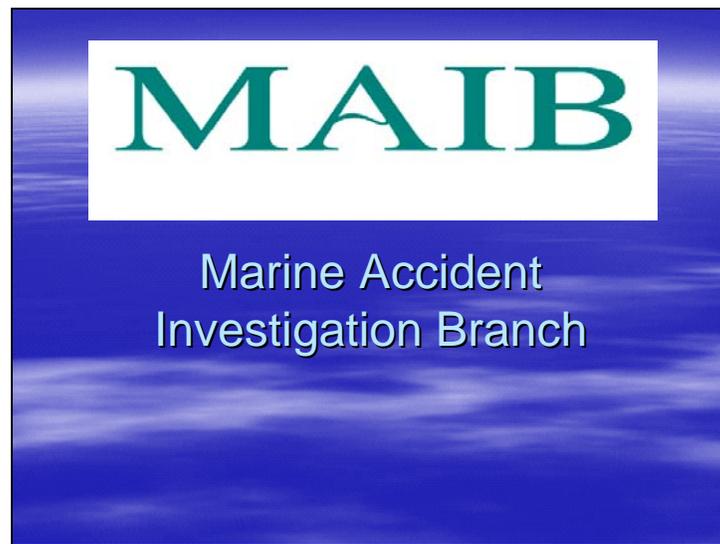


Important

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This case will highlight where a misapplication of the ColRegs led to a collision and the sinking of a fishing vessel.

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Collision between a Supply Vessel and a Fishing Vessel whilst "Pair Trawling" in the N. Sea.

Slide



It is early November 2005.

You are the junior Chief Officer of a Supply vessel on regular passage between the UK and Norway via three rigs in the Norwegian and UK sectors of the North Sea

The run is familiar to you, and although the ship is brand new, and you have only been on board a month, the routine is the same as on the old vessel.

You come on watch at 0445.

Slide

Fishing vessels

- Fishing vessel pair trawling with its “partner” vessel in N. Sea

A photograph of a fishing vessel docked in a harbor. The vessel is a blue and white trawler with a white cabin and a blue hull. It is positioned in front of a row of multi-story brick buildings. The water is dark and reflects the sky. The background of the slide is a blue gradient with a light blue horizon line.

Fishing vessels:

Meanwhile, two fishing vessels are pair trawling in the North Sea. The vessel on the port side of the trawl is to the east of the other vessel.

The vessels are using the easterly boat's fishing rig (tow) so all the crew are in bed except one on watch.

The skipper is on watch on the other fishing boat while the crew sort the catch from the last haul.

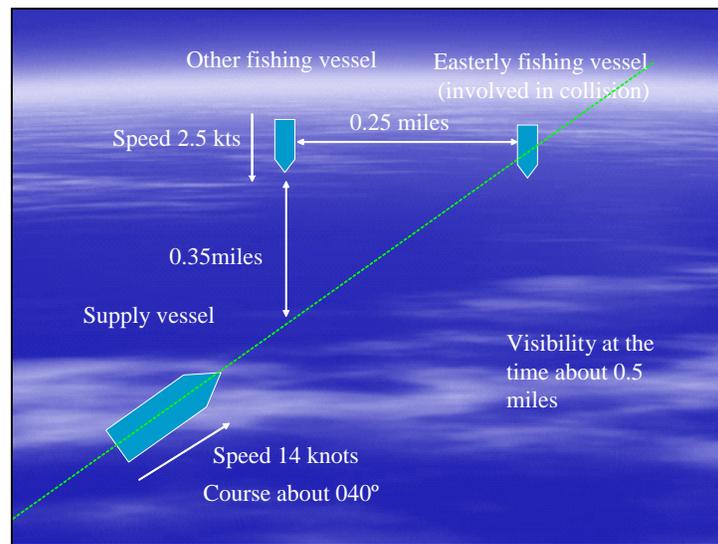
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There is continuous fog and visibility has reduced to ½ mile. Your Master on the Supply vessel left you no instructions to tell him if the visibility reduces, so you don't alert him.

The wind and sea state are calm.

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Although your supply vessel is fitted with a sound reception device, fitted to the monkey island, it is not used since any external sounds tend to be masked by the wind and noise from the funnel fans.

