

Certificate of Registry of *Kathryn Jane*, issued 16 September 2002

TRANSCRIPT OF REGISTRY OF A BRITISH FISHING VESSEL

PARTICULARS OF SHIP

Official Number:	A12386	EC Number:	GBR000A12386
IMO Number / HIN:		Radio Call Sign	
Name Of Vessel:	KATHRYN JANE		
Port Letters and numbers:	LH 269	Year of Build	1981
Construction material:	STEEL		
Where built:	SOUTH SHIELDS		
Name of Builder:	UNK		
Engine make / model:	GARDNER 8LXB		
Total Engine Power:	130.00	kW	
Overall Length:	11.89	metres	Registered Length: 11.89 metres
Breadth:	3.66	metres	Depth: 1.46 metres
Gross Tonnage:	10.11	Net Tonnage	10.11
Date of entry into service:	10/07/1981		
Type of Registration:	FULL		
Certificate of registry issued:	16/09/2002	Expires on:	09/10/2007

I certify that this transcript consisting of 2 pages is a true extract from Part II of the Register now in my charge showing descriptive particulars, registered ownership and mortgages, if any as at 27 January 2005

Signed _____

For and on behalf of the Registrar General of Shipping & Seamen
Registry of Shipping & Seamen
Anchor Court
Ocean Way
Cardiff
CF24 5JW



SIAS Report on *Kathryn Jane*, dated 29 August 2002

Ship Details

Ship ID 50668

Next ID

Group ID 6500

Ship Name KATHRYN JANE

IMO Number 0000000

Official
Number A12386

FV Number LH269

Call Sign MEHS3

Ship Type F1 - Fishing Vessel - Steel

Flag 670 - UNITED KINGDOM

Class. Society 0 - NONE

Owner MR A NAYLOR

Year of Build 1981

UK Class
Code X

Kw 130

Dead Weight

Length(m) 11.89

Gross
Tonnage 10.11

Inspection Details

Marine Office Glasgow

Inspection
Date 29/08/2002

Input Date 02/09/2002

Detained? N

Release Date

Country UNITED KINGDOM

Place Oban

Inspection
Type MCA Inspector

Inspected at
Sea? N

MACRIS
Codes 459

Comments

Ship Actions

Inspection has no ship actions

Survey Details

Inspection has no surveys

ILO Survey Details

Inspection has no ILO Survey

Certificate Details

Inspection has no certificates

Deficiency Details

Inspection has no deficiencies

fv *Kathryn Jane* – accident reports received by MAIB

FV KATHRYN JANE – ACCIDENT REPORTS RECEIVED BY MAIB

The following accident reports relating to *Kathryn Jane* have been received by the MAIB.

Date	Accident Description
20 November 1992	Flooding reported off Oban. (MAIB recommended that MSA consider conducting a General Inspection)
13 May 1993	Vessel stranded on Port Appin rocks with 2 persons on board
2 February 1997	Vessel aground in Loch Long
5 July 1997	Vessel aground at Mallaig Harbour entrance
20 March 1999	Vessel grounded after the watchkeeper fell asleep
24 April 1999	Vessel grounded in Sound of Mull (Skipper officially cautioned by Nautical Surveyor Glasgow Marine Office)
7 December 2003	Vessel fell on her side whilst in Portree Harbour when the tide ebbed leading to fuel spillage into the harbour.
27 May 2004	Vessel grounded on leaving Kyleakin. Skipper misjudged distance between slipway and a submerged rock.

Table of MCA Inspections of *Kathryn Jane*

MCA INSPECTIONS

The record of MCA inspections relating to *Kathryn Jane* is detailed in the following table.

Identification No	Date	Inspection	Comments
1	28 October 1993	Inspection by the SGO	6 deficiencies
2	22 June 1994	Inspection by the SGO	5 deficiencies
3	20 January 1997	Inspection by the SGO	11 deficiencies (included requirement to replace wasted deck and hull steelwork)
4	1 July 1999	Inspection by the MCA	Vessel detained
5	29 August 2002	Inspection by the CG SM	No deficiencies

1. Inspections 1 - 4 were conducted by Marine Surveyors (Fishing Vessels) under the General Exemptions from the Fishing Vessel (Safety Provisions) Rules 1975, as amended. At the time of inspections 1-3, the surveyors were attached to the Surveyor General's Office and later to the MCA.
2. Inspection No 5 was conducted in accordance with "The Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length", which is published as MSN 1756 (F).

MSN 1756 (F) – Code of Practice for the Safety of Small
Fishing Vessels under 12m in Length

The Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length

Notice to Designers, Builders, Owners, Employers, Skippers and Crew of Fishing Vessels

This Notice should be read in conjunction with the Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations SI 2001 No.9 and the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (Note 1) , as amended.

Summary

This notice draws attention to the Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations 2001 and incorporates the full text of the Code of Practice for the Safety of Small Fishing Vessels with a registered length of less than 12 metres.

1. This Merchant Shipping Notice is associated with The Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations 2001. It sets out the full text of the Code of Practice for the Safety of Small Fishing Vessels.
2. The Regulations give statutory force to the Code of Practice for the Safety of Small Fishing Vessels and replace the requirements of the Fishing Vessels (Safety Provisions) Rules 1975 and the Fishing Vessels (Life Saving Appliance) Regulations 1988 as they apply to fishing vessels with a registered length less than 12 metres.
3. The Regulations and the Code have been introduced following consultation with the industry and other interested bodies. Their introduction represents part of a wider review of the Fishing Vessels (Safety Provisions) Rules 1975 to update existing requirements in order to increase the safety of fishing vessels in foreseeable operating conditions, and the survival of the crew in the event of an accident.
4. To comply with the Code of Practice for the Safety of Small Fishing Vessels, a vessel owner will be required:
 - to carry safety equipment on the vessel appropriate to its length and construction;
 - to complete, or arrange for the completion of, an assessment of the health and safety risks arising in the normal course of work activities or duties on the vessel in accordance with the provisions of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) Regulations 1997
 - to certify annually that the vessel complies with the Code, by declaring that the safety equipment has been properly maintained and serviced in accordance with manufacturers' recommendations and that an appropriate and up to date health and safety risk assessment has been completed; and
 - to present the vessel for inspection by the MCA in accordance with the provisions of the Code.
5. Additionally, the owner of a new vessel should ensure that the vessel is constructed in accordance with the Construction Standards issued by the Seafish Industry Authority (SIFA or Seafish) or an equivalent standard recognised by the MCA.

Note 1 - S.I. 1997 No 2962

MSPP1b
Maritime and Coastguard Agency,
Spring Place,
105 Commercial Road,
Southampton SO15 1EG.

Tel: 023 8032 9150
Fax: 023 8032 9161

March 2001

File ref. MS 088/001/0291

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Maritime and Coastguard Agency

THE FISHING VESSELS CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS

From the date of introduction of the Fishing Vessels Code of Safe Working Practice for the Construction and Use of 15 metre length overall (LOA) to less than 24 metre registered length (L) Fishing Vessels, this Code will include vessels from 12 metres up to 15 metres length overall.

All previous references to under 12 metres registered length will now read under 15 metres length overall and apply to the whole Code.

**The Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton SO15 1EG**

**Telephone: 0845 6014072
Facsimile: 023 8032 9173**

Effective from 23 November 2002

1. Foreword


1.1 The aim of this Code of Practice is to improve safety in the under 12 metre sector of the fishing industry and to raise the safety awareness of all those involved with the construction, operation and maintenance of fishing vessels with a registered length of less than 12 metres.

2. Development


2.1 In 1992 the National Audit Office, in its report entitled "Department of Transport: Ship Safety" noted an increase in the fishing vessel accident rate in the period 1978 to 1989 due in part to an increase in the numbers of smaller vessels, and it observed the absence, until 1990, of any programme of inspection of fishing vessels with a registered length of less than 12 metres. At about the same time a House of Lords Select Committee on Science & Technology recommended that fishing vessels down to 7m in length should be brought within the licensing, crew certification and structural safety regimes for fishing vessels.

2.2 In response, the Surveyor General's Organisation of the Department of Transport (now the Maritime & Coastguard Agency (MCA)), in consultation with industry members of the Fishing Industry Safety Group (FISG), decided to develop a Code of Practice for fishing vessels with a registered length of less than 12 metres as part of a wider review of fishing vessel safety regulations.

2.3 This Code has been developed by the MCA. The content of the Code has been the subject of extensive discussion with representatives of the under 12 metre sector of the fishing industry within a Steering Committee set up by FISG to oversee the Code's development.

2.4 If the Code needs to be up-dated at any time to take account of new statutory requirements that apply to vessels operating under the Code, the organisations involved in the development of the Code will be consulted. Code requirements, including inspection arrangements, will in any event be reviewed not more than 2 years after the Code comes into force, and thereafter at no more than five-yearly intervals, by a Committee comprising of representatives of those organisations involved in the development of the Code, to take into account experience gained from its application. New section 2.5 added - see adjacent note 

3. Application

3.1 The Code will apply from 1 April 2001 to all United Kingdom registered fishing vessels with a registered length of less than 12 metres. New section 3.2 added - see adjacent note 

4. Code Requirements

4.1 To comply with the Code a vessel owner will be required:

4.1.1 To carry safety equipment on the vessel appropriate to its length and construction (i.e. decked or open). Checklists are at ANNEX 1.2 to 1.6.

