

航海情報記録装置（VDR）の性能試験事業所

Firms Engaged in Performance Tests
of
Voyage Data Recorders

審査の案内

Guidance of Surveillance

ClassNK

(財) 日本海事協会

Material and Equipment Department
材料艙装部

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Firms Engaged in Performance Tests of VDRs

1 Approval of Firms Engaged in Performance Tests of VDRs

Regulation 20 of Chapter V of 2000 amendments to '74 SOLAS requires certain ships to be fitted with a Voyage Date Recorder (VDR). The VDR shall be subjected to an annual performance test conducted by an approved testing or servicing facility in accordance with the provision of Regulation 18.8 of Chapter V. Furthermore, a copy of Certificate of Compliance issued by the testing or servicing facility shall be retained on board the ship.

The Society will approve Firms Engaged in Performance Tests of VDRs and issue Certificate of Approval to the firms approved in accordance with the Society's "Rules for Approval of Manufacturers and Service Suppliers" (hereinafter referred to as the "Rules").

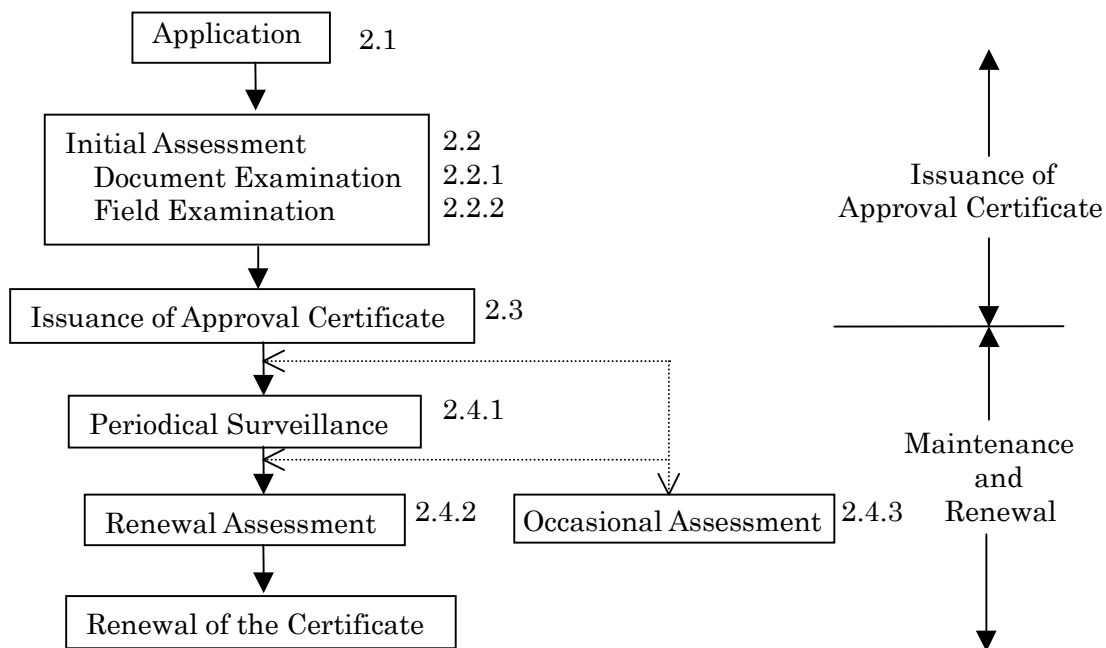
The Society accepts performance tests of VDRs conducted by an approved firm under prescribed procedures as the performance tests provided in Regulation 18.8 of Chapter V of '74 SOLAS as amended, and certificates issued by the firms under prescribed procedures as Certificates of Compliance provided in the Regulation.

The approval process starts in January 2004.

2 Issuance, Maintenance and Renewal of an Approval Certificate

Issuance, maintenance and renewal of a Certificate of Approval for Firms Engaged in Performance Tests of VDRs are handled as follows.

For further details, please refer to the "Rules for Approval of Manufacturers and Service Suppliers (Excerpt)" attached hereto.



