

SUPPLEMENT No. 216

Lehtola Kari:

**VIKING SALLY - ESTONIA. SOLAS Passenger Ship Certificates and
Inspection Certificates.**

Working paper

31.3.1996

THE JOINT ACCIDENT INVESTIGATION
COMMISSION FOR THE MV ESTONIA

WORKING PAPER

VIKING SALLY - ESTONIA SOLAS PASSENGER
CERTIFICATES AND INSPECTION CERTIFICATES

31.3.1996

(2)

Viking Sally - Estonia SOLAS Passenger Ship Safety Certificate and Inspection Certificates

1) Safety certificates

A review of the archives of the Finnish National Board of Navigation has shown that the vessel had a complete series of safety certificates from when the vessel was first taken into operation, to when it was transferred to sail under the Estonian flag.

The safety certificate has traditionally been prepared and signed by one official on the basis of the appropriate inspection certificates of experts in different fields.

The first safety certificate was valid from 27 June 1980 to 21 July 1980. This certificate gives the number of passengers as 1,100. When the vessel sailed from Papenburg to Finland, it arrived with dozens of German shipyard employees who continued to build cabins. Because the cabins were still under construction, it was not possible to certify the vessel as carrying more than 1,100 passengers. The period of validity of that first certificate was only one month.

In this first certificate, the vessel's trade area is defined in English, Finnish and Swedish as:

"for a short international voyage
lyhyillä kansainvälisillä matkoilla
för kort internationell resa"

The second safety certificate was valid from 16 July 1980 to 26 June 1981. This certificate gave the number of passengers as 2,000. The vessel had been made ready before this second certificate had been issued. This certificate gives the vessel's trade area as:

"for a short international voyage between Finland and Sweden
rannikkoliikenteessä Suomen ja Ruotsin välillä
i kustfart mellan Finland och Sverige"

(A direct translation of the Finnish and the Swedish is "for

(3)

coastal traffic between Finland and Sweden".)

The same trade area was also mentioned in the two following certificates valid from 30 June 1981 to 24 June 1982 and from 17 November 1982 to 6 June 1983.

A search of the archives did not reveal any certificates valid from 7 June 1983 to 6 June 1985.

The next certificate found in the archives was valid from 7 June 1985 through 23 April 1986. It gave the trade area as

"on a short international voyage between Finland and Sweden
lyhyillä kansainvälisillä matkoilla Suomen ja Ruotsin
väillä

på korta internationella resor mellan Finland och Sverige"
(Here, all three languages stipulate the same trade area.)

The following seven certificates, which cover the period from 3 June 1986 through 22 May 1993 stipulate the same trade area.

The trade area mentioned in the first safety certificate, "short international voyage", allows the vessel to trade in practice in the entire Baltic. The trade area mentioned in the safety certificates issued after 1985, "short international voyage between Finland and Sweden", apparently refers to the identical area.

The certificates valid between 30 June 1981 and 6 June 1983 also used the same English language definition of the trade area. On the other hand, the Finnish and Swedish language expressions, a direct translation of which is "for coastal traffic between Finland and Sweden", may refer to point 2c of SOLAS chapter II(A)(1), according to which a vessel may be prohibited from voyaging more than 20 nautical miles from land. While in traffic, the Viking Sally remained within this distance from land.

(4)

The officials who had participated in the granting of the certificates have noted that at the time there were no reasons connected with the structure of the vessel that would have required limiting its trade area to a smaller area than called for by "short international voyage". The "coastal traffic" notation apparently referred to the Commercial Vessel Officers Decree in force at the time. Section 2 of this Decree is attached (part) in Finnish and Swedish.

2 §.

Tässä asetuksessa tarkoitetaan:

- 1) konealuksesta — alusta, jonka pääkuljetuslaiteena on kone;
 - — — — —
 - 7) sisäliikenteellä — liikennettä järviillä, joissa ja kanavissa sekä rannikon saaristalueella, joka ei ole välittömästi altiina aavalta mereltä tulevalle merenkäynnille;
 - 8) rannikkoliikenteellä — liikennettä sisäliikennealueen ulkopuolella Suomenlahdella 23° itäiseen pituuteen, Pohjanlahdella ja Itämerellä $59^{\circ}30'$ pohjoiseen leveyteen sekä Ruotsin saaristossa Söderköpingiin asti;
 - 9) itämerenliikenteellä — liikennettä rannikkoliikennealueen ulkopuolella Itämerellä ja siihen liittyvillä vesillä aina Lindesnäsin ja Hanstholmin välistelle linjalle sekä Cuxhaveniin saakka;
 - 10) euroopanliikenteellä — liikennettä itämerenliikennealueen ulkopuolella Vienanmeren satamiin pohjoisessa, 11° läntiseen pituuteen lännessä sekä Välimerelle ja siihen liittyville vesille, ei kuitenkaan Suezia kauemmaksi;
 - 11) valtameriliikenteellä — liikennettä euroopanliikennealueen ulkopuolella; sekä
 - 12) keskeytymättömällä kululla — kulkua, jonka kestäessä alus ei poikkea satamaan tai muutoin ole yhteydessä maihin pitempää aikaa kuin kaksi tuntia kerrallaan.
- — — — —

2 §.