4.1.2 To complete, or arrange completion of, an assessment of the health and safety risks arising in the normal course of work activities or duties on the vessel in accordance with the provisions of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 and MGN 20 (M+F). Paragraphs 4.4 to 4.7 below describe the process of risk assessment and current best practice.

4.1.3 To certify annually (using the declaration at ANNEX 2) that the vessel complies with the Code, by declaring that the safety equipment has been properly maintained and serviced in accordance with manufacturers' recommendations and that an appropriate, up to date health and safety risk assessment has been completed. This document should be retained by the vessel owner and produced when requested by the MCA.

4.1.4 To present the vessel for inspection either voluntarily or as requested by the MCA in accordance with the provisions of section 5.

4.2 Additionally, the owner of a new vessel should ensure that the vessel is properly constructed in accordance with the provisions of section 5(1) and the equipment detailed in this Code is properly maintained.

4.3 It is the owner's/skipper's responsibility to ensure that the vessel is operated in accordance with the Code and other relevant regulations at all times.

Risk Assessment

4.4 The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 came into force on 31 March 1998. Under those regulations employers are required to make a suitable and sufficient assessment of the risks to the health and safety of workers arising in the normal course of their activities or duties. Guidance on these regulations and on the principles of risk assessment is contained in a Marine Guidance Note (currently MGN 20 M+F).

4.5 A risk assessment is intended to be a careful examination of what, in the nature of operations, could cause harm, so that decisions can be made as to whether enough precautions have been taken or whether more should be done.

4.6 The assessment should first identify the hazards that are present and then establish whether a hazard is significant and whether it is already covered by satisfactory precautions to control the risk, including consideration of the likelihood of the failure of those precautions that are in place.

4.7 It is not a requirement of the Merchant Shipping and Fishing Vessels (Health and Safety at Work Regulations) 1997 that risk assessments be written. **Nevertheless, the MCA strongly recommends that such assessments be written.** An example of a suitable standard of written risk assessment is included in the Fishing Vessel Safety Folder developed by and available from Seafish, which also provides pro-forma guidance on fishing vessel risk assessment, both generally and in relation to particular modes of fishing.

5. Compliance Procedures and Inspections

New Vessels

5.1 New definition of "new fishing vessels", see adjacent note 

5.2 To operate a new vessel under the Code the owner must complete a health and safety risk assessment, the vessel must have been inspected by MCA and an Inspection Form issued, and a compliance certificate must have been issued by the construction standard's authority. Thereafter, the vessel must maintain compliance with The Code.

Existing Vessels

5.3 The owner of every existing fishing vessel with a length of less than 15 metres length overall must ensure that the vessel complies with the checklist of requirements appropriate to the length and construction of the vessel, that a health and safety risk self-certification declaration has been completed.

5.4 One month before the Code comes into effect the MCA will write to owners of all existing fishing vessels with a registered length of less than 12 metres explaining the

action to be taken on entry into force of the Code.

All Vessels

Inspections

5.5 A vessel may be inspected by the MCA at any time to check compliance with Code requirements. On satisfactory completion of the inspection an Inspection Form will be issued. If deficiencies are found which necessitate follow-up visits, fees will be charged to the owner in accordance with the MCA fee regulations applicable at the time of the follow-up visit.

Annual Self-Certification

5.6 Within 1 month of the anniversary of the vessel's registration, the owner (or other competent person employed by the owner) must inspect the vessel to confirm that the safety equipment carried on board the vessel has been suitably maintained, that the safety and other specified equipment continues to comply with the checklist of safety equipment appropriate to the length and construction of the vessel. The health and safety risk assessment must also be checked to ensure that it remains appropriate to the vessel's fishing method and operation. If there has been a change of fishing method or of operational practice since the previous health and safety risk assessment was completed, the assessment should be revised accordingly.

5.7 On completion of these annual checks, the owner should sign a self-certification declaration confirming that the vessel complies with the Code, and retain the declaration for inspection purposes.

Change of ownership

5.8 Risk assessments of the vessel are particular to each employer. When a vessel is sold, the new owner must complete, or arrange the completion of, a new risk assessment and self-assessment in accordance with paragraph 5.6.

Penalties

5.9 A vessel that is found, in the course of inspection, not to have been equipped, the safety equipment properly maintained, assessed and self-certificated in accordance with the Code will be liable to detention by the MCA. An owner whose vessel fails to comply with the Code or who makes a false declaration may be liable to prosecution. A skipper who fails to operate the vessel in accordance with the Code may be liable to prosecution.

Appeal Procedures

5.10 If an owner is dissatisfied with an inspection and agreement cannot be reached with the person who carried out the inspection, the owner may refer the matter to the Principal Marine Surveyor (Fishing Vessels) in the Region where the vessel was inspected.

5.11 Should the above procedure fail to resolve the disagreement, the owner may refer the matter to the Head of Maritime Operations at MCA headquarters, and, if necessary, to the MCA Chief Executive who will ensure the complaint is looked into thoroughly.

5.12 If an owner is still not content with the way in which the complaint has been handled by the MCA, a request may be made for it to be referred to an adjudicator who is independent of the MCA.

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

DECKED Vessels 10m and above Registered Length to less than 12m Registered Length

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
Liferafts		
2 Lifebuoys (1 with 18m buoyant line attached) or 1 Lifebuoy (fitted with 18m buoyant line) + 1 Buoyant Rescue Quoit		
3 Parachute flares		
2 Hand-held flares		
1 Smoke Signal (buoyant or handheld)		
1 Fire bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket + 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) + 1 fixed Fire Extinguishing system for the machinery space		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio - fixed or hand held		
Bilge Pump		
Bilge Alarm		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) "Decked vessels" means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.
- (iii) VHF using DSC is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

ALL DECKED Vessels up to 10m Registered Length

Item	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18m buoyant line attached)		
or		
1 Lifebuoy (fitted with 18m buoyancy line) + 1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose		
or		
1 Fire Bucket		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio – fixed or hand held		
Bilge Pump		
Bilge Alarm		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) "Decked vessels" means a vessel with a continuous watertight weather deck that extends from stern to stern and has positive freeboard throughout, in any condition of loading the vessel.
- (iii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

OPEN Vessels 7m and above to less than 12m Registered Length

Item	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18m buoyant line attached)		
or		
1 Lifebuoy (with 18m buoyant line) + 1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose		
or		
1 Fire Bucket		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio – fixed or hand held		
Bilge Pump		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

OPEN Vessels less than 7m Registered Length

Item	Remarks/compliance	Expiry/Service Date
Lifejackets – 1 per person		
1 Lifebuoy (with 18m buoyant line attached)		
2 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal, buoyant or hand held		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) - if vessel has in- board engine		
1 Fire Blanket (light duty) if vessel has galley or cooking area		
VHF Radio – fixed or hand held		
Bailer		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

**CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS:
CHECK LIST OF REQUIREMENTS**

DECKED Vessels 12m and above Registered Length to less than 15m Length Overall

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
Liferafts		
2 Lifebuoys (1 with 18m buoyant line attached) or 1 Lifebuoy (fitted with 18m buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute flares		
2 Hand-held flares		
1 Smoke Signal (buoyant or handheld)		
1 Fire bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket + 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) + 1 fixed Fire Extinguishing system for the machinery space		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio - fixed or hand held		
Bilge Pump		
Bilge Alarm		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) "Decked vessels" means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.
- (iii) VHF using DSC is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

**CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS:
CHECK LIST OF REQUIREMENTS**

OPEN Vessels 12m registered length and above to less than 15m Length Overall

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18m buoyant line attached) or 1 Lifebuoy (with 18m buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio – fixed or hand held		
Bilge Pump		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

THE FISHING VESSELS (CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS)
REGULATIONS 2001

ANNUAL SELF CERTIFICATION (Owner to verify and sign in spaces below that vessel complies)

Name of Owner

Address of Owner

.....

.....

Name of Vessel.....

RSS No..... Length Overall

Registered Length Date of Registration

Hull Identification No..... Mode(s) of Fishing

Port letters and number.....

I HEREBY CERTIFY, in respect of the above named vessel, that:

- i. The safety and other specified equipment have been checked in accordance with the attached checklist;
- ii. Such safety and other specified equipment carried are in accordance with the requirements of the Code;
- iii. Such safety and other specified equipment has been properly maintained and serviced in accordance with manufacturers' recommendations;
- iv. Where applicable a risk assessment* of work activities and duties has been completed in accordance with the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997;

*The health and safety risk assessment is written - Yes/No (delete as appropriate)

1st Signature of Owner Date.....

2nd Signature of Owner Date.....

3rd Signature of Owner Date.....

4th Signature of Owner Date.....

5th Signature of Owner Date.....

THE FISHING VESSELS (CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS)

REGULATIONS 2001: GUIDANCE FOR SURVEYORS, INSPECTORS AND FISHERMEN

Lifejackets should be of the solid-filled type, or should comply with BS EN 396 or BS EN 399, with automatic gas inflation and at least 150 Newtons buoyancy. One lifejacket per person carried, fitted with light, whistle and reflective tape.