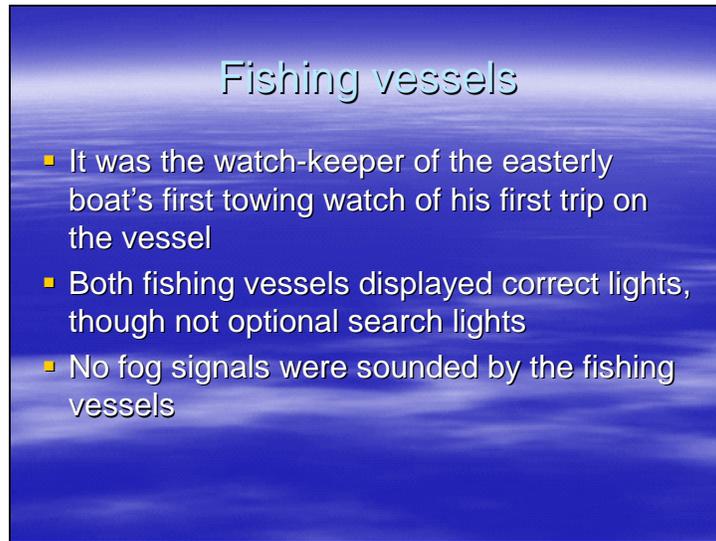
It is still dark and you are not sounding a fog signal.

The AB/cadet on board has been told previously by the Master to be on look-out, with you on watch, but he is cleaning the accommodation. You speak to him on the phone, but don't ask him to carry out lookout duties. You remain alone on the bridge.

During your watch, you busy yourself on the bridge with other tasks, distracting you from your primary responsibility of maintaining a lookout.

Two targets appear on the radar at 0509. These targets are not plotted using the Automatic Radar Plotting Aid (ARPA), nor is any other radar function used to assess risk of collision. Do you know they are there?.

Slide



Fishing vessels

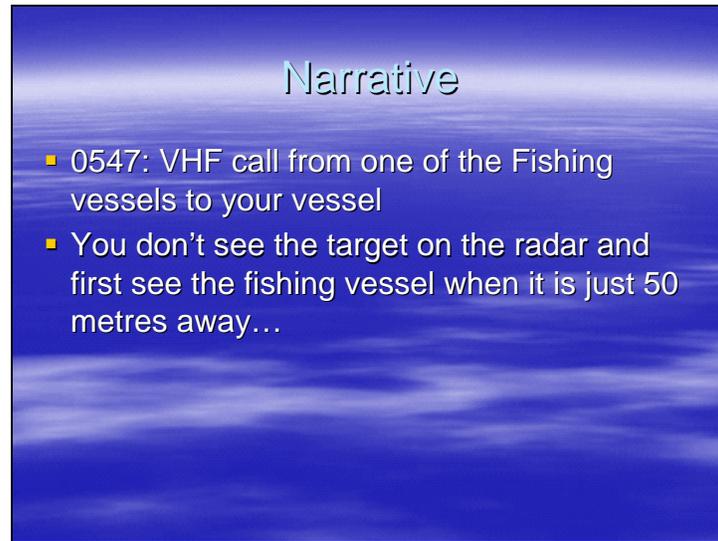
- It was the watch-keeper of the easterly boat's first towing watch of his first trip on the vessel
- Both fishing vessels displayed correct lights, though not optional search lights
- No fog signals were sounded by the fishing vessels

Meanwhile on the fishing vessels:

This is the watch-keeper of the easterly boat's first towing watch and first trip on the vessel.

Both fishing vessels are displaying the lights for vessels of their size engaged in trawling. However, neither is using the optional searchlights directed at the other vessel of the pair, as allowed under Annex II of the ColRegs, for fishing vessels operating in close proximity. Neither are they sounding fog signals.

Slide



Narrative

- 0547: VHF call from one of the Fishing vessels to your vessel
- You don't see the target on the radar and first see the fishing vessel when it is just 50 metres away...

At 0547, the VDR on your Supply vessel records a VHF call from one of the fishing vessels, in which the skipper asks, "Supply boat, have you seen us?" You make no reply – did you hear the call?

Recognising the danger of collision, the watchkeeper on the easterly fishing vessel starts to alter course when your vessel is about 0.2 miles away. However, this is too late to avoid collision.

You haven't seen the target on your radar and first see one of the fishing vessels when it is just 50 metres away, giving you about 7 seconds to act!

You attempt to alter course to starboard by adjusting the azimuth pods. However, because they're steering in autopilot, this action is limited until an adjustment of over 60° is attempted. As this initial adjustment doesn't work, you try to stop the vessel by turning the azimuth thrusters through 90° so they are opposing each other. However, it takes about 150 m to stop from full speed, which is too far to avoid collision...