I denna förordning förstas med:

- 1) maskindrivet fartyg — fartyg med maskin såsom huvudframdrivningsmedel;
 - — — — —
 - 7) inre fart — fart på insjöar, floder och kanaler samt i skärgård vid kusten, som icke är omedelbart utsatt för sjögång från öppen sjö;
 - 8) kustfart — fart utom området för inre fart på Finska viken till 23° ostlig longitud, på Bottniska viken och Östersjön till $59^{\circ}30'$ nordlig latitud samt i svenska skär-gården till Söderköping;
 - 9) östersjöfart — fart utom området för kustfart på Östersjön och därtill anslutna farvatten intill linjen Lindesnäs—Hanstholm samt till Cuxhaven;
 - 10) europeisk fart — fart utom området för östersjöfart till hamnarna vid Vita havet i norr, till 11° västlig longitud i väster samt till Medelhavet och därtill anslutna farvatten, likväl icke längre än till Suez;
 - 11) oceanfart — fart utom området för europeisk fart; samt
 - 12) oavbruten gång — gång, under vilken fartyget icke anlöper hamn eller annorledes står i förbindelse med land under längre tid än två timmar åt gången.
- — — — —

The officers in vessels intended for coastal traffic had less strict qualifications.

When the Viking Sally - Estonia was under construction, the Commercial Vessel Decree issued in 1920 was in force in Finland. Section 45 of this Decree reads in Finnish and Swedish as follows:

45 §.

Rungonkatsastus toimitetaan ennen kuin alusta saadaan käyttää ja sen jälkeen merimatkustaja-aluksissa joka vuosi, muissa matkustaja-aluksissa joka toinen vuosi, merilastialuksissa joka kolmas vuosi sekä konevoimalla kulkevissa rannikkoaluksissa ja sisävesien koneilla kulkevissa lastialuksissa joka neljäs vuosi. Jos alus ylläpitää talviliikennettä, tulee se joka vuosi, ennenkuin tämä alkaa, katsastuttaa, jollei katsastusta sellaista liikennettä varten ole aikaisemmin vuoden kuluessa talvipurjehduksen päätyttyä toimitettu. Katsastus toimitetaan, kun alus on otettu tokaan tai seisoo telakalla, sekä ennen kuin runko on kitattu tai maalattu.

Vastamainitussa toimituksessa on katsastettava myöskin kaikkien pelastusveneiden rungot.

Jos aluksella on luokka merenkulkuhallituksen hyväksymässä luokitusalitoksessa sitä liikennettä ja kulkuvettä varten, jossa alusta käytetään, olkoon se, niinkauan kuin luokitustodistus on voimassa, vapautettu edellä määritystä katsastuksesta; kuitenkin, milloin alusta, jolla talviliikennettä ylläpidetään, ei ole laitoksen toimesta tässä suhteessa sitä vuotta varten katsattu, toimitettakoon katsastus niin kuin yllä on sanottu.

Jos hyväksytyyn luokitusalitokseen asian-tuntija on toimittanut rungonkatsastukseen, olkoon siitä annettu todistus tässä maassa pätevä.

Surveyors working for the Finnish National Board of Navigation have surveyed the vessel annually from 1980 to when the vessel was transferred to sail under the Estonian flag. However, the Finnish surveyors had not surveyed the hull, since according to section 45, paragraph 3 cited above, no surveys of the hull need be carried out on the vessel, since it had been classified by Bureau Veritas.

45 §.

Skrovbesiktning verkställes innan fartyget får användas och sedermera å sjögående passagerarfartyg varje år, å övriga passagerarfartyg vart annat år, å sjögående lastfartyg vart tredje år samt å kustgående maskindrivet lastfartyg och maskindrivet lastfartyg för inre farvatten vart fjärde år. Underhåller fartyget vintertrafik, bör det samma varje år innan denna vidtager undergå besiktning, såframt besiktning för dylik trafik icke tidigare under året efter avslutad vinterseglation verkställts. Besiktning verkställes, medan fartyget är intaget i docka eller står på slip samt innan skrovet blivit spacklat och målat.

Vid nu nämnda förrätning bör besiktning verkställas jämväl å samtliga för livräddning avsedda båtars skrov.

Innehåller fartyg klass i klassificeringsanstalt, som av sjöfartsstyrelsen godkänts, för den fart och det farvattnen, vari fartyget användes, skall detsamma, så länge klassificeringscertifikatet är gällande, vara befriat från ovan föreskrivna besiktning; dock att, där fartyg, varmed vintertrafik underhålls, icke blivit i sådant avseende genom anstaltens försorg för året besiktigat, besiktning skall äga rum på sätt ovan är sagt.

År skrovbesiktning verkställs av expert för godkänd klassificeringsanstalt, vare häröver utfärdat bevis här i landet giltigt.

Annex I contained the records of the Finnish Survey of Seaworthiness, which also indicates that the survey of the hull is to be taken care of by the classification society.

Bureau Veritas, together with certain other older classification societies, received this approval under section 45 by a decision of the Finnish National Board of Navigation given already on 18 January 1921. A copy of this has already been distributed to the Joint Accident Investigation Commission.