Liferafts should either be float free, fitted with an hydrostatic release unit (HRU), or stowed in a position where it is accessible for deployment in an emergency. It/they should have a capacity sufficient for the total number of persons on board.

Lifebuoys should be marked with the vessel name and port of registry or fishing vessel number and fitted with reflective tape and may be circular or horseshoe in shape.

Flares and smoke signals should be of an acceptable type and within their expiry date.

Fire buckets should be heavy duty with a Lanyard.

Fire extinguishers should where practical comply with the stated fire ratings. However existing extinguishers of equivalent capacity, provided they have been maintained and serviced are acceptable. All extinguishers should be inspected and serviced annually by a competent person.

Fire blankets for the galley or cooking appliance should be of light duty to BS 7944 (this standard has superseded 6575) or a recognised equivalent BS EN 1869

Fire pumps can be a hand pump or any other pump that supplies water from the sea onto the deck with a hose suitable for fire fighting purposes.

Fixed fire-fighting systems should be an approved system or a fixed fire extinguisher of sufficient capacity arranged to discharge directly into the machinery space.

Navigation lights and sound signals:

1. Any vessel that operates between sunset and sunrise or in times of restricted visibility must exhibit the navigation and fishing lights prescribed in the Collision Regulations.
2. A masthead light or all round white light of 2-mile range, is to be 1 metre higher than sidelights.
3. Sidelights of 1 mile range at a height above the uppermost continuous deck not greater than three-quarters the height of the masthead light.
4. A Stern light of 2-mile range if the masthead light (number 2) is carried.
5. An all-round white light of 2 mile range when trawling or fishing as referred to in number 7 below (that may also on its own be used as an anchor light). An all-round white anchor light is required if anchored in or near a narrow channel, fairway or anchorage, or where other vessels normally navigate.
6. The all-round white light (number 5) to be more than 2 metres above the gunwales and above the sidelights (number 3) at more than twice the distance between the vertical lights (numbers 5 and 7).
7. An all-round light (green if trawling, red if fishing other than trawling) at least 1metre above the all-round white light (number 5) and of 2 mile range.
8. Alternatively, a vessel under 7 metres, with speed less than 7 knots may instead of the above lights exhibit one all-round white light of 2 mile range and if practical, sidelights or a combination lantern.
9. Additionally for vessels of greater than 12 metres overall length, a bell is required and the range of the masthead light is extended to 3 miles.

Amendment 1 to - MSN 1756 (F) – Code of Practice for the
Safety of Small Fishing Vessels under 12m in Length

The Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels

Notice to Designers, Builders, Owners, Employers, Skippers and Crew of Fishing Vessels

This Notice amends MSN 1756 (F), the Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length and should be read in conjunction with the Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations SI 2001 No.9 and the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations SI 1997 No.2962, as amended.

Summary

This notice amends Merchant Shipping Notice MSN1756 (F). MSN 1756 set out the requirements of the Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations 2001 which has been amended by the Fishing Vessels (Safety of 15-24 Metre Vessels) Regulations 2002 and incorporates the new checklist requirements for fishing vessels between 12 metres registered length (L) and less than 15 metres length overall (LOA).

1. This Merchant Shipping Notice contains amendments to MSN 1756 (F) - The Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length (the Small Fishing Vessel Code). It sets out revised sections of the Small Vessel Code and new checklist requirements for fishing vessels between 12 metres registered length and less than 15 metres length overall, which were formerly regulated by the Fishing Vessels (Safety Provision) Rules 1975.
2. The Fishing Vessel (Safety of 15-24 metre Vessels) Regulations 2002 bring into force the Code of Safe Working Practice for the Construction and Use of 15 metre (LOA) to 24 metre (L) Fishing Vessels and amend the Fishing Vessel (Code of Practice for the Safety of Small Fishing Vessels) Regulations to include vessels of less than 15 metres length overall.
3. No changes have been made to the requirements for vessels of under 12 metres.
4. The Regulations and the Codes have been introduced following consultation with industry and other interested bodies. It represents the second stage of a wider review of requirements aimed at increasing the safety of fishing vessels and survival of the crew in the event of an accident.
5. To comply with the Code of Practice for the Safety of Small Fishing Vessels, a vessel owner will be required:
 - to carry safety equipment on the vessel appropriate to its length and construction;
 - to complete, or arrange for the completion of, an assessment of the health and safety risks arising in the normal course of work activities or duties on the vessel in accordance with the provisions of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) Regulations 1997;
 - to certify annually that the vessel complies with the Code, by declaring that the safety equipment has been properly maintained

and serviced in accordance with manufacturers' recommendations and that an appropriate and up to date health and safety risk assessment has been completed; and

- to present the vessel for inspection by the MCA in accordance with the provisions of the Code.

6. Additionally, the owner of a new vessel should ensure that the vessel is constructed in accordance with the Construction Standards issued by the Seafish Industry Authority (SIFA or Seafish) or an equivalent standard recognised by the MCA.

7. The following amendments are made to the Code of Practice contained in MSN 1756:

.1 Paragraph 2.5 shall be inserted and read

"Following development of the Code of Safe Working Practice for the Construction and Use of 15 metre (LOA) to less than 24 metre (L) Fishing Vessels, and after extensive consultation with industry, it was agreed that the Code of Practice for Small Fishing Vessels should be extended to cover Fishing vessels of less than 15 metres length overall."

.2 Paragraph 3.2 shall be inserted and read

"The Code will also apply from 23 November 2002 to all United Kingdom registered vessels with a length overall of less than 15 metres."

.3 Paragraph 4.1.1 shall be amended to read

"To carry safety equipment on the vessel appropriate to its length and construction (i.e. open or decked). Checklists are at ANNEX 1.2 to 1.6."

.4 Paragraph 5.1 shall be amended to read

"New fishing vessels, defined as those:

.1 with a registered length of less than 12 metres for which a keel was laid or construction or lay-up was started after 1st April 2001; or

.2 those with a length of less than 15 metres overall for which a keel was laid or construction or lay-up was stated after 23 November 2002,

must comply with the Construction Standards issued by Seafish or an equivalent standard recognised by MCA. A certificate showing compliance with the Seafish standards or an equivalent standard must be issued by the construction standard authority on completion of build."

.5 Paragraph 5.3 shall be amended to read

"The owner of every existing fishing vessel with a length of less than 15 metres length overall must ensure that the vessel complies with the checklist of requirements appropriate to the length and construction of the vessel, that a health and safety risk assessment has been completed, and that a self-certification declaration has been completed."

Fishing Vessel Safety Branch
Maritime and Coastguard Agency,
Spring Place,
105 Commercial Road,
Southampton SO15 1EG.

Tel: 023 8032 9154
Fax: 023 8032 9173

June 2002

File ref. MS 088/001/0291
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Safer Lives, Safer Ships, Cleaner Seas

Department for
Transport

The MCA is an executive agency
of the Department of Transport



Maritime and Coastguard Agency

THE FISHING VESSELS CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS

From the date of introduction of the Fishing Vessels Code of Safe Working Practice for the Construction and Use of 15 metre length overall (LOA) to less than 24 metre registered length (L) Fishing Vessels, this Code will include vessels from 12 metres up to 15 metres length overall.

All previous references to under 12 metres registered length will now read under 15 metres length overall and apply to the whole Code.

**The Maritime and Coastguard Agency
Spring Place
105 Commercial Road
Southampton SO15 1EG**

**Telephone: 0845 6014072
Facsimile: 023 8032 9173**

Effective from 23 November 2002

**CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS:
CHECK LIST OF REQUIREMENTS**

DECKED Vessels 12m and above Registered Length to less than 15m Length Overall

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
Liferafts		
2 Lifebuoys (1 with 18m buoyant line attached) or 1 Lifebuoy (fitted with 18m buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute flares		
2 Hand-held flares		
1 Smoke Signal (buoyant or handheld)		
1 Fire bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket + 1 Multi-purpose Fire Extinguisher (fire rating 5A/34B) + 1 fixed Fire Extinguishing system for the machinery space		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio - fixed or hand held		
Bilge Pump		
Bilge Alarm		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) "Decked vessels" means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.
- (iii) VHF using DSC is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

**CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS:
CHECK LIST OF REQUIREMENTS**

OPEN Vessels 12m registered length and above to less than 15m Length Overall

ITEM	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18m buoyant line attached) or 1 Lifebuoy (with 18m buoyant line) +1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose or 1 Fire Bucket		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio – fixed or hand held		
Bilge Pump		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

History of the development of fishing vessel inspections from 1975

1. BACKGROUND

1.1 Legislation

Statutory Instrument, 1975 No 330, Merchant Shipping Safety, "The Fishing Vessel (Safety Provisions) Rules 1975 laid down the construction criteria for all mechanically propelled fishing vessels. The rules extended for the first time to fishing vessels a system of regular statutory surveys for the purpose of issuing safety certificates.

In 1979, after a period of consolidation, a number of exemptions to the regulations were agreed for vessels of 24.4 metres and over.

1.2 National Audit Office and House of Lords Select Committee observations

In 1992 the National Audit Office (NAO) noted a sharp increase in the number of fishing vessel accidents between 1978 and 1989. It also noted that it was not until 1990 that a programme for the inspection of <12m fishing vessels was initiated. At about the same time a House of Lords Select Committee on Science and Technology recommended that fishing vessels down to 7m in length should be brought into the licensing, crew certification and structural safety regimes for fishing vessels.