2.1 Application

Firms intending to be approved under the Rules are to submit the following documents to the nearest ClassNK service site.

- 1) An Application Form (Form AM-VT)
- 2) Three copies each of the following documents
 - (a) Outline of the firm (location, history, organization diagram, etc.)
 - (b) Outline of performance tests services of VDRs (manufacturers and models of VDRs to which the firm is capable of testing the performance, service regions, etc.)
 - (c) Quality manual and its supplementary documents, or documented procedures (procedures for preparation, implementation, recording and reporting of the performance tests, for education and training on performance tests, and for controlling

- equipment used for performance tests.)
- (d) Forms of checklist and Certificate of Compliance used in the performance tests
 - (e) List of operators and supervisors (names, qualification, experience of the services, and records of training)
 - (f) List of equipment used in performance tests of VDRs
 - (g) Copies of approval certificates issued by competent organizations or other classification societies, if any
 - (h) Other documents deemed necessary by the Society

2.2 Initial Assessment

Initial assessment consists of document examination and field examination.

2.2.1 Document Examination

In the document examination, the documents submitted are reviewed to confirm that the documented quality system, qualification/experience of operators/supervisors, equipment used in performance tests of VDRs, etc. are in conformity with the relevant provisions of the Rules.

2.2.2 Field Examination

In the field examination, the followings are confirmed at service site, based on the submitted documents already reviewed in the document examination

- Adequate operation of the quality system etc.
- Satisfactory demonstration of the performance tests of a VDR

2.3 Issuance of an Approval Certificate

As a result of the document examination and the field examination, if the firm is found in conformity with the Rules, the firm is approved and a Certificate of Approval be issued. The valid term of the Certificate is 5 years from the date of approval.

2.4 Maintenance and Renewal of Approval

After the initial approval of the firm, following assessment and surveillance are required for the firm to maintain and to renew the approval.

2.4.1 Periodical surveillance

To confirm that the approved quality system, etc. of the firm have been maintained satisfactory, a periodical surveillance is carried out after 2 years but not 3 years passing from the initial or the renewal approval.

For the periodical surveillance, the following documents to be submitted to the nearest ClassNK service site.

- (a) An Application Form (Form AM-VT)
- (b) Three copies of the documents, if any modification has been made to the approved contents
- (c) Three copies of any other documents the Society may consider necessary

The Society may cancel the approval, in case where the surveillance is not carried out.

2.4.2 Renewal Assessment

Renewal assessment is carried out to the approved firm by the expiry date of the certificate of approval, in case where the firm intends renewal of the approval. The assessment is carried out in accordance with the requirements for the initial assessment, however, if the Society considers acceptable, the assessment may be modified.

2.4.3 Occasional Assessment

Occasional assessment is carried out to the approved firm as the occasion demands, in case where the firm intends to make alterations in the approved contents at a time other than that of periodical surveillance or renewal assessment.

For the occasional assessment, the following documents are to be submitted to the nearest ClassNK service site.

- (a) An Application Form (Form AM-TV)
- (b) Three copies of the documents relating to the alteration
- (c) Three copies of any other documents the Society may consider necessary

3. Fees

The fees and the travel expenses are charged in accordance with the separate provisions in case where performing the assessment or the surveillance.

4. Reference

For any questions about the matter, please contact:

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Rules for Approval of Manufacturers and Service Suppliers (Excerpt)

Part 1 General

Chapter 1 General

1.1 General

- 1 The "Rules for Approval of Manufacturers and Service Suppliers" (hereinafter referred to as the "Rules") applies to assessment and approval of a manufacturing works of ships, to be classed or have been classed, and of machinery, materials, etc. with which the ships are to be equipped (hereinafter referred to as the "products"), and also applies to a service supplier of a repairing service, maintaining service, an inspecting service, a measuring service for the survey, etc. to the products.
- 2 Assessment and approval under the Rules are performed to confirm that a manufacturing works or a service supplier has enough capacity as follows.
 - (1) For a manufacturing works of products, it has enough capability to maintain such quality of its products as required by the **Rules for the Survey and Construction of Steel Ships**, and other rules of the Society.
 - (2) For a service supplier, it has enough capability to evaluate that the products have such quality as required by the **Rules for use Survey and Construction of Steel Ships**, and other rules of the Society.
- 3 Assessment and approval under the Rules apply to a manufacturing works for the specified products or a service supplier for the specified services.
- 4 Assessment and approval are made following an application from a manufacturer's or supplier's management.

