4000 VDR, NW-4000 SVDR, NW-6000 VDR, NW-6000 SVDR
Beijing Highlander Digital Technology Co., Ltd.	HLD-A2/S, HLD-B2/S2, HLD-VDR600, HLD-SVDR600
Kelvin Hughes Limited	VDR-A12, MDP-A5, VDR-A1, MDP-A3
Danelec Marine A/S	DM100, DM200, DM300, DM400, DM500
Samsung Heavy Industries Co., Ltd.	SVDR, SVDR-N, SVDR-Pro, SVDR-3000, SVDR-3200
Transas Limited	SVDR 3100, SVDR 3200
Rutter Technologies Inc.	VDR-100G2, VDR-100G2S, VDR-100G3, VDR-100G3S
INTERSCHALT maritime systems GmbH	G3, G4
IS steinsohn	MER-VDR, MER- SVDR, VDR-G4, VDR-G4e

Offices and Subsidiaries / Locations

Mackay Marine New Orleans	Distributers Row Harahan, LA 70123, U.S.A.