2. INSPECTION ARRANGEMENTS OF < 12m FISHING VESSELS

2.1 Arrangements - 1990 to 1999

From 1990 Marine Surveyors (Fishing Vessels), as part of the Department of Transport's Surveyor General's Organisation undertook the inspections of <12m fishing vessels. They were occasionally supplemented by Marine Office general Marine Surveyors.

The inspections were conducted in accordance with the "General Exemptions from the Fishing Vessel (Safety Provisions) Rules 1975, as amended". If vessels complied with the exemptions then the conditions for the inspection were satisfied. If a vessel did not comply with the exemptions then the surveyor had the option of detention.

In 1994 the MSA was established. As part of the re-organisation the MSA subsumed the responsibility for the inspections from the Surveyor General's Office. Further change occurred when, in 1998, the Coastguard Agency and the Marine Safety Agency were amalgamated to form the MCA.

2.2 Arrangements - 1999 - 1 April 2001

From 1999, responsibility for < 12m fishing vessel inspections was transferred from the MCA surveyors to the CG Sector Managers (SMs). The SMs assumed this responsibility following a period of training and achievement at an endorsed standard. Initially training was rolled out around the UK by Survey staff but later the MCA's Training Centre at Highcliffe in Dorset assumed the initial training responsibility. Training comprised one day focused on inspection criteria. A further half day was dedicated to "Measuring and Marking" procedures for the registration of new and owner transferred fishing vessels. A period of consolidation "On Job Training" requiring the CG SM to accompany a surveyor or inspection experience SM on five inspections was required. The SM could then

apply to the MCA HQ, via the AOM (SAR), for formal endorsement as an inspector after which he was issued with an identity card endorsed with Departmental Officer powers.

In 1999 the CG SMs continued to conduct inspections in accordance with the General Exemptions detailed above. However, the CG SMs did not have the authority to detain a vessel. If there was doubt about the interpretation of the General Exemptions, or on any other aspect of the vessel's stability, structural aspects or seaworthiness the advice of the Marine Surveyor (Fishing Vessels) should be sought. If in doubt, the area Principal Marine Surveyor (Fishing Vessels) and the MSA HQ, as it was then, would also be available for advice.

2.3 Arrangements - 1 April 2001 to 23 November 2002

The MCA, in consultation with industry members of the Fishing Industry Safety Group decided to develop a Code of Practice for fishing vessels with a registered length of less than 12m as part of a wider review of fishing safety regulations.

On 1st April 2001, Statutory Instrument 2001 No 9 "The Fishing Vessel (Code of Practice for the Safety of Small Fishing Vessels) Regulations 2001 was published.

As a result, Merchant Shipping Notice (MSN) 1756(F) - "The Fishing Vessels Code of Practice for the Safety of Small Fishing Vessels under 12 metres in Length (the Small Fishing Vessel Code) was developed. The "Code", that came into force on 1 April 2001 requires that vessels be inspected at intervals not exceeding 5 years. In the intervening periods skippers are to conduct an Annual Self-Certification and sign to the effect that their vessels comply with the "Code". The inspection is conducted against a checklist that centres on emergency equipment i.e. fire extinguishers, fire pumps and life saving equipment and navigational aids.

MSN 1756(F) superseded the General Exemptions from the Fishing Vessel (Safety Provisions) Rules 1975 as amended. Rules under which <12m fishing vessels were previously inspected.

To bring SMs up to date with the "Code" requirements, each of the Regional Principal Marine Surveyors (Fishing) conducted SM refresher training within their respective regions. In common with previous arrangements, if a SM has concerns over the vessel compliance or interpretation of the Code, or on any other aspect of vessel safety or seaworthiness then advice should be sought from either the Marine Surveyor (Fishing) or the Principal Marine Surveyor (Fishing).

2.4 23 November 2002 to present

On 23 November 2002 MSN 1756(F) was amended to include fishing vessels between 12m and <15m length overall. It brought a further 50-60 fishing vessels under the SM inspection regime.

The "Code" is subject to periodical review by the Fishing Industry Safety Group that is chaired by the MCA. During late 2003 draft changes to the "Code" were provisionally agreed. These are the subject of further consultation and have yet to be published.

3. SUPPLEMENTING COASTGUARD SECTOR MANAGER'S INSPECTIONS

3.1 Coastguard Watch Manager and Officers and Marine Surveyors 3

During February 2001 the opportunity to conduct fishing vessel inspections was extended to suitably recommended and trained CG Watch Managers and Watch Officers. Personnel who wished to be considered as inspectors made application through the MCA's Personal Development Plan process. Where appropriate the CG District Controller approved the request for inspector training.

In February 2005 there were 24, inspector qualified CG Watch Managers and Watch Officers. There are 7 in the Eastern Region, 13 in the Scotland and Northern Ireland Region and 4 in the Wales and Western Region.

3.2 Marine Surveyors 3

In 2003 the MCA also introduced the Marine Surveyor 3 (MS3) who are located at the Marine Offices. The MS3s are authorised to conduct inspections following a period of training and achievement in the same way as for the SMs. There are currently 9 MS3s capable of undertaking these inspections, equally distributed throughout the 3 MCA Regions.

Personnel authorised to conduct inspections of
fishing vessels under 15m in length

PERSONNEL AUTHORISED TO CONDUCT INSPECTIONS OF FISHING VESSELS UNDER 15 METRES IN LENGTH

CG Watch Managers and Watch Officers

During February 2001 the opportunity to conduct fishing vessel inspections was extended to suitably recommended and trained CG Watch Managers and Watch Officers as well as the CG SMs. Personnel who wished to be considered as inspectors made application through the MCA's Personal Development Plan process. Where appropriate, the CG District Controller approved the request for inspector training.

In February 2005, there were 24 inspector qualified CG Watch Managers and Watch Officers. There are 7 in the Eastern Region, 13 in the Scotland and Northern Ireland Region and 4 in the Wales and Western Region.


Marine Surveyors 3

In 2003, the MCA also introduced the Marine Surveyor 3 (MS3) who are located at the marine offices. The MS3s are authorised to conduct inspections following a period of training and achievement in the same way as for the CG SMs. There are currently 9 fully qualified MS3s, equally distributed throughout the 3 MCA Regions.


Marine Surveyors

Marine surveyors are authorised to conduct inspections and surveys as required by their respective Principal Marine Surveyor. A marine surveyor will attend a vessel if an inspecting officer identifies concerns over the material condition, stability or seaworthiness of the vessel during his inspection. The Surveyors have the power of detention and have a wider experience, which may be called upon.

MCA Operations Advice Note – OAN 371 – Issue of Decals to
Fishing Vessels of Less than 15m in length

	Maritime and Coastguard Agency Operations Advice Note	Document Number: OAN 371
Revision: 01	Issue of Decals to Fishing Vessels of Less than 15 Meters LOA	Page 1 of 2
Date: 01 Oct 04	Distribution A, C, D, E	

1. This OAN advises inspectors on the procedure for completing and issuing a decal to a fishing vessel of under 15m LOA. The issue of a decal indicating that a fishing vessel is compliant with the requirements of MSN 1756 (The Code of Practice for the Safety of Small Fishing Vessels) has been ongoing since the code came into force on the 1st April 2001.
2. The following procedure should now be followed when issuing a decal:
 - a. Complete all the boxes on the decal excluding the 'UNIQUE NUMBER', which should have a line through it. The unique number no longer serves a useful purpose.
 - b. 'EXPIRY DATE' should be 5 years after the date of inspection.
 - c. If there are outstanding defects following the inspection the owner should be required to rectify these within a specified period and to contact the inspector when this has been completed (If the defects affect the seaworthiness of the vessel then a FVS should be contacted in accordance with MCA901). The Report of Inspection (MSF1606) has a space to record this. The inspection results including defects will be recorded in the Ship Inspection and Survey (SIAS) database by the regional point of contact from the MSF 1606.
 - d. The inspector should judge whether to accept confirmation from the owner that defects have been rectified, or whether re-inspection is required. In deciding whether a re-inspection is necessary, while taking account of the nature of the defect and knowledge of the owner, the inspector should also consider whether inspection resource would be more effectively spent on the initial inspection of other fishing vessels.
 - e. If the vessel is re-inspected on the same day the MSF 1606 should be amended to show that the outstanding defects have been rectified by amending each action taken code to code "10". The decal should then be issued dated 5 years from the date of the inspection. A copy of the amended form should be sent to the regional point of contact for updating SIAS.

 mca <small>Maritime and Coastguard Agency</small>	Maritime and Coastguard Agency Operations Advice Note	Document Number: OAN 371
Revision: 01	Issue of Decals to Fishing Vessels of Less than 15 Meters LOA	Page 2 of 2
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- a. If the vessel is re-inspected at a later date and there are no outstanding deficiencies a MSF 1606 with nil deficiencies should be completed. The decal should then be issued dated 5 years from the date of the re-inspection. The form should be forwarded to regional point of contact who should enter the clean report on SIAS and also record the deficiencies from the original inspection as confirmed rectified.
- b. If accepting the owner's confirmation that defects have been rectified, the MSF 1606 should be amended to show that the outstanding defects have been rectified by amending each action taken code to code "10". A note should also be made in the "Remarks" box on MSF 1606 to indicate the date confirmation was received. A copy of the report and a decal, dated 5 years from the inspection date, should be issued to the owner and copied to the regional point of contact for updating SIAS.
- 3 The owner should be instructed to retain their copy of MSF 1606 until their next inspection (the form currently says the report should be retained for 2 years. This will be amended at the next reprint).