1.2 Definition of Terms

- 1 "Quality system" means a system under management in which the organizational structure, responsibilities, procedures, processes, personnel, etc. that a manufacturing works or a service supplier possesses are combined in an organic manner for the product or the service
- 2 "Quality manual" means a document of procedures to perform, and maintain a quality system.
- 3 "Manufacturer's or supplier's management" means a top management related to a quality system in a manufacturing works or a service supplier.

Chapter 2 Assessment

2.1 General

- 1 In case a manufacturer or a service supplier intends to obtain approval or maintain approval as a manufacturer or a service supplier under the Rules, the manufacturing works or the service supplier is to be assessed by the Society in accordance with the requirements of this Chapter.
- 2 In such assessment of a manufacturing works or a service supplier, an investigation on the quality system, production or service procedures, production or service facilities, operators, etc. and, an approval test or a demonstration where necessary, are carried out, and comprehensive evaluation is made.

2.2 Kinds of Assessment

The kinds of assessment is initial assessment, periodical surveillance, renewal assessment and occasional assessment.

2.3 Initial Assessment

In initial assessment, a manufacturing works or a service supplier will be assessed by the Society, based upon the results of document examination and field examination as specified for in the following:

1 Document examination

- (1) For manufacturing works of products intended to be approved under the Rules, 3 copies each of the following documents are to be submitted to the Society for the document examination.
 - (a) Outline of the works intended to be approved (location, history, capital, organization diagram, number of employees, main products, standard production output, etc.)
 - (b) Manufacturing facilities (a summary of main manufacturing facilities and inspection equipment, outline of workshops and facilities for storing materials and parts, a list of orders to the subcontractors and the subcontracted products, etc.)
 - (c) Outline of the products
 - (d) Quality manual and its supplementary documents
 - (e) Quality plan for each product

- (f) Any other data deemed necessary by the Society
- (2) For service suppliers intended to be approved under the Rules, 3 copies each of the following documents are to be submitted to the Society for the document examination.
 - (a) Outline of the firms intended to be approved (location, history, capital, organization diagram, number of employees, main services and their actual records, etc.)
 - (b) Description of equipment used for the service (measuring equipment, outline of workshops and facilities for storing materials and parts, a list of orders to the subcontractors, etc.)
 - (c) Outline (including description of service conditions or service regions) of the relevant service
 - (d) Quality manual and its supplementary documents, or documented procedures (work procedures, verification procedures, recording and reporting procedures, training procedures, control procedures of measuring equipment, etc.
 - (e) List of operators documenting name, qualifications, training and experience within the relevant service area, and training programmes for operators
 - (f) Checklists of the relevant services and reporting formats to the Society
 - (g) Copies of approval certificates issued by competent organizations or other classification societies, if any
 - (h) Other documents deemed necessary by the Society
- (3) In the document examination, the documents submitted under the requirement in (1) or (2) above are reviewed to confirm that the documented quality system is in conformity with the Rules.

2 Field examination

- (1) In the field examination, based on the documents that have been submitted and reviewed, the quality system, etc. of the manufacturing works or the service supplier is investigated on site to confirm that the quality system, etc. is in conformity with the Rules.
- (2) For manufacturing works to which **Chapter 4, Part 2** of the Rules applies, approval tests on the products intended to be approved are to be carried out with satisfactory results.
- (3) For service suppliers to which **Part 3** of the Rules applies, demonstrations of the service performances intended to be approved are to be carried out with satisfactory results.