Slide



30 seconds after the VHF call, you strike the easterly fishing vessel on the starboard side under her 'A' frame.

The impact rolls the fishing vessel heavily to port, throwing those sleeping on the starboard side of the cabin out of bed.

The crew of the fishing vessel check the engine room and fish hold and discover water entering both spaces from splits in the hull at the forward end of the engine room and after end of the fish hold. The impact has also split the starboard fuel tank.

All the crew have to evacuate to the other fishing vessel, wearing survival suits.

The video and photographs show what happened next

Note:

Click on image to watch mobile phone video.

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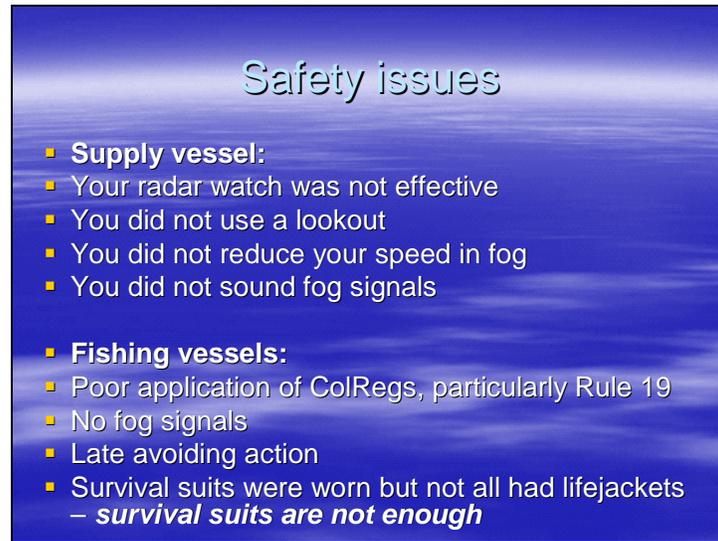


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Safety issues

- What safety issues can you identify from this case?

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Safety issues

- **Supply vessel:**
 - Your radar watch was not effective
 - You did not use a lookout
 - You did not reduce your speed in fog
 - You did not sound fog signals

- **Fishing vessels:**
 - Poor application of ColRegs, particularly Rule 19
 - No fog signals
 - Late avoiding action
 - Survival suits were worn but not all had lifejackets
 - *survival suits are not enough*

MAIB investigations have revealed that **in many collisions and groundings at night, there is no lookout on the bridge.**

There is an absolute need to change the culture of seafarers to understand and accept the benefits of bridge lookouts and the importance they play in the safe navigation of a vessel – **integrate them into the bridge team.**

Safety issues:

Supply vessel:

Your radar watch was not effective. You did not use ARPA and were distracted by completing other activities on the bridge during your watch.

You did not use a lookout

You did not reduce your speed in fog, or alert the Master to the reduction in visibility

No fog signals sounded on your vessel.

Your eye-sight was subsequently found to be deficient, which may explain why you did not see the targets on your radar clearly. Why did you not notice this before?

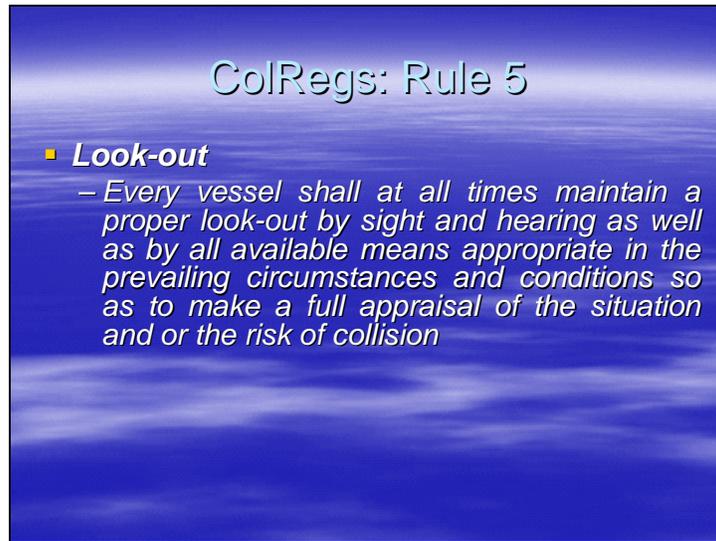
Fishing vessels:

Fisherman's knowledge of the ColRegs, particularly Rule 19, was not good. He assumed they still had right of way and left any action too late.

No fog signals sounded on the fishing vessels.