Merchant Shipping Act 1995, Part X, Paragraph 256(9)(C)

(3) In the application of this Part in relation to Scotland, any reference to a justice of the peace includes a reference to a sheriff.

PART X

ENFORCEMENT OFFICERS AND POWERS

Enforcement Officers

256.—(1) The Secretary of State may, if he thinks fit, appoint any person as an inspector to report to him—

Appointment of
inspectors and
surveyors.

- (a) upon the nature and causes of any accident or damage which any ship has or is alleged to have sustained or caused;
- (b) whether any requirements, restrictions or prohibitions imposed by or under this Act have been complied with or (as the case may be) contravened;
- (c) whether the hull and machinery of a ship are sufficient and in good condition;
- (d) what measures have been taken to prevent the escape of oil or mixtures containing oil.

(2) The Secretary of State may, at such ports as he thinks fit, appoint persons to be surveyors of ships for the purposes of this Act and may remove any person so appointed.

(3) A surveyor of ships may be appointed either as a ship surveyor or as an engineer surveyor or as both.

(4) Surveyor of ships may be appointed either generally or for any particular case or purpose.

(5) The Secretary of State may also appoint a surveyor general of ships for the United Kingdom and such other officers in connection with the survey of ships and other matters incidental thereto as he thinks fit.

(6) The Secretary of State may appoint persons to be inspectors for the purposes of sections 261 to 266.

(7) Every inspector appointed under section (1) above shall be treated as appointed under subsection (6) above.

(8) Every surveyor of ships shall be treated as a person appointed generally under subsection (1) above to report to the Secretary of State in every kind of case falling within paragraphs (b) and (d) of that subsection in relation to Chapter II of Part VI.

(9) In this Act—

- (a) "Departmental inspector" means an inspector appointed under subsection (1) above;
- (b) "surveyor of ships" means a surveyor appointed under subsection (2) above;
- (c) "Departmental officer" means any officer of the Secretary of State discharging functions of his for the purposes of this Act;

and the reference to requirements, restrictions or prohibitions under this Act includes any such requirements, restrictions or prohibitions constituting the terms of any approval, licence, consent or exemption given in any document issued under this Act.

PART X

Inspection etc powers

Powers to require
production of
ships documents.

257.—(1) The powers conferred by this section are conferred in relation to United Kingdom ships and are available to any of the following officers, namely—

- (a) any Departmental officer,
- (b) any commissioned naval officer,
- (c) any British consular officer,
- (d) the Registrar General of Shipping and Seamen or any person discharging his functions,
- (e) any chief officer of customs and excise,
- (f) any superintendent,

whenever the officer has reason to suspect that this Act or any law for the time being in force relating to merchant seamen or navigation is not complied with.

(2) Those powers are—

- (a) to require the owner, master, or any of the crew to produce any official log-books or other documents relating to the crew or any member of the crew in their possession or control;
- (b) to require the master to produce a list of all persons on board his ship, and take copies of or extracts from the official log-books or other such documents;
- (c) to muster the crew; and
- (d) to require the master to appear and give any explanation concerning the ship or her crew or the official log-books or documents produced or required to be produced.

(3) If any person, on being duly required by an officer under this section to produce a log-book or any document, fails without reasonable excuse to produce the log-book or document, he shall be liable on summary conviction to a fine not exceeding level 3 on the standard scale.

(4) If any person, on being duly required by any officer under this section—

- (a) to produce a log-book or document, refuses to allow the log-book or document to be inspected or copied;
- (b) to muster the crew, impedes the muster; or
- (c) to give any explanation, refuses or neglects to give the explanation or knowingly misleads or deceives the officer;

he shall be liable on summary conviction to a fine not exceeding level 5 on the standard scale.

Powers to inspect
ships and their
equipment, etc.

258.—(1) For the purpose of seeing that the provisions of this Act other than Chapter II of Part VI and of regulations and rules made under this Act (other than that Chapter) or that the terms of any approval, licence, consent, direction or exemption given by virtue of such regulations are duly complied with, the following persons, namely—

- (a) a surveyor of ships,
- (b) a superintendent,

PART X

(c) any person appointed by the Secretary of State, either generally or in a particular case, to exercise powers under this section, may at all reasonable times go on board a ship and inspect the ship and its equipment or any part thereof, any articles on board and any document carried in the ship in pursuance of this Act other than Chapter II of Part VI or in pursuance of regulations or rules under this Act (other than that Chapter).

(2) The powers conferred by subsection (1) above are, if the ship is a United Kingdom ship, also exercisable outside the United Kingdom and may be so exercised by a proper officer as well as the persons mentioned in that subsection.

(3) A person exercising powers under this section shall not unnecessarily detain or delay a ship but may, if he considers it necessary in consequence of an accident or for any other reason, require a ship to be taken into dock for a survey of its hull or machinery.

(4) Where any such person as is mentioned in subsection (1) above has reasonable grounds for believing that there are on any premises provisions or water intended for supply to a United Kingdom ship which, if provided on the ship, would not be in accordance with safety regulations containing requirements as to provisions and water to be provided on ships he may enter the premises and inspect the provisions or water for the purpose of ascertaining whether they would be in accordance with the regulations.

(5) If any person obstructs a person in the exercise of his powers under this section, or fails to comply with a requirement made under subsection (3) above, he shall be liable, on summary conviction, to a fine not exceeding level 5 on the standard scale.

259.—(1) The powers conferred by this section are conferred in relation to—

- (a) any premises in the United Kingdom; or
- (b) any United Kingdom ship wherever it may be and any other ship which is present in the United Kingdom or in United Kingdom waters;


and are available to any Departmental inspector, or any inspector appointed under section 256(6), for the purpose of performing his functions.

(2) Such an inspector—

- (a) may at any reasonable time (or, in a situation which in his opinion is or may be dangerous, at any time)—
 - (i) enter any premises, or
 - (ii) board any ship,
 if he has reason to believe that it is necessary for him to do so;
- (b) may, on entering any premises by virtue of paragraph (a) above or on boarding a ship by virtue of that paragraph, take with him any other person authorised for the purpose by the Secretary of State and any equipment or materials he requires;
- (c) may make such examination and investigation as he considers necessary;

Powers of inspectors in relation to premises and ships.

MCA Instructions of Under 15 Metre Fishing Vessels – Quality Management System
Documentation Procedure MCA 901, dated 28 February 2003

 Maritime and Coastguard Agency	Maritime and Coastguard Agency Quality Management System Documentation Procedure	Document Number: MCA 901
Revision: 04	Safety Inspections of Under 15 Metre Fishing Vessels	Page 1 of 4
Date: 28.02.03		

CONTENTS

- 1.0 Purpose
- 2.0 Scope
- 3.0 References
- 4.0 Responsibilities
- 5.0 Definitions
- 6.0 Actions
- 7.0 Documentation

Key changes

This Procedure has been revised to take account of changes to the FV Code of Practice the Safety of Small FV Reg. 2001 (SI No9.2001) form and the involvement of RSS. All amendments are highlighted by a vertical line in the left margin.


1.0 Purpose

The purpose of this Procedure is to give guidance on the inspection of Under15m Fishing Vessels.