SJÖVÄRDIGHETSBEVIS



Maskineribesiktningsbevis

Fartygets art¹⁾ och namn passagerarfartyget Viking Sally
 Redare Federiaktiebolaget Sally Bruttodräktighet 15566,89 reg.ton
 Framdrivningsmaskin: art²⁾ dieselmotorer antal 4
 Maskineffekt 17600 kW HK/HKa enligt bevis den — 19 — Bevis auskaffas
 Arbetstryck: lufttryck 30 kp/cm², ångtryck — kp/cm² från Sjöfartsstyrelsen
av underdeckhöjd,

Var och när har föregående besiktning förrättats Ej tidigare, nybygge

Maskineriet godkändes då till den — 19 — för seglationsperioden 19 —

Tillståndsbevis för pannan/pannorna har utfärdats den — 19 —

Är alla rörledningar författningsenliga Ja

Var är bränslebehållarena placerade i dubbelbotten, högtankar och daglankar

Kan huvudpådragningsventilerna/bränsleventilerna avstängas på däck Ja

Hurudan är maskinrummets/pannrummets reservutgång 5/2 reservutgångar

Är säkerhetsventilerna justerade — Finns föreskrivna reservdelar ombord Ja, klass

Finns föreskrivna verktyg ombord Ja Finns föreskrivna reparationsförförhinder ombord Ja

När har huvudmaskinen öppnats och besiktigats KI. 07.80 Till vilken datum godkänd 07. 85

När har hjälpmaskinerna öppnats och besiktigats KI. 07.80 Till vilken datum godkända 07. 85

När har propelleraxeln besiktigats SB&BB KI. 04.80 Till vilken datum godkänd 04. 85

När har bottenventilerna och -kranarna öppnats och besiktigats KI. 04.80 Till vilken datum godkända 04.85

När har tryckluftsbehållarena besiktigats KI. 07.80 Provttryck ent.klassfödrt. kp/cm²

Länspumparna:

Kapacitet m ³ /h	300	110	110	110
Är pumpen själv sugande	Ja	Ja	Ja	Ja

Huvudlänsledningens

diameter 125

Art³⁾ samtliga självständigt drivna

30

Ja

Självständigt drivna

brandpumpar:

Kapacitet m ³ /h	92	92	92	2x150
Tryck kp/cm ² bar	9,0	9,0	9,0	7,5

Placering HM-rum H/MI-rum KAMEVA-YUM KAMEVA-YUM

Verkstad

för sprickor

Är brandpumparna försedda med säkerhetsventiler Ja

Brandposter: På öppet däck 15, varav — är åtkomliga då fartyget har däckslast;

i passagerar bostadsavdelningarna 68; i maskin- och pannrummen avd. 10

Vid brandposterna finns 92 st brandslangar à 15 m. Slangarnas diameter 52 mm,

Storlek och typ⁴⁾ av slangarnas munstycken samtliga för alternativt sluten/spredd ström

¹⁾ passagerar-, last-, isbrytar-, bogser-, fiske-, båtgångsfartyg

²⁾ ång-, motor-, turbin-

³⁾ handpump, av huvudmaskineriet driven pump, självständigt driven pump

⁴⁾ helstråle-, reglerbart, dimmunstycke

Flyttbara eldsläckningsapparater:

Typ ⁵⁾	Pulver	Pulver	Pulver	CO ₂
Antal	1	2	160	3
Storlek	50 kg	12 kg	6 kg	12 kg
Senaste besiktning	samtliga levererade sommaren 1980			
Reservladdningar	1	2	160	3

Av flyttbara eldsläckningsapparater finns:

i maskinrummet: 1 st 50 kg pulv., 19 st 6 kg pulv. och 1 st 12 kg CO₂⁶⁾
avdelningen: 2 » 12 - " - " , 2 » 6 - " - " " — — —⁶⁾
» pannrummet: 2 » 12 - " - " - " , 2 » 6 - " - " " — — —⁶⁾
» övriga rummen: 2 » 12 - " - " CO₂, 139, 6 - " - " » — » — —

I pannrummet finns 2 ~~hetoljeh~~ pannor, vilka är försedda med sammanlagt 2/2 eldstäder/brännare ^{samt 8 st.}
~~(thermal fluid heaters)~~ avgaspannor.
Finns vid varje panna en behållare med sand eller motsvarande — , volym — m³ (gas heaters,

Finns rökhjälpm — Finns säkerhetslampor Ja, 10 st.

~~tryck-~~

Finns luftsländningsapparater Ja, 6 st. Reservbehållarnas antal 1% sätser = 1/2 st.