2.4 Periodical Surveillance

- 1 Periodical surveillance is carried out to the approved manufacturing works or service supplier.
- 2 In the periodical surveillance, it is confirmed by the Society that the approved quality system, etc. of the manufacturing works or service supplier are maintained satisfactorily.
- 3 The date of periodical surveillance is to be as follows:
 - (1) For manufacturing works of products, periodical surveillance is to be carried out within 3 *months* either way of each anniversary date (the day corresponding to the expiry date of the certificate).
 - (2) For service suppliers, periodical surveillance is to be carried out after 2 *years* but not 3 *years* passing from the initial or the renewal approval date.

2.5 Renewal Assessment

- 1 Renewal assessment is to be carried out to the approved manufacturing works or service supplier by the expiry date of the approval certificate as specified in 3.3, in case where the manufacturer's or supplier's management intends renewal of the approval.
- 2 In the renewal assessment, assessment is made in accordance with the requirements for the initial assessment specified in 2.3 above. However, if the Society considers acceptable, the assessment may be modified.

2.6 Occasional Assessment

- 1 Occasional assessment is carried out to the approved manufacturing works or service supplier as the occasion demands, in case the manufacturer's or supplier's management intends to make alternations and some change in the approved contents at a time other than that of periodical surveillance or renewal assessment.
- 2 In the occasional assessment, it is confirmed by the Society that all the necessary items are in a satisfactory condition.

2.7 Preparations for Assessment or Surveillance, and Others

- 1 All such preparations as required for assessment or surveillance specified in 2.3 through 2.6 are to be made by the manufacturing works or the service suppliers. On such occasions, the management representative as specified in 2.2.1-2, Part 2 for the manufacturing works or the person familiar with the quality system for the service suppliers is also to be present at the assessment or the surveillance.
- 2 In case necessary preparations have not been made or in case no responsible person specified in -1 above is

- present at the assessment or the surveillance, the Society may suspend the assessment or the surveillance.
- 3 As a result of assessment or surveillance, in case rectification is considered necessary, the Society will notify the management accordingly. The manufacturer's or supplier's management who has received such notification is to perform corrective actions subject to confirmation by the Society..

Chapter 3 Approval

3.1 Issuance of Approval Certificates and Official Announcement

- 1 As a result of initial assessment or renewal assessment, if the quality system, etc. of a manufacturing works or service supplier is found in conformity with the Rules, the manufacturing works or the service supplier is approved and an approval certificate be issued to the manufacturer's or supplier's management.
- 2 The Society officially announces a list of the approved manufacturing works and service suppliers.

3.2 Issuance of Assessment Record

As a result of the assessment or the surveillance an assessment record stating corrective action requests on the quality system, etc. is issued to the manufacturing works or the service supplier.

3.3 Valid Term of Approval Certificates

The valid term of an approval certificate is *5 years* from the date of the initial or the renewal approval. In case where the renewal assessment is carried out within *3 months* before the expiry date, the valid term of the certificate is *5 years* from the expiry date.

3.4 Cancellation of Approval

In case an approved manufacturing works or service supplier falls under one of the following items **(1)** through **(5)**, the Society may cancel the approval. Upon such a cancellation, the Society notifies the manufacturer's or supplier's management accordingly.

- (1) In case where a quality of the products or a result of the services is in doubt.
- (2) In spite of request from the Society for rectification, in case appropriate corrective actions have not been taken by the date designated by the Society.
- (3) In case where the approved condition has not complied with the technical requirements concerned due to alteration of the requirements.
- (4) In case assessment or surveillance specified for in **2.4** and **2.6** is not carried out.
- (5) In case the manufacturer's or supplier's management proposes to cancel application to the Rules.

Chapter 4 Miscellaneous

4.1 Fees

The fees and the travel expenses are charged in accordance with the separate provisions in case where performing the assessment or the surveillance.

4.2 Liability

The Society's liability for any loss or damage of the products under the examination will be handled based on the "**Conditions of Service for Classification of Ships and Registration of Installations**", which is separately specified.