Fishermen were wearing survival suits but not all had lifejackets – **survival suits are not enough.**

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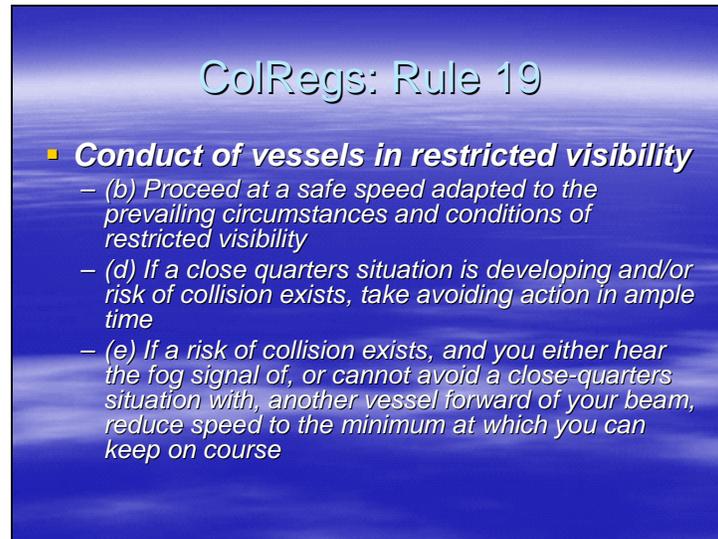


Relevant ColRegs:

Section 1 – Conduct of vessels in any condition of visibility

Rule 5: Look-out

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and or the risk of collision.



ColRegs: Rule 19

- **Conduct of vessels in restricted visibility**
 - (b) *Proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility*
 - (d) *If a close quarters situation is developing and/or risk of collision exists, take avoiding action in ample time*
 - (e) *If a risk of collision exists, and you either hear the fog signal of, or cannot avoid a close-quarters situation with, another vessel forward of your beam, reduce speed to the minimum at which you can keep on course*

Relevant ColRegs:

Section 3 – Conduct of vessels in restricted visibility

Rule 19: Conduct of vessels in restricted visibility

(a) This Rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.

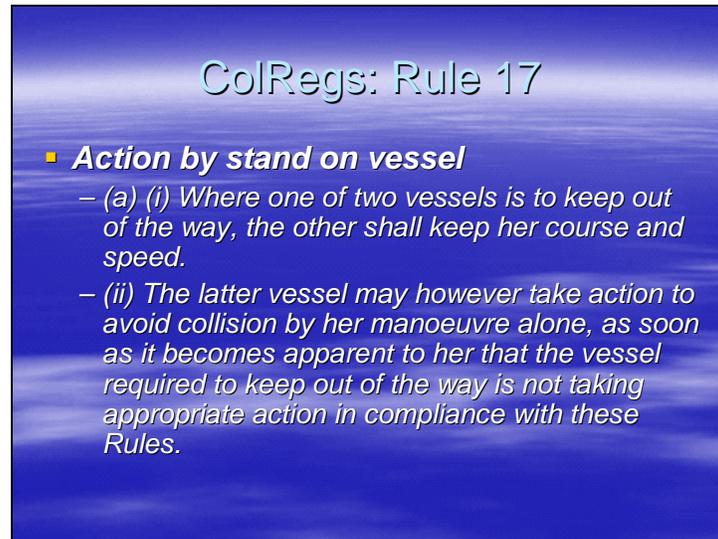
(b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.

(c) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with the Rules of Section I of this Part.

(d) A vessel which detects by radar alone the presence of another vessel shall determine if a close quarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:

- (i) an alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;
- (ii) an alteration of course towards a vessel abeam or abaft the beam.

(e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary take all her way off and in any event navigate with extreme caution until danger of collision is over.



Relevant ColRegs:

Section 2 – Conduct of vessels in the sight of one another

Rule 17: Action by stand-on vessel.

This applied in the final moments before collision, where the Fishing vessel involved in collision became the stand on vessel.

(a) (i) Where one of two vessels is to keep out of the way, the other shall keep her course and speed.