Finns brandyxor Ja, 10 st. Finns flyttbar borrmaskin Ja, 2 st., borrens diam 13 mm

Finns skumsläckningsanordning i utrymmet för olje-eldade pannor

Skumvätskemängd — 1. Utrymmets golvtyta — m², volym — m³

Finns i pannutrymmet någon annan anordning för eldsläckning

Eldsläckningsanordningens kapacitet från centralt CO₂ batteri + handsläckare

- Eldsläckning i
maskinrum Eldsläckande gas
och i maskin-
(anteckna) Ånga
avdelning Skum
 Annan, härudan

Största lastrummets bruttovolym — m³

Gasmängd 68 st. CO₂ behållare å 45 kg
= 3060 kg CO₂. Laddningsluft för CO₂ finnes

I maskinrum och maskinavd. 35 st. CO₂ manst,

Finns i rum, dit CO₂ kan insläppas, alarmanordning för varnande av manskapet Ja,

Finns anordningar för förhindrande av oljeutflöde i bilgarna Ja

Finns separator eller annan anordning för avskiljande av olja från slagvattnet Separator+filter. ppm-skriva

Anordningens typ och kapacitet

10 m³/h HDW Turbulon TE 10 FS + HDW TF 10-S.

Anmärkningar: Brandsläcken, bildäck: 358 st. vattensprinklers, 2 st. 150x10³/h
75 MVP spridningspumpar. Brandmanusutrustningar: 6 st fullst, och
4 st. personl., fördelade på stationen. Klass: Bureau Veritas.

Årgångarnas fullständiga/infte/klassbesiktning skall utföras den 1 juli (07) 1985

Maskineriet godkännes vid denna besiktning till den 1 juli 1981 för seglationsperioden 19—
på korta internationella resor

Antal besök ombord: 24

Besiktningsarvode: 1750,-

Marielund den 1 juli 1980

Maskineribesiktningarna i Aland distrikt

⁵⁾ CO₂, pulver, skum, vatten.

⁶⁾ Storlek och typ bör nämnas.

Jaimes Mattsson

BUREAU VERITAS

INTERNATIONAL REGISTER FOR CLASSIFICATION OF SHIPS ESTABLISHED 1828

CERTIFICATE OF



CLASSIFICATION

Certificate

" VIKING - SALLY "

No. 35 P 387
in Register Book

N 608862

MACHINERY

This is to certify that the machinery of the above named ship, has been surveyed during construction at Papenburg/Ems in 1979/1980 by surveyors to the Society, in accordance with the requirements of the Rules.

Main machinery Four Diesel engines, type MAN 8 L 40/45, 8 cyl., 4 cycle, single acting, supercharged, Nos. 1080005 and 008 - 010

total effective power 17600 kW (23913 hp) at 600 r.p.m. determined by built at Augsburg by MAN Maschinenfabrik testing completed in April 1980 Augsburg-Nürnberg AG.

The machinery has been entered in the Register Book with the mark *

The present certificate is valid until ~~July 1, 1985~~

The next special survey will be the 1st special survey No. 1 CONTINUOUS SURVEY

When the requirements of the rules for maintenance of class and in particular those concerning surveys are not complied with, the validity of the certificate lapses and the class will be withdrawn from the Register.

The interventions of Bureau Veritas, carried out either in accordance with its own Regulations or according to standards, specifications or similar documents explicitly called for, or alternatively the opinions of the Society as expressed by the classification symbols or special marks, certificates, attestations, reports or similar documents, shall not, in any case, involve the responsibility of the Society.

Although the utmost care is taken in the drafting of Bureau Veritas publications, particularly with respect to the Register, the Society declines any responsibility for the errors or omissions which may be found therein or in the certificates, attestations or reports drawn up by its Services or its Surveyors, which may form the subject of observations by the Parties concerned. Furthermore, Bureau Veritas declines any responsibility for the errors of judgement, mistakes or negligence of its technical or administrative staff or Agents in drafting such documents and in carrying out the interventions which they cover, nor shall the responsibility of the staff be involved.

Propeller-shaft : Type, periodicity of Survey: two LB5

Last survey in: April 1980

At Hamburg , on July 1, 1980

For Bureau Veritas,

By order of the Secretary

W. BUHR



BUREAU VERITAS

INTERNATIONAL REGISTER FOR CLASSIFICATION OF SHIPS ESTABLISHED 1828

CERTIFICATE OF

CLASSIFICATION



Certificate

N° 212788

" VIKING - SALLY "

No. 35 P 387

in Register Book

BOILERS

This is to certify that the undermentioned boilers ~~has~~/have been surveyed for classification purpose at Papenburg/Ems in 1980 by Surveyors to the Society, in accordance with the requirements of the Rules.

Two thermal fluid heaters, type T0-80-II, Nos. 109 et 110

Total heating surface 250 m². Working pressure 7 kg/cm².

Superheated steam temperature 180 °C

Built at Alingsas by SANEA Werkstads AB in 1980

Four exhaust gas heaters, type S 1 - 200, Nos. 166 - 169

Four exhaust gas heaters, type S 1 - 65, Nos. 170 - 173

Total heating surface 1060 m². Working pressure 7 kg/cm².

Superheated steam temperature 180 °C

Built at Alingsas by SANEA Werkstads AB in 1980

The boiler is/are classed with the mark

The present certificate is valid until JULY 1985

When the requirements of the rules for maintenance of class and in particular those concerning surveys are not complied with, the validity of the certificate lapses and the class will be withdrawn from the Register.

The interventions of Bureau Veritas, carried out, either in accordance with its own Regulations or according to standards, specifications or similar documents explicitly called for, or alternatively, the opinions of the Society as expressed by the symbols of Classification or special marks, certificates, attestations, reports or similar documents, shall not in any case, involve the responsibility of the Society.