Part 2 - Omitted -

Part 3 Requirements for Approval of Service Suppliers

Chapter 1 General

1.1 General

1.1.1 Application

- 1 This Part applies to service suppliers listed as follows
 - (1) Firms engaged in thickness measurements on ships
 - (2) Firms carrying out in-water survey of ships
 - (3) Radio firms engaged in services on ships
 - (4) Firms engaged in performance tests of Voyage Data Recorders (hereinafter referred to as "VDRs")
 - (5) Firms other than those listed in **(1)** through **(4)** above
- 2 Firms listed in **-1(1)** through **(4)** are to comply with the requirements in this Part as well as the

requirements in **Part 1**.

- 3 Firms listed in **-1(5)** are to comply with the requirements deemed appropriate by the Society as well as the requirements in **Part 1**.

1.1.2 Equivalency

Even in case it is difficult to conform to the requirements in this Part, if the Society admits a matter as equivalent to the requirements in this Part, the matter may be regarded as conforming to this Part.

1.1.3 Definition of Terms

- 1 "Internal quality audit" means systematic and independent examination the supplier's management performs to verify that the established quality system is operating effectively and as planned, and to determine the adequacy of the system to achieve the objectives.
- 2 "Rules of the Society" means technical rules of the Society such as the "**Rules for the Survey and Construction of Steel Ships**", and others.

1.2 Quality System

1.2.1 General

To maintain quality required to the services to be provided, the supplier's management is to establish and maintain a documented quality system that is in conformity with the requirements in **1.2.2** through **1.2.8**.

1.2.2 Training

- 1 The supplier's management is to provide the training of all personnel who are engaged in the activities which can affect quality of the relevant services.
- 2 The supplier's management is to establish and maintain a documented procedure for implementing the training specified in **-1**.
- 3 The supplier's management is to establish and maintain a list of operators and supervisors documenting name, qualifications, training and experience within the relevant service area.

1.2.3 Measuring and Testing Equipment

- 1 Measuring and testing equipment to maintain quality of the relevant services is to be provided at the supplier.
- 2 The supplier's management is to establish and maintain a documented procedure to control, calibrate and maintain the equipment specified in **-1**.

1.2.4 Work Procedure

The supplier's management is to establish and maintain a documented work procedure for the services to be provided.

1.2.5 Subcontracting Control

- 1 In case where any parts of the services provided are sub-contracted, the supplier's management is to examine and evaluate the subcontractor's quality system and works to verify that the subcontractor has enough capability to provide subcontracted services with required quality.
- 2 Ordering documents are to contain data clearly necessary for the subcontracting.
- 3 The supplier's management is to establish and maintain a documented procedure for implementing the subcontracting control specified in **-1** and the order specified in **-2**.

1.2.6 Verification Resources

- 1 The supplier's management is to verify quality of the services provided.
- 2 The supplier's management is to perform the internal quality audits periodically. As to the results of the audits, the following **(1)** though **(3)** are to be ensured.
 - (1) The audit results are to be reported to the supplier's management and the sections audited.
 - (2) Based on the audit results, the supplier's management is to review the quality system when necessary.
 - (3) The audit results and the records or the management review are all to be maintained.
- 3 The supplier's management is to establish and maintain a documented procedure for implementing the verification specified in **-1** and the internal quality audit specified in **-2**.

1.2.7 Reporting to the Society

The supplier's management is to establish and maintain a documented procedure for reporting the results of

the services provided to the Society.

Chapter 2 -Omitted-

Chapter 3 -Omitted-

Chapter 4 -Omitted-

Chapter 5 Firms Engaged in Performance Tests of VDRs

5.1 Quality System

5.1.1 Work Procedure

A documented work procedure specified in 1.2.4 is at least to contain information on items listed in the following (1) through (4).