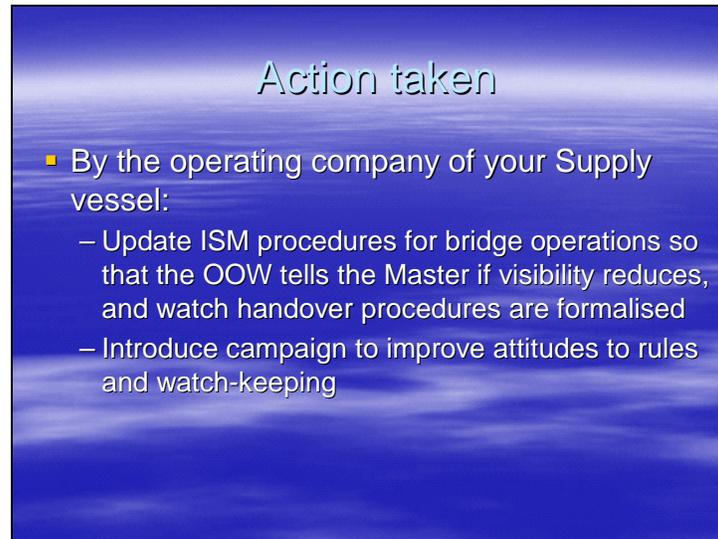
(ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.

(b) When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.

(c) A power-driven vessel which takes action in a crossing situation in accordance with sub-paragraph (a) (ii) of this rule to avoid collision with another power-driven vessel shall, if the circumstances at the case admit, not alter course to port for a vessel on her own port side.

(d) This rule does not relieve the give-way vessel of her obligation to keep out of the way.

Slide



Action taken

- By the operating company of your Supply vessel:
 - Update ISM procedures for bridge operations so that the OOW tells the Master if visibility reduces, and watch handover procedures are formalised
 - Introduce campaign to improve attitudes to rules and watch-keeping

Although the fishing vessel should have taken avoiding action in accordance with Rules 17a(ii) or 17b of the Collision Regulations, the fundamental cause of this accident resulted from the poor lookout of your Supply vessel. As a result, the operating company of this vessel carried out the following actions following the incident:

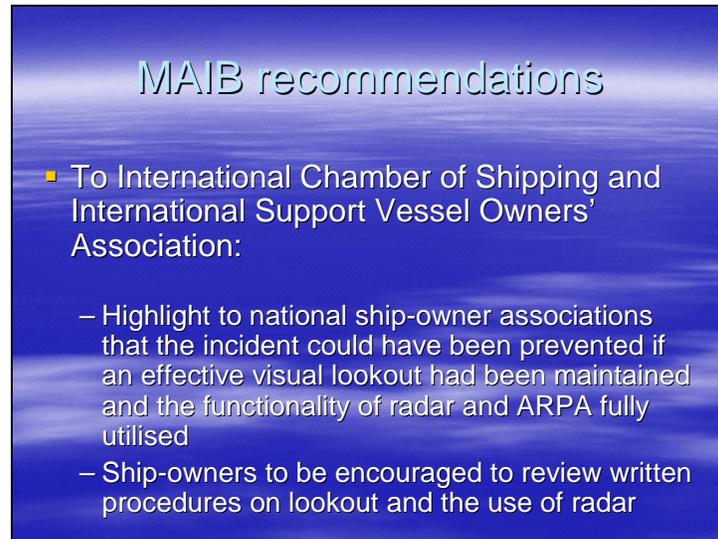
The ISM procedure for bridge operations have been updated so the OOW tells the Master if visibility reduces.

The routine for handing over the watch has been formalised.

Requirements for active use of radar have been implemented.

A campaign was introduced to improve attitudes to rules and watch-keeping.

A dedicated book was issued for documenting the Master's night orders.

A blue rectangular slide with a light blue gradient background. The title 'MAIB recommendations' is centered at the top in a light blue, sans-serif font. Below the title, there is a bulleted list of recommendations. The first bullet point is a square symbol followed by the text 'To International Chamber of Shipping and International Support Vessel Owners' Association:'. The second and third bullet points are hyphens followed by text describing the recommendations to national ship-owner associations and to ship-owners regarding radar and ARPA usage.

MAIB recommendations

- To International Chamber of Shipping and International Support Vessel Owners' Association:
 - Highlight to national ship-owner associations that the incident could have been prevented if an effective visual lookout had been maintained and the functionality of radar and ARPA fully utilised
 - Ship-owners to be encouraged to review written procedures on lookout and the use of radar

Recommendations made in the MAIB report into this accident included:

To the International Chamber of Shipping and the International Support Vessel Owners' Association:

Highlight to national ship-owner associations that the incident could have been prevented if an effective visual lookout had been maintained and the functionality of radar and ARPA fully utilised.

Ship-owners to be encouraged to review written procedures on lookout and the use of radar and be reminded that shipboard auditing should provide sufficient evidence to verify that ship's staff are in compliance with its instructions.

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