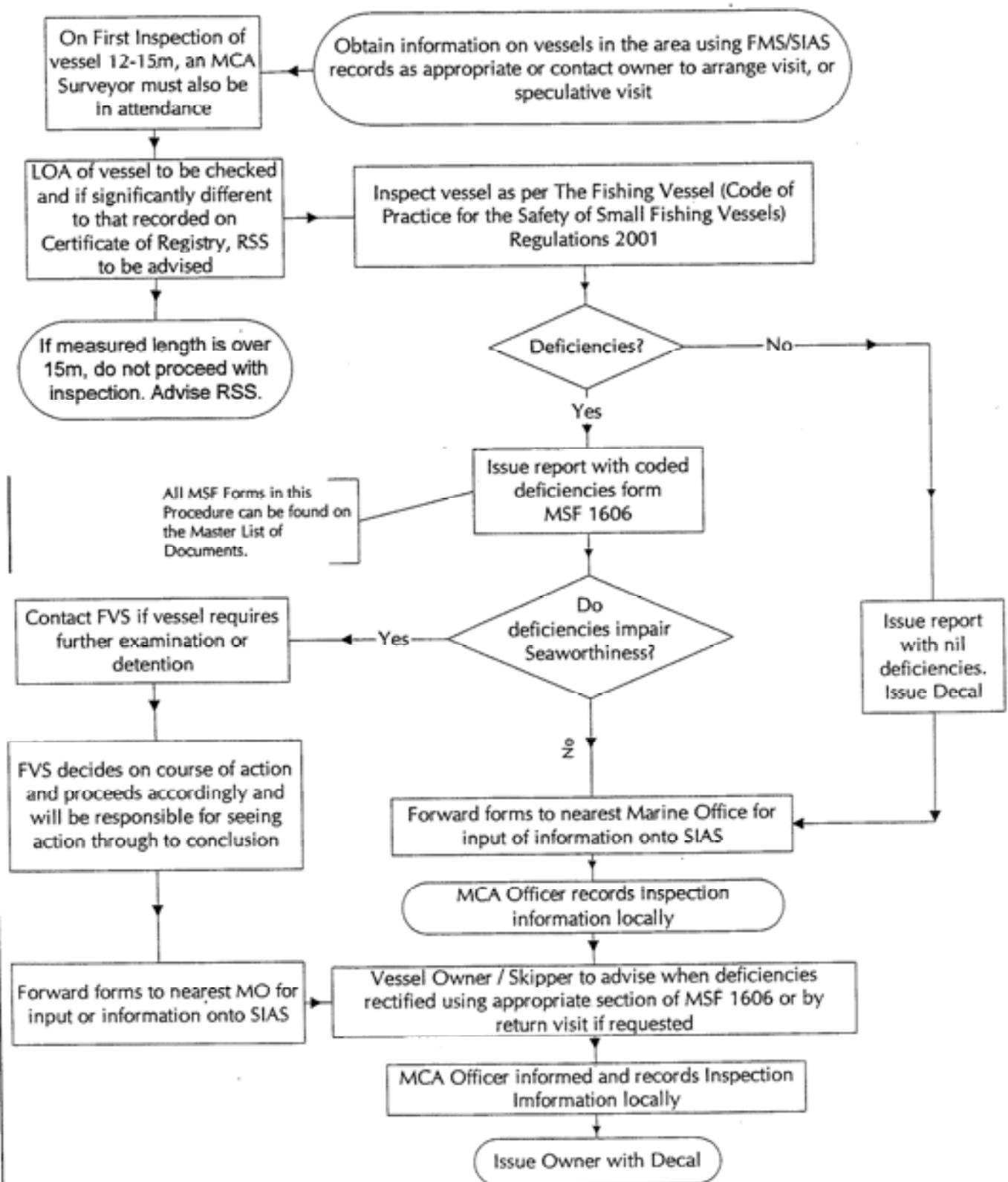
2.0 Scope

This Procedure applies to all MCA personnel whose duties include the inspection of Under 15m Fishing Vessels, under THE FISHING VESSELS (CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS) Regulations 2001 (SI No. 9,2001).

Author: Tony Woodward	Authorised: John Garner	Approved: Andrew Cherrett
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 Maritime and Coastguard Agency	Maritime and Coastguard Agency Quality Management System Documentation Procedure	Document Number: MCA 901
Revision: 04	Safety Inspections of Under 15 Metre Fishing Vessels	Page 3 of 4
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6.0 Actions



Under 15m Fishing Vessel Inspection Course Objectives

U15M FISHING VESSEL INSPECTION

AIMS AND OBJECTIVES

AIM

The Aim is to deliver a one day foundation course to Sector Managers and other MCA staff (as management require) to undertake U15M Fishing Vessel Safety Equipment Inspections IAW the current Code. Additionally the course will normally comprise of an additional half day to cover FV Measurement, Carving and Marking.

On conclusion of the training the delegates will understand and be able to explain:-

OBJECTIVES

1. Understand the goal to reduce the risk to fishermen in the pursuit of their work by ensuring that each registered FV complies with minimum safety equipment and other requirements according to the current Code. Following this foundation course delegates are required to work under a FV Surveyor or experienced SM gaining experience before being allowed to undertake such work on their own.
2. Delegates will understand the health & safety issues involved with such activity and accept the need to risk assess each situation and take appropriate precautions to reduce that risk to an acceptable level.
3. Course members will be challenged to ensure that in representing the MCA they need to conduct themselves in a professional, helpful and polite manner. They will also be made aware of their legal powers to inspect under the MSA.
4. Where the condition of a vessel is deemed to be a cause of concern (Dangerous condition affecting seaworthiness or stability worries for example) then this should be referred to the appropriate FV Surveyor.

5. Acceptance that FVs are categorised into various sizes and decked/undecked with such categories having to carry different levels and/or types of safety equipment.
6. Appropriate interpretation of Code requirements and the meaning of 'fit for purpose'. Such inspections require consistent interpretation of the Code.
7. By PowerPoint presentation, discussion and handling of certain items, delegates will be able to ascertain whether those items are acceptable or not.
8. Understand and practice completing form MSF 1606 and the administration needed to record such checks, including the protocol for deficiencies and the issue of Decals.
9. (As appropriate) Understand the skill of measuring FVs for Registration and completing the appropriate paperwork (MSF 2301A) and how to check the carving and marking of registered FVs.

MSN 989 – The Safety of Small Fishing Vessels

THE SAFETY OF SMALL FISHING VESSELS**Notice to Owners, Skippers, Designers, and Builders of Fishing Vessels
under 12 metres (3937 feet) Registered length**

This notice is intended both as a warning and as a guide to the Owners, Skippers, Designers and Builders of all small fishing boats. The Insurers of such vessels are also invited to have regard to the contents of this Notice.

1. GENERAL

There are no rules in force governing the safety standards of fishing vessels of less than 12 metres in length except for certain requirements to carry items of lifesaving and firefighting equipment. The safety of these vessels and of the lives of those on board is mainly in the hands of the people concerned with their construction, operation and maintenance.

2. OWNERS AND SKIPPERS

- 2.1 Owners and Skippers are under a duty at common law and under Section 44 of the Merchant Shipping Act 1979 to use all reasonable means to ensure that a ship goes to sea in a seaworthy state.
- 2.2 Registration of a fishing vessel does not of course imply approval of the vessel's seaworthiness and the following notes should serve as a guide.

Stability and Seaworthiness
- 2.3 Experience of recent casualties to small fishing vessels has shown that often insufficient attention is given to matters of stability and seaworthiness.
- 2.4 Before using a boat for fishing be sure it is suitable for the intended type of fishing and sea area in which it is to operate.
- 2.5 It is best that you use a boat which has at least been accepted by, or built to the Specification of, a recognised Authority (see the Appendix for useful names and addresses).
- 2.6 The stability should be properly assessed by a person having appropriate professional experience. The assessment should have regard to the intended type of fishing and service. Alterations should not be made to the structure, fishing gear or ballast without

APPENDIX

The following publications contain useful guidance and advice on the safety of fishing vessels and fishing activities generally:

"Rules for the construction of wooden fishing vessels". "Rules for the construction of glass reinforced plastics fishing vessels".

(Issued by, and obtainable from, The White Fish Authority, Sea Fisheries House, 10 Young Street, Edinburgh EH2 4JQ.)

"Provisional Rules for the application of glass reinforced plastics to Fishing Craft".

"Lloyd's Register of Shipping Rules and Regulations for the Classification of Yachts and Small Craft".

(Issued by, and obtainable from, Lloyd's Register of Shipping, Manor Royal, Crawley, West Sussex RH10 2QN.)

"The Construction of Small Craft" (code of recommended practices for boats up to 20 feet in length).

(Issued by, and obtainable from, The Ship and Boat Builders National Federation, Boating Industry House, Vale Road, Otlands, Weybridge, Surrey, KT13 9NS.)

"Recommended code of safety for fishermen". "United Kingdom marine search and rescue organisation". "The Fishing Vessels (Safety Provisions) Rules 1975 (as amended)".

(Issued by the Department of Trade and published by HMSO: obtainable from Government Bookshops and other booksellers.)

"Fishermen and Safety (a guide to safe working practices for fishermen)". "Personal Survival at Sea".

(Issued by the Department of Trade and obtainable from the Department's Marine Offices.)

Department of Trade
Marine Division
London WC1V 6LP
October 1981

checking that the standard of stability and seaworthiness is not thereby reduced.

Freeboard

- 2.7 This is the height of the deck above water and is a very important safety feature. Low freeboard can result in a boat being defenceless against the sudden invasion of the deck by water. It can result in a loss of stability leading to capsizing, or sinking.
- 2.8 There must be sufficient freeboard all round to ensure that the boat is still stable and seaworthy in all likely weather conditions, even with an unusually heavy weight of catch and the weight of the gear being hauled or the catch being hoisted and swung on board.

General Safety

- 2.9 Before making any alterations or additions always give careful consideration to the possible consequences of your actions on the safety of the boat and crew.

3. BOATBUILDERS AND DESIGNERS

- 3.1 Safety is an important aspect of the designer's and builder's art. Firms engaged in the designing, building and fitting out of boats have a duty and responsibility under common law to pay proper attention to safety when applying their skills.

Stability and Closures

- 3.2 When building a complete boat or when fitting out an unfinished hull which has been "bought in", paying attention to the stability of the finished product is a matter of prime importance. There is the obvious need to provide efficient means of closing all openings through which water could enter the hull. If you are not sure the advice of a consultant should be sought.

Builders to advise purchasers

- 3.3 When selling a completed boat the builder should advise the purchaser, in writing, regarding the risks of making modifications without first investigating the effect on stability and freeboard.
- 3.4 A builder selling an unfinished hull should provide appropriate advice to the purchaser concerning the safety aspects to be considered when fitting the boat out for the intended service.