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At Hamburg, on July 1, 1980

For Bureau Veritas:

By order of the Secretary

W. BUHR

SUPPLEMENT No. 217

Selection of MV ESTONIA's certificates valid at the time of the accident.

PASSENGER SHIP SAFETY CERTIFICATE

No 2PA

This Certificate shall be supplemented by a Record of Equipment (Form P)

for xxx * international voyage
a short

Issued under the provisions of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974,
as amended under the authority of the Government of

REPUBLIC OF ESTONIA

by BUREAU VERITAS

Name of Ship BV No : 35P387	Distinctive Number or Letters	Port of Registry	Gross Tonnage	IMO Number
ESTONIA	E S T E	TALLIN	15598	7921033

Sea areas in which ship is certified to operate (regulation IV/2) ...NA.....

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced01/10/1979.....

THIS IS TO CERTIFY :

1 That the ship has been surveyed in accordance with the requirements of regulation I/7 of the Convention.

2 That the survey showed that :

2.1 the ship complied with the requirements of the Convention as regards :

1 the structure, main and auxiliary machinery, boilers and other pressure vessels;

2 the watertight subdivision arrangements and details;

3 the following subdivision load lines :

Subdivision load lines assigned and marked on the ship's side at amidships (regulation II-1/13)	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
C.1	.....2062.....	.....
C.2	.....	.....
C.3	.....	.....



- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
 - 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
 - 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
 - 2.5 the ship complied with the requirements of the Convention as regards radio installations;
 - 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
 - 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
 - 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
 - 2.9 in all other respects the ship complied with the relevant requirements of the Convention.
- 3 That an Exemption Certificate~~has~~/has not* been issued.

This certificate is valid until 26 January 1995

Issued at COPENHAGEN , on the 23 June 1994

BUREAU VERITAS



Secretary

KB /

* Delete as appropriate.

17-10-1997 10:55 DE BUREAU VERITAS

A

0-003726313285 P.02/06

CONVENTIONAL EXAMINER (See signature)

INTERIM PASSENGER SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment (Form P)

for All * international voyage
a shortIssued under the provisions of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974,
as amended under the authority of the Government of

the Republic of Estonia.....

by BUREAU VERITAS

Name of Ship BV No: 35 P 387	Distinctive Number or Letters	Port of Registry	Gross Tonnage	IMO Number
"ESTONIA"	E S T E	TALL INN	75598	7921033

Sea areas in which ship is certified to operate (regulation IV/2) ... N.A.

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced ... 12.7.93

THIS IS TO CERTIFY :

1 That the ship has been surveyed in accordance with the requirements of regulation I/7 of the Convention.

2 That the survey showed that :

2.1 the ship complied with the requirements of the Convention as regards :

.1 the structure, main and auxiliary machinery, boilers and other pressure vessels;

.2 the watertight subdivision arrangements and details;

.3 the following subdivision load lines :

Subdivision load lines assigned and marked on the ship's side at midships (regulation II-1/13)	Freight	To apply when the spaces in which passengers are carried include the following alternative spaces
C.1	2062 mm	.....
C.2	.....	.....
C.3	.....	.....



* Dates as appropriate.
Conditionally issued maximum validity 1 month.
Intrinsic maximum validity 5 months.

Ad. E 3426/1

1/2

17/10 '97 11:52

TX/RX NO.4097

P.002

17-10-1997 10:57 DE BUREAU VERITAS

A

0-003726313285

P.06/06

RECORD OF EQUIPMENT FOR THE PASSENGER SHIP SAFETY CERTIFICATE

No

4 Methods used to ensure availability of radio facilities (regulations IV/15.6 and 15.7)

- 4.1 Duplication of equipment N. A.
- 4.2 Shore-based maintenance N. A.
- 4.3 At-sea maintenance capability N. A.

5 Ships constructed before 1 February 1995 which do not comply with all the applicable requirements of chapter IV of the Convention as amended in 1988 *

	Requirements of regulations	Actual provision
Hours of listening by operator	8	8
Number of operators	1	1
Whether auto alarm fitted	Required	Fitted
Whether main installation fitted	Required	Fitted
Whether reserve installation fitted	Required	Fitted
Whether main and reserve transmitters electrically separated or combined	Separated	Separate installed

6 Ships constructed before 1 February 1992 which do not fully comply with the applicable requirements of chapter III of the Convention as amended in 1988 **

	Actual provision
Radiotelegraph installation for lifeboat	1
Portable radio apparatus for survival craft	1
Survival craft EPIRB (121.5 MHz and 243.0 MHz)	N. A.
Two-way radiotelephone apparatus	3

* This section need not be reproduced on the record attached to certificates issued after 1 February 1995.