- (1) Preparation of performance tests of VDRs
- (2) Implementation of performance tests of VDRs
- (3) Reporting the results of performance tests of VDRs and verification by the Society's surveyor
- (4) Issue of service record certificates

5.2 Operators and Supervisors

5.2.1 Training

- 1 Operators carrying out performance tests of VDRs and supervisors are to have sufficient knowledge upon the following (1) through (3).
 - (1) The requirements of VDRs and the inspection instructions issued by the Society
 - (2) The latest *SOLAS (Safety of life at sea)*, *IMO (International Maritime Organization)* Assembly Resolution concerning performance standards, and *IEC (International Electrotechnical Commission)* standards
 - (3) The following reference documents concerning VDRs in question
 - (a) Installation manual
 - (b) Operation and maintenance manual
 - (c) Information for use by an investigation authorities
- 2 The documented training procedures specified in 1.2.2 are to contain the followings.
 - (1) Procedures to learn the knowledge specified in -1 above
 - (2) Procedures for the continuous internal training of the suppliers

5.2.2 Qualifications, etc

- 1 In general, one or more operators and supervisors are to be attached to the supplier respectively.
- 2 As for the competence and experience, operators for the performance tests of VDRs are to comply with the requirements specified in (1) and (2).
 - (1) Operators carrying out the performance tests of VDRs are to have qualification approved by the manufacturer.
 - (2) Operators are to have experience as an operator of VDRs for one year or more as well as to have once or more experience for performance tests.
- 3 As for the competence and experience, supervisors for performance tests of VDRs are to comply with the requirements specified in (1) and (2).
 - (1) Supervisors carrying out the performance tests of VDRs are to have qualification approved by the manufacturer.
 - (2) Supervisors are to have experience as a supervisor of VDRs for 2 years or more.
- 4 Notwithstanding -1 through -3 above, the Society may appoint a person as an operator or a supervisor of VDRs who is deemed to have competence and experience equivalent to those specified in -1 though -3.

5.3. Equipment for the performance tests of VDRs

The suppliers are to have the equipment for the performance tests of VDRs following (1) through (3).

- (1) Instruments for measuring frequency, voltage, current and resistance
- (2) Playback hardware of recorded data, speakers, printers and memories
- (3) Playback software of recorded data

5.4 Demonstration

5.4.1 Demonstration

On board demonstration is to be carried out in the presence of the Society's surveyor to verify that the supplier have appropriate competence for the performance tests specified in the documents submitted.

Application for Assessment/Approval of
Firms Engaged in Performance Tests of Voyage Data Recorders (VDRs)
(Initial*1 Occasional*2 Periodical*3 Renewal*4 Withdrawal*5)

To : ClassNK (Nippon Kaiji Kyokai)

Name of the Firm (Applicant) : _____
 Applicant's Document Number : _____
 Date of Application : _____
 Person in charge of the Application : _____
 Phone & Fax : TEL: _____ FAX: _____
 E-mail: _____

On the basis of the requirements of *Rules for Approval of Manufacturers and Service Suppliers*, we hereby submit application:

- for approval with attached documents *1,
 for approval of alteration to the items which have been approved with attached documents*2,
Outline of the alteration : _____
 for periodical surveillance *3,
 for renewal assessment and to renew the approval *4,
 for withdrawal of the approval with the ClassNK Approval Certificate attached *5.
Reason : _____

1. Name of the Firm applied : _____

2. Address of the Firm : _____

3. Kind of Services : _____ Performance Tests of VDRs

4. Approval Number *2/*3/*4/*5 : _____

5. Intended Date of Field Examination *1/*2/*3/*4 : _____

6. Attached documents and data *1/*2/*3/*4 (relevant documents only in the case of occasional assessment, periodical surveillance and renewal assessment) :
- (a) Outline of the firm (location, history, capital, organization diagram, number of employees, main services, etc.)
 - (b) Outline of the services (manufacturers and models of VDRs to which the firm is capable of testing the performance, records of the tests in the past, etc.)
 - (c) List of operators engaging on performance tests of VDRs and supervisors (including their names, qualifications, experiences, etc.) and their service areas
 - (d) List of equipment necessary for performance tests of VDRs
 - (e) Quality manual and supplementary documents, or documented procedures (procedures for preparing, implementing, recording and reporting of performance tests of VDRs, for education and training on the services, and for controlling equipment used in the performance tests)
 - (f) Records of education and training of operators and supervisors
 - (g) Forms of checklists and certificate of compliance intended to be used for the performance tests
 - (h) Copies of approval certificates issued by other classification societies, if any
 - (i) Any other documents the Society may consider necessary

7. Note :