4. PUBLICATIONS

- 4.1 The attention of owners, skippers, builders and designers is drawn to the list of publications given in the appendix.

Code of practice for the safety of small fishing vessels:
Check list of requirements for decked vessels up to 10m Registered Length

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS: CHECK LIST OF REQUIREMENTS

ALL DECKED Vessels up to 10m Registered Length

Item	Remarks/compliance	Expiry/Service Date
Lifejackets - 1 per person		
2 Lifebuoys (1 with 18m buoyant line attached)		
or		
1 Lifebuoy (fitted with 18m buoyancy line) + 1 Buoyant Rescue Quoit		
3 Parachute Flares		
2 Hand-held Flares		
1 Smoke Signal (buoyant or hand held)		
1 Fire Bucket + Lanyard		
1 Multi-purpose Fire Extinguisher (fire rating 5A/34B)		
1 Fire Blanket (light duty) in galley or cooking area (if applicable)		
1 Fire Pump + Hose		
or		
1 Fire Bucket		
1 Multi-purpose Fire Extinguisher for oil fires (fire rating 13A/113B)		
VHF Radio – fixed or hand held		
Bilge Pump		
Bilge Alarm		
Navigation Lights & Sound Signals		
Compass		
Waterproof Torch		
Medical Kit		

Notes:

- (i) Equipment need not be MCA approved provided it is fit for its intended purpose.
- (ii) "Decked vessels" means a vessel with a continuous watertight weather deck that extends from stem to stern and has positive freeboard throughout, in any condition of loading the vessel.
- (iii) VHF using Digital Selective Calling (DSC) is highly recommended in view of cessation of the Coastguard's Channel 16 dedicated headset watch on 1st February 2005.

MCA letter to the owners of under 12m Fishing Vessels



Maritime and Coastguard Agency

Spring Place
105 Commercial Road
SOUTHAMPTON
SO15 1EG

TEL: 023 80329100

Fax: 023 80329161

To: Owners of Under 12m Fishing Vessels

27 March 2001

Dear Sir/ Madam,

CODE OF PRACTICE FOR THE SAFETY OF SMALL FISHING VESSELS

I wrote to you on 6 March 2001 to give you advance notice about the effect of the Code of Practice for the Safety of Small Fishing Vessels which comes into force on 1 April 2001.

The Code has now been included as an integral part of Merchant Shipping Notice 1756 (F). The enclosed Code has been copied on pink paper and will also be known as "The Pink Code".

Helpline

We have set up a local cost call helpline number for information, advice and for arranging inspections under the Code. The telephone number is

0845 6014072

This line will be open from Monday 2nd April 2001 and will be manned between 10:00 hours and noon and from 14:00 to 16:00 hours from Monday to Friday. Outside these times an automated answering and recording service will take your calls. Please contact us if you have any questions about the Code and its introduction.



To remind you:

Safety equipment required

We suggest you check the safety equipment requirements that apply to your vessel and make sure that you carry the appropriate equipment on board. The requirements for different lengths and types of vessel are set out in Annexes 1.1 to 1.4 of the enclosed Code.

Health and Safety Risk Assessment

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 require a health and safety risk assessment of your vessel. This does not have to be written down but we would strongly recommend that it is. If you have not yet done so, you should complete one now.

Annual self-certification

Every year, on the anniversary of your vessel's registration, you should certify that your vessel complies with the Code. The form for doing this is at Annex 2 of the Code. Please note that you should retain this declaration for inspection purposes. It should not be sent to the MCA.

Inspection

In the course of an MCA inspection you will be required to demonstrate that your vessel complies with the appropriate revised checklist of equipment and you have completed the annual self-certification of your vessel. You will also be asked if you have carried out an appropriate and up-to-date health and safety risk assessment.

Yours faithfully,

**Director
Maritime Safety and Pollution Prevention**

Inspection/Survey Details for *Emerald Dawn*



UK & DT Inspection/Survey Details

Ship Details

Ship ID 53486

Next ID
Group ID 49774

Ship Name EMERALD DAWN

IMO Number 0000000

**Official
Number** C17944

FV Number N967

Call Sign
Ship Type F3 - Fishing Vessel - GRP

Flag 670 - UNITED KINGDOM

Class. Society 0 - NONE

Owner SHANE MURNAGHAN

Year of Build 1988

UK Class Code X

Kw 134

Dead Weight
Length(m) 8.69

**Gross
Tonnage** 9.05

Inspection Details

Marine Office Belfast

**Inspection
Date** 22/10/2004

Input Date 29/10/2004

Detained? N

Release Date
Country UNITED KINGDOM

Place Kilkeel

**Inspection
Type** Targeted

**Inspected at
Sea?** N

**MACRIS
Codes**
Comments

Ship Actions

Inspection has no ship actions

Survey Details

Inspection has no surveys

ILO Survey Details

Inspection has no ILO Survey

Certificate Details

11/11/2004

Inspection has no certificates**Deficiency Details**

Code	Surveyor's Description	Regulation Ref	Relates to survey?	Actions
1699	No radio licence			99
660	No lifejacket lights			16
640	3 parachute, 2 handheld, 1 smoke missing			17
620	Liferaft to service			17
650	2x properly marked lifebuoys with line & light to provide			16
1550	Stern light missing			16
1550	Sound signal missing			16
720	1 13A 70B or 13A 43B fire ext missing			16

[Return to main menu](#)[Back](#)[Delete Inspection](#)[Re-open Inspection](#)[Change User:](#)

MCA letter to the owner of *Emerald Dawn*, dated 8 November 2004

An executive agency of the Department for Transport

Tel:

Fax:

Mr S Murnaghan

Our ref:

8 November 2004

Dear Mr Murnaghan,

MCA INSPECTION OF UNDER 15M FISHING VESSELS

Mfv EMERALD DAWN – N967

The above named vessel was inspected by myself on 22 October 2004

I have not received from you a written report confirming rectification of deficiencies (items 2 - 8) as requested at the foot of the Report of Inspection (MSF 1606). A copy of MSF 1606 is attached for your information

Please confirm that the deficiencies noted during the inspection have been rectified.

Written confirmation (letter/fax/email) should be submitted to this office within **15 working days** from the date of this letter.

Yours sincerely

MS3 Marine Technician

ROV survey observations of *Jann Denise II*

ROV SURVEY OBSERVATIONS

During the ROV survey, the following observations were made:

- Various tools, as if spilled from a toolbox, were lying scattered over the aft deck.
- The underside of the radar scanner had been damaged.
- The hull was inclined 10-15 degrees to starboard lying in a south-westerly direction and clear of marine growth.
- The name and registration number on the port and starboard bows, and the letter "T" on the stem plate established positive identification of the vessel. The port of registry 'No Shields' was clearly visible at the stern.
- A thorough inspection of the hull showed nothing untoward, the lower blade of the propeller was resting in the seabed, and the rudder was positioned amidships.
- Examination of the starboard bow area showed the vessel's liferaft clearly visible, lying on its side on the seabed below the vessel's registration letters. Closer inspection showed the hydrostatic release unit lying close by, also on the seabed. The liferaft's painter was still attached by a half turn to the vessel by means of the dedicated weak link. The hydrostatic release had operated, and the nylon securing eye was observed secured to a rope on the wheelhouse deck. The rope was in turn secured to a steel lug on the deck.
- The derrick head was observed in the upright position, with one rope running through the derrick head block. The rope was then secured onto the wheelhouse roof.
- With the exception of the starboard aft freeing port, which was closed, all other freeing ports were in the open position.
- Inspection of the deck shelter and aft section of the wheelhouse, showed that little damage had been sustained. The aft wheelhouse window was intact, and the wheelhouse door was observed in the lashed open position. Deep corrosion was identified on the starboard aft section of the wheelhouse structure.
- The engine room hatch, positioned on the port side of the main deck close to the wheelhouse, was closed. No securing arrangement for the hatch was observed.
- Located under the 'A' frame on the starboard quarter, the hatch providing access to the steering flat compartment was observed to be in the open position. No securing arrangement for the hatch was seen.
- On the working deck area the net drum appeared full. The net had been hauled onboard around the port side of the 'A' frame, with the cod end identified lying on the deck. The main hauling wires were still connected to the drum. Both trawl doors were clearly identified stowed on the port and starboard quarters.

Out of water survey of *Jann Denise II*

HULL SURVEY

Preservation

The hull was inspected while the vessel was on the dockside. It was last painted during a short maintenance period in June 2004 when she was lifted out of the water at Royal Quays, North Shields.

While there were large areas of anti-fouling paint detachment (**Figure 25**) there was no weed attachment to the underwater section of the hull.

Condition of hull plating

There was evidence, to varying degrees, of pitting to the external underwater section of the hull. The independent non-destructive test survey was conducted, the results of which are at **Annex 21**. Fifty six sample readings were taken using a "Krautkramer USM-2" ultrasonic unit. The maximum plate thickness recorded on the keel was 6.4mm and the minimum was 6.2mm. The plate thickness on the hull ranged from 4.0mm to 7.2mm.