** This section need not be reproduced on the record attached to certificates issued after 1 February 1995.

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued at Stockholm on the 14 June 1993



BUREAU VERITAS

Anders Wikström

Secretary

Ad. E 5926

TOTAL PAGE(S) 3/3

17/10 '97 11:52 TX/RX NO.4097

P.006

29/10 '97 10:45 LSH/VAST NR09591 S.001



**RECORD OF EQUIPMENT FOR COMPLIANCE WITH
THE INTERNATIONAL CONVENTION FOR THE SAFETY
OF LIFE AT SEA, 1974, AS AMENDED IN 1988
(Form P)**

No

This Record shall be permanently attached to the Passenger Ship Safety Certificate

1 Particulars of ship

Name of ship	QUEEN OF IRISH SEA	BV Registered No P.38
Distinguishing number or letters	K-S-T-C	
Number of passengers for which certified	2000	
Minimum number of persons with required qualifications to operate the radio installations		

2 Details of life-saving appliances

1 Total number of persons for which life-saving appliances are provided		Port side	Starboard side
2			
2.1	Total number of lifeboats	5	5
2.2	Total number of persons accommodated by them	368	324
2.3	Number of partially enclosed lifeboats (regulation III/42)	-	-
2.4	Number of self-righting partially enclosed lifeboats (regulation III/43)	-	-
2.5	Number of totally enclosed lifeboats (regulation III/44)	-	-
2.5.1	Other lifeboats	5	5
2.5.2	Number	open	open
2.5.2	Type		
3	Number of motor lifeboats (included in the total lifeboats shown above)	10	
3.1	Number of lifeboats fitted with searchlights	2	
4	Number of rescue boats	1	
4.1	Number of boats which are included in the total lifeboats shown above	1	
5	Lifesafety		
5.1	Those for which approved launching appliances are required	12	
5.1.1	Number of liferafts	300	
5.1.2	Number of persons accommodated by them		
5.2	Those for which approved launching appliances are not required	51	
5.2.1	Number of liferafts	1275	
5.2.2	Number of persons accommodated by them		
6	Buoyant apparatus	6	
6.1	Number of apparatus		
6.2	Number of persons capable of being supported	120	
7	Number of lifebuoys	18	
8	Number of lifejackets	2298 + 200 (children)	

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2 Details of life-saving appliances (continued)

9 Immersion suits	
9.1 Total number	30
9.2 Number of suits complying with the requirements for lifejackets	30
10 Number of thermal protective aids *	662
11 Radio installations used in life-saving appliances	1
11.1 Number of radar transponders	
11.2 Number of two-way VHF radiotelephone apparatus.	3

3 Details of radio facilities

Item	Actual provision
1 Primary systems	
1.1 VHF radio installation :	
1.1.1 DSC encoder	N.A.
1.1.2 DSC watch receiver	N.A.
1.1.3 Radiotelephony	3
1.2 MF radio installation :	
1.2.1 DSC encoder	
1.2.2 DSC watch receiver	N.A.
1.2.3 Radiotelephony	N.A.
1.3 MF/HF radio installation :	
1.3.1 DSC encoder	N.A.
1.3.2 DSC watch receiver	N.A.
1.3.3 Radiotelephony	2
1.3.4 Direct-printing radiotelegraphy	N.A.
1.4 INMARSAT ship earth station	N.A.
2 Secondary means of alerting	N.A.
3 Facilities for reception of maritime safety information	
3.1 NAVTEX receiver	1
3.2 EGC receiver	N.A.
3.3 HF direct-printing radiotelegraph receiver	N.A.
4 Satellite EPIRB	
4.1 COSPAS-SARSAT	2
4.2 INMARSAT	N.A.
5 VHF EPIRB	N.A.
6 Ship's radar transponder	N.A.
7 Radiotelephone distress frequency watch receiver on 2,182 kHz **	1
8 Device for generating the radiotelephone alarm signal on 2,182 kHz ***	2

* Excluding those required by regulations III/38.5.1.24, III/41.8.31 and III/47.2.2.13.

** Unless another date is determined by the Maritime Safety Committee, this item need not be renominated for the period indicated in certificates issued after

- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
- 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.5 the ship complied with the requirements of the Convention as regards radio installations;
- 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.9 in all other respects the ship complied with the relevant requirements of the Convention.
- 3 That an Exemption Certificate has/has not* been issued.

This certificate is valid until 27 JUNE 1994

Issued at Stockholm, on the 27 January 1994



luft
Anders Wikström

BUREAU VERITAS

By order of the Secretary

* Delete as appropriate.

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LSH/VAST NR09590 S.002

INTERNATIONELL MÄTBEREV

INTERNATIONAL TONNAGE CERTIFICATE

Utfärdat enligt konvention om ett enhetligt skeppsmätningsystem avslutad i
Oslo den 10 juni 1947.

Issued in accordance with the convention for a uniform system of tonnage measurement of ships
concluded in Oslo on the tenth of June 1947.