Two areas of damage were identified on the port side. The first was a "vee" shaped penetration with the apex of the "vee" being pushed outboard indicating that the source of the damage was from inside the vessel. The lengths of the sides of the "vee" were 30mm and 50mm respectively. The damage was under the port bilge keel, 22.5cm from the keel and 260cm from the stern (**Figure 26**). The second area of damage comprised two 12cm cracks located 60 cm from the keel and 160cm from the stern (**Figure 27**). One of the cracks was in way of the port main fuel tank located in the engine room and the other was in the steering gear compartment. The independent test report is at **Annex 20**.

Sacrificial anodes

In June 2004, the vessel was fitted with three sacrificial anodes to each side of the skeg, and one on the after end of the skeg. Most of these anodes had been completely consumed (**Figure 28**), so there was little protection to counteract galvanic action. Whilst at the time of the inspection there was no significant pitting, there was virtually no protection to prevent its onset.

The two anodes fitted to the rudder were partially consumed (**Figure 29**).

Rudder

The rudder blade was found to be in good overall condition, with no evidence of either impact damage or cavitation erosion.

The lower supporting pintle and upper rudder stock bearing bush were both very badly worn. The clearance at the pintle was approximately 10mm and there was 8mm of clearance at the bush. There was also evidence of sea water staining at the upper end of the rudder stock.

Propeller

The propeller was undamaged and in good overall condition. The propeller shaft stern gland external cutlass rubber seal was damaged and the clearance was found to be 0.4 mm.

STRUCTURAL SURVEY

Damage

The damage to the vessel's structure above the waterline included damaged guardrails at the port shoulder, bent mast, broken plywood shelter deck roof and fractured mild steel supporting stanchions. There was also significant damage to the wheelhouse starboard after bulkhead, and the engine exhaust that was sited in the vicinity had been fractured. The "A" frame had also been bent, and its port after stanchion deck support partially torn from the deck. Most of this damage was likely to have been sustained as a result of the salvage operation.

Upper deck plating

The upper deck plating was in very poor condition and there was evidence of widespread corrosion wastage throughout all areas. An area of approximately 1m² just aft the engine room soft patch flexed by about 10mm (**Figure 30**).

The plating above the port side of the steering compartment was perforated, and a screwdriver easily penetrated the plates (**Figure 31**).

The plating supporting the "A" frame port after gallows stanchion was fractured along three edges. When the "A" frame became distorted during salvage, the plate was lifted and the fracture increased (**Figure 32**).

Hatch coamings, bulwarks and net drum

The previous owner, following concerns over water ingress, had increased the height of the engine room and steering flat compartment hatch coamings.

Both compartment hatch coamings were manufactured from 10mm steel plate and were in good condition. The engine room hatch coaming was 810mm x 619mm x 550mm high. The steering gear compartment hatch coaming was 610mm x 610mm x 285mm high. Both accesses were fitted with aluminium hatches, which were channelled to accept a thick rubber seal, part of which was missing on both hatches. There was no fitted method of securing either hatch in the closed or open position. It was also found that one of the steering compartment hatch cover brackets had been fractured.

The average bulwark height was 350mm.

The hydraulically driven net drum was in good condition. The centre of gravity was approximately 1m from the deck.

Freeing ports

The vessel was fitted with nine freeing ports. The forward two on the port and starboard sides were fitted with closing plates secured by chains. The plates were in the removed position.

Steering flat compartment

There was very little surface preservation remaining on the compartment surfaces. In particular, the forward bulkhead had signs of large scale corrosion.

The lower port area of the forward bulkhead had suffered from implosion distortion. About 1.5m² of the plate work had been set forward by about 75mm. There were also 3 x regular 8mm holes drilled about 260mm from the shell plating. It is unclear

whether these were originally used for securing purposes or were intentionally drilled to allow water to drain into the engine room. There were also 2 x 15mm holes drilled to starboard of the centreline, 85mm from the deckhead, the purpose of which is uncertain.

The deckhead was perforated by a number of small holes, and daylight was clearly visible through the fracture at the "A" frame port after stanchion deck pad piece.

None of the hydraulic hoses supplying the winch were clipped to the structure; all were found to be laying in the bilge.

Engine room

The engine room bilge was covered with a thick oily water deposit during the survey, and little could be seen of the shell plating. However, there was deep pitting in the bilge in the immediate vicinity of the port after engine mounting arrangement (**Figure 33**). It was also noted that the 10mm steel right angle support was welded to a 5mm mild steel upstand. This itself was welded directly to the shell plate at the turn of bilge. This area coincided exactly to the vee -shaped hull perforation on the port side of the vessel.

The port after fuel tank, and the hydraulic oil header tank situated at the port forward corner of the engine room, had both suffered significant implosion effects.

Forepeak (cabin) compartment

The forepeak compartment was undamaged. It was noted that the compartment bilge was free to drain into the engine room and vice versa.

ENGINEERING SYSTEMS AND EQUIPMENT

Bilge pumping arrangements

The engine room bilge was pumped using a "Jabsco 4000 Heavy Duty" electrically driven submersible pump (**Figure 34**). The pump was found in the deepest part of the bilge, at the starboard forward corner of the main engine. The pump was fitted to a mild steel overboard discharge pipe by a flexible hose and non return valve. The overboard discharge pipe was located at the starboard after corner of the engine room.

The vessel was fitted with a high bilge level sensing system (**Figure 35**) that activated an alarm in the wheelhouse and started the bilge pump when the control was in the automatic mode. However, the high level alarm (float switch) system was found to be disconnected at its junction box.

Control of the bilge pump is from a panel situated on the after bulkhead of the forepeak compartment (**Figure 36**). The pump can be selected for "manual" control, "automatic" control via the bilge high level sensor or can be set to the "off" position. The control selector switch was found to be in the "manual" position.

There was no engine driven bilge pumping arrangement fitted to *Jann Denise II*.

The bilge pump was found to be fully functional. Its output during tank testing was found to be 100 litres/min. The non-return valve was also found to be working correctly. Although the bilge high level sensor had been disconnected, it was, nevertheless, found to be working correctly.

The steering flat compartment bilge pump was also a "Jabsco" type pump, but there were no manufacturer's details or serial numbers on the pump casing (**Figure 37**). The pump was found to be lashed to a wooden spar by its electrical supply cables. The electrical supply cables were connected to the main supply passing from the engine room by twisting the cables together and covering them with insulating tape. The pump was found to be disconnected from its flexible discharge pipe, but the flexible pipe was connected to the mild steel overboard discharge pipe. A non-return valve was fitted to the pump discharge. The control panel in the wheelhouse indicated the pump had been switched on.

During pump testing, it was found that the pump turned under electrical power, but it failed to discharge water because of wear to the impeller bottom sealing plate. The pump discharge non-return valve functioned correctly.

Steering arrangements

There was a build up of thick rust on areas of the rudder stock support tube, indicative of previous water ingress from the top of the rudder stock (**Figure 38**). However, the rudder stock gland follower had not been fully pulled down, suggesting that, despite the 10mm rudder bush clearance, the water ingress was manageable.

A steering system functional test was conducted using the ship's wheel. The system was found to be operating correctly.

ENGINE ROOM SYSTEMS

General

There was no evidence that any of the engine room systems failed. The majority of the water systems were connected with flexible hoses and, although sections of the steel pipework had suffered surface corrosion, they were intact.

Deck wash system

The deck wash pump was belt driven from the free end of the main engine via a manual clutch. The pump discharged to the weather deck, outboard of the engine room hatch. The pipe on the weather deck was found to be fractured just above deck level. The pipe was corroded, and the fracture pre-dated the accident.

Engine seawater system

The engine seawater circulating pump was belt driven from the free end of the engine. It was found that the sea tube, penetrating the vessel's hull, which incorporated a suction strainer, had about 5mm of lateral movement. This could also be seen by about 1-2mm of movement at the underwater side of the connection. It is likely that this movement was being achieved by compressing the thick rubber joint between the hull interface. There was no evidence of leakage of bilge contents through the connection.

Fuel system

With the exception of the implosion damage to the port fuel tank, the fuel system was intact.

The fine duplex fuel filters were removed and confirmed to be full of fuel. The inlet connection to the fuel lift pump was also disconnected, and, again, clean fuel issued from the inlet pipe. There was no evidence of engine fuel starvation.

Engine and gearbox controls

It was found that the wheelhouse gearbox and engine power control levers were set to the ahead position, and 75% power had been applied. These settings were confirmed at the engine and gearbox. Both the gearbox controls and fuel pump control rack were confirmed to travel throughout their full ranges.

Electrical system

The electrical standards throughout the vessel were poor. There was considerable evidence of bare wiring, open junction boxes, overuse of temporary connection blocks and twisting together of cables to form connections.

Figure 25



Anti-fouling paint detachment

Figure 26



"Vee" split in port side of hull

Figure 27



Cracks in port side of hull

Figure 28



Missing sacrificial anode

Figure 29



Intact rudder sacrificial anode

Figure 30



Area of flexing upper deck steelwork

Figure 31



Perforations to upper deck above steering compartment

Figure 32



"A" frame support pad piece split

Figure 33



Area of deep pitting in engine room bilge shell plating

Figure 34



Engine room submersible pump

Figure 35



Engine room high level bilge alarm arrangement

Figure 36



Engine room bilge pump control panel

Figure 37



Steering gear compartment submersible bilge pump, lashed to a wooden spar by electrical supply cables

Figure 38



Rudder stock leakage