FINLAND

Fartygets namn
Name of ship
VIKING-SATELY

Fartygets art Description of ship	Nationalitet Nationality	Hemort Home port	Registrerort Port of registry	Signaturstavar Official letters	Framdrivningsätt Propelled by machinery or by sail	
pass. färja pass. ferry	finsk Finnish	Marielund	* /	G I K W	maskin machinery	
Byggadåtar When built	Byggadort Where built	Byggnadsverk (namn och adress) Name and address of builders	Byggnadnummer Yard number	Byggnadsmaterial Material	stål steel	
1980	Papenburg	Jos. L. Meyer Papenburg, Germany	590			
Framdrivningsmaskineri Description of propelling machinery	Aantal Propellrar Number of screws	Ägare (namn och adress) Names and address of owners			Fot Feet	
diesel	två (2)	Rederiaktiebolaget Sality Marielund	*		Meter Metres	
Identifikation dimensions						
Längd Length	från förkant av förstävens översta ända till akterkant av akterstävens översta ända Length from the fore side of the uppermost end of the stem to the aft side of the stern post					148,82
Bredt, största yttré (avvilsare ej inräknade)	Breadth, extreme outside (rubbing pieces not included)					29,42
Djup eller överkanten av bottenstockar	i mittplanet vid mitten av lgenkänningsslängden från undersidan av övre däck till översidan av dubbelbottens tak Depth in the middle plane at half length, from the under side of the upper deck to the upper side of the double-bottom					6,50

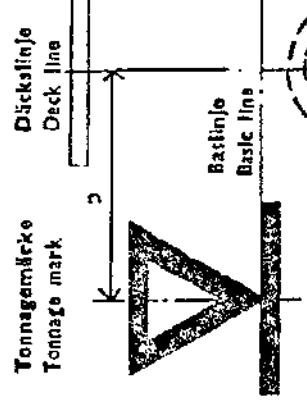
Tonnage märke
Tonnage mark

Detta tonnagemärke är märkt på fartygets båda sidor

i höjd med lastmärkets översta linje

On each side of the ship a tonnage mark is marked on level with the highest loadline grid as follows:

Astånd (se figur) Distances (see figure)	Tum Inches	Miljoner Millimetres
Vertikalastånd Vertical distance	a	144,5
Horizontalstånd Horizontal distance	b	150,0



Härmed intygas att detta fartyg blivit mätt i enlighet med ce till ovan nämnda konvention fogade internationella skepps-mätningssreglerna och att dess dräktighet, mätt enligt regel 1, är såsom i detalj framgår av sidan 2 i detta mätbrev, följande, förutsatt att tonnagemärkets baslinje icke ligger under vatten:

This is to certify that the above-named ship has been measured in conformity with the international regulations for tonnage measurement of ships annexed to the above mentioned convention and that her tonnage under Rule 1 of the said regulations is as stated in detail on page 2 of this tonnage certificate, provided the basic line of the tonnage mark as indicated above is not submerged:

bruttodräktigheten
the gross tonnage being 15398,79
nettdräktigheten
the net tonnage being 8393,81

Är fartyget nedlastat så djupt att tonnagemärkets baslinje ligger under vatten är detta mätbrev icke giltigt.
NB! When the basic line of the tonnage mark is submerged this tonnage certificate will not be valid.

Helsingfors, den 9 maj 19 85

Lösen mk 6674,25
Mätningstavla nr 2645,03
Summa mk 10319,25

På Sjöfartsstyrelsens vägnar
For the National Board of Navigation

Ake Wihberg
Sjöfartskontrollör
Chief controller of seafarers



Fartygets namn VIKTIC SALLY
Name of ship

	Kubikmeter Cubic metres	Register tons	Kubikmeter Cubic metres	Register tons	Kubikmeter Cubic metres
Under-decksdräktighet Under-deck cargo			Bruttodräktighet Gross tonnage		
Mellanläggsdräktighet Tween-deck cargo			Avdrag Deductions		
Slutet rum i öppet sh.-däcksrum Closed in space in open sh.-deckspace			Befälshavare Master	34,71	32,32
Överbyggnad Superstructure			Besättning Crew	1809,59	5123,49
			Proviantrum Provision rooms		
			Navigationssrum Navigation spaces	125,01	354,13
			Plumprum Pump rooms		
			Vorstäder och förråd Workshops and store rooms	44,95	127,35
			Vattenballastrum * Water ballast spaces	199,76	565,88
					Attentad Reservader
					13385,27
					Nettodräktighet Net tonnage
					8393,81
			Drevkraftsavdraget Production for propelling- machinery spaces	4991,46	14140,10
					23778,53
Rum för framdrivningsmaskinrums, belägna ovanför mätdäck Spaces above the tonnage deck included as part of the propelling-machinery space					
Tilligg förluckor Excess of hatchways			Bruttodräktighet Gross tonnage	15598,29	44187,80
					Volumen av rum för framdrivningsmaskinrums, vilken ligger till grund för drivkraftens avdraget och vilken därför tasräknas i bruttdräktigheten.
					The cubic capacity of propelling-machinery spaces upon which the propelling-power allowance is based and which has therefore been included in the gross tonnage.
Lasterum Cargo spaces			Längd meter Length		
			Kubikmeter Cubic metres		
			Register tons		
Mellanläggsrum Tween-deck space	147,43	5205,50	16729,45	Under mätdäck Below the tonnage deck	5249,57
På däck On deck	11,84 6,97	70,27 41,36	199,06 117,19	Ovanför mätdäck Above the tonnage deck	494,84 5744,41
					Summa Total
					7027,78

No	Avstående Available for	Kubikmeter Register tons	Cubic metres Cubic tons
6	Water ballast	30,53	86,5
8	Diesel oil	25,24	71,5
9	Heavy fuel oil	25,24	71,5
15	" " "	51,19	145,0
16	" " "	51,19	145,0
18	Diesel oil	24,71	70,0
19	Heavy fuel oil	25,77	73,0
20	Gas oil	7,59	21,5
17	Fresh water	6,35	18,0
24	Thermal oil	6,53	18,5
25	Tub oil	5,44	15,4
26	" "	5,44	15,4
27	" "	5,44	15,4
28	" "	5,44	15,4
29	Fresh water	5,82	16,5
30	Tub. oil	4,24	12,0
31	" "	1,84	5,2
32	" "	4,86	13,7
33	Bilge water	8,12	23,0
42	Dirty oil	4,91	13,9
40	HFO overflow	13,77	39,0
44	Sludge oil	9,25	26,2
45	DO. overflow	9,38	12,4
47	Diesel oil	16,52	47,0
48	" "	17,30	49,0
54	Water ballast	21,53	61,0

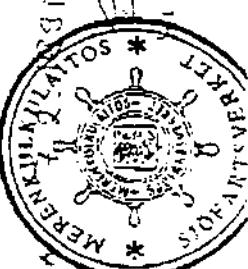
Av beträffande myndighet följer en åtgärd om ändring av fartygets namn, hemort, registrerort, åge och s.v.
Statements made by competent authorities with regard to changes of ships name, home port, part of registry, owners etc.

W/ ALMSEIC RIBB
NAME OF SHIP : WASSA KING

KÖPPLÄCK
HOME PORT

REGISTERPLATTA
PORT OR REGISTER :

DISLAYED IN THE OFFICE OF
NAME AND ADDRESS OF OWNER'S
COMPANY



Summa
Total : 389,69

1101,0

INTERNATIONAL TONNAGE CERTIFICATE (1969)

No. CPN0088

Issued under the provisions of the
 INTERNATIONAL CONVENTION ON TONNAGE MEASUREMENT OF SHIPS, 1969,
 under the authority of the Government of the

REPUBLIC OF ESTONIA
 for which the Convention came into force on

by BUREAU VERITAS

Name of Ship	Distinctive Number or Letters	Port of Registry	Date*
ESTONIA	ESTE	TALLINN	1980
BV Reg. No. 35P-87	2921033		

* Date on which keel was laid or the ship was at a similar stage of construction, (Article 2(6)), or date on which the ship underwent alterations or modifications of a major character, (Article 3(2) (b)), as appropriate.

MAIN DIMENSIONS

Length (Article 2(8))	Breadth (Regulation 2(3))	Moulded Depth amidships to Upper Deck (Regulation 2(2))
138.8m	24.20m	13.40m

THE TONNAGES OF THE SHIP ARE :

GROSS TONNAGE 21794

NET TONNAGE 10428

THIS IS TO CERTIFY that the tonnages of this ship have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships 1969.

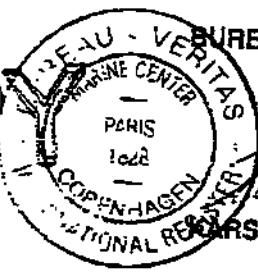
Issued at CCP - COPENHAGEN the 29 AUGUST 1994

The undersigned declares that Bureau Veritas is duly authorized by the said Government to issue this certificate.



JA / KB

COP



BUREAU VERITAS

MARITIME CENTER

PARIS

1994

—

COPENHAGEN

—

NATIONAL REGISTRY

—

REGISTEN BERTELSEN

Secretary

GROSS TONNAGE			NET TONNAGE					
Name of Space	Location	Length (m)	Name of Space	Location	Length (m)			
UNDERDECK	-	-	CARGO COMPAREMENT	FORE-AFT	145.00			
1st TIER								
ROUNDHOUSE NO. 1	(139-4)	121.20						
2nd TIER								
ROUNDHOUSE NO. 2	(139-4)	121.20						
DECK HOUSE	(-4 - 15)	5.70						
3rd TIER								
ROUNDHOUSE NO. 3	(139-4)	121.20						
4th TIER								
ROUNDHOUSE NO. 4	(139-4)	121.20						
5th TIER								
ROUNDHOUSE NO. 5	(127-4)	112.80						
6th TIER								
ROUNDHOUSE NO. 6	(126-112)	11.30						
FUNNEL NO. 1	(120-108)	9.60						
7th TIER								
ROUNDHOUSE NO. 7	(79-45)	27.20						
FUNNEL NO. 2	(76-25)	19.20						
EXCLUDED SPACES (Regulation 2(5))			NUMBER OF PASSENGERS (Regulation 4(1)) 2000					
Less recess in roundhouse No. 4			Number of passengers in cabins with not more than 8 berths 1170					
Less recess in roundhouse No. 5			Number of other passengers 830					
An asterisk (*) should be added of those spaces listed above which comprise both enclosed & excluded spaces			MOULDED DRAUGHT (Regulation 4(2)) 5.617m					
Date and place of last original measurement : /								
Date and place of last previous remeasurement : /								
REMARKS :	<p>The ship is remeasured according to article 3(2)(d) of the 1969 Tonnage Convention.</p> <p>The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of ships, 1969, is 15598 RT, according to the regulations of 1947 Oslo Convention. (Cf. IMO Resolution A.758(18)).</p>							