

IFISH 6

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# Hook Marine Troon Scotland

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Director

# Why do fishing vessels capsize?

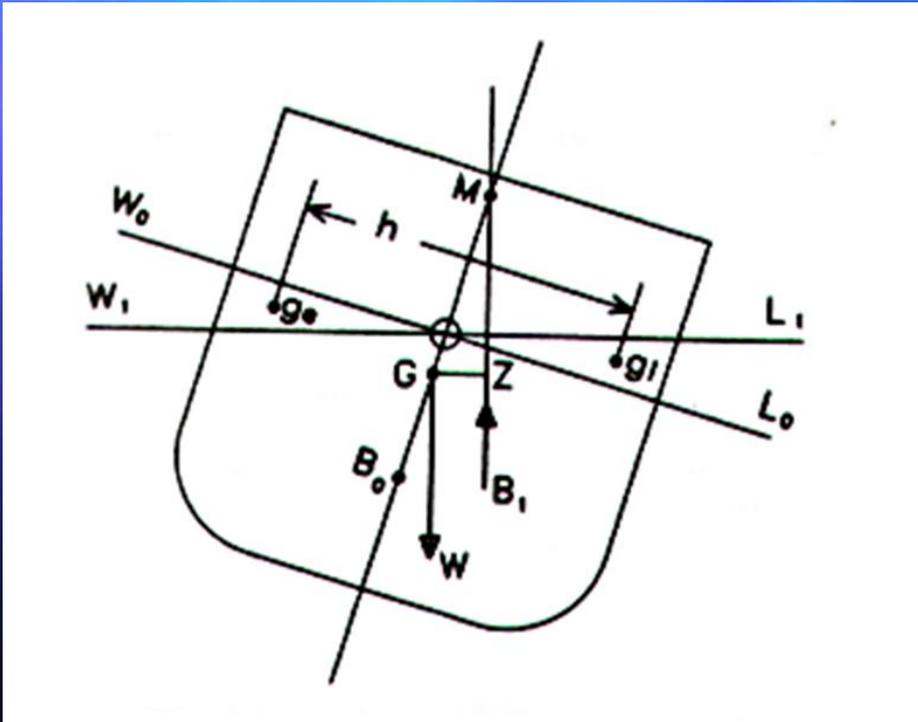
Or, why do some stay afloat?

# Stability

From 2020 to 2022, 50% of UK fishing vessel losses at sea were due to capsizing

Marine Accident Investigation Branch

# Stability



$$GM = k^2 \times B^2 / T^2$$

(Or relax in your  
rocking chair)

## Stability in Port

The Roll Test gives a value for GM

IMO values for GM and k

Good only for as built or modified condition

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## Stability Change at Sea

SeaWise® monitors stability changes at sea due to

Fuel burn

Overloading

Water ingress

Cargo shift

Free surface effect

Spray icing

Vessel modification\*

Weight creep\*

\*Also from roll test in port

## Flooding - Capsize



FV Solway  
Harvester

Irish Sea  
11/01/2000

7 lives lost

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## Overloading - Capsize



FV Nicola Faith

Irish Sea

27/01/2021

3 lives lost

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## Modification - Capsize



[www.flickr.com/zak355](http://www.flickr.com/zak355)

FV Nancy Glen

Loch Fyne

18/01/2018

2 lives lost

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## Icing - Capsize

FV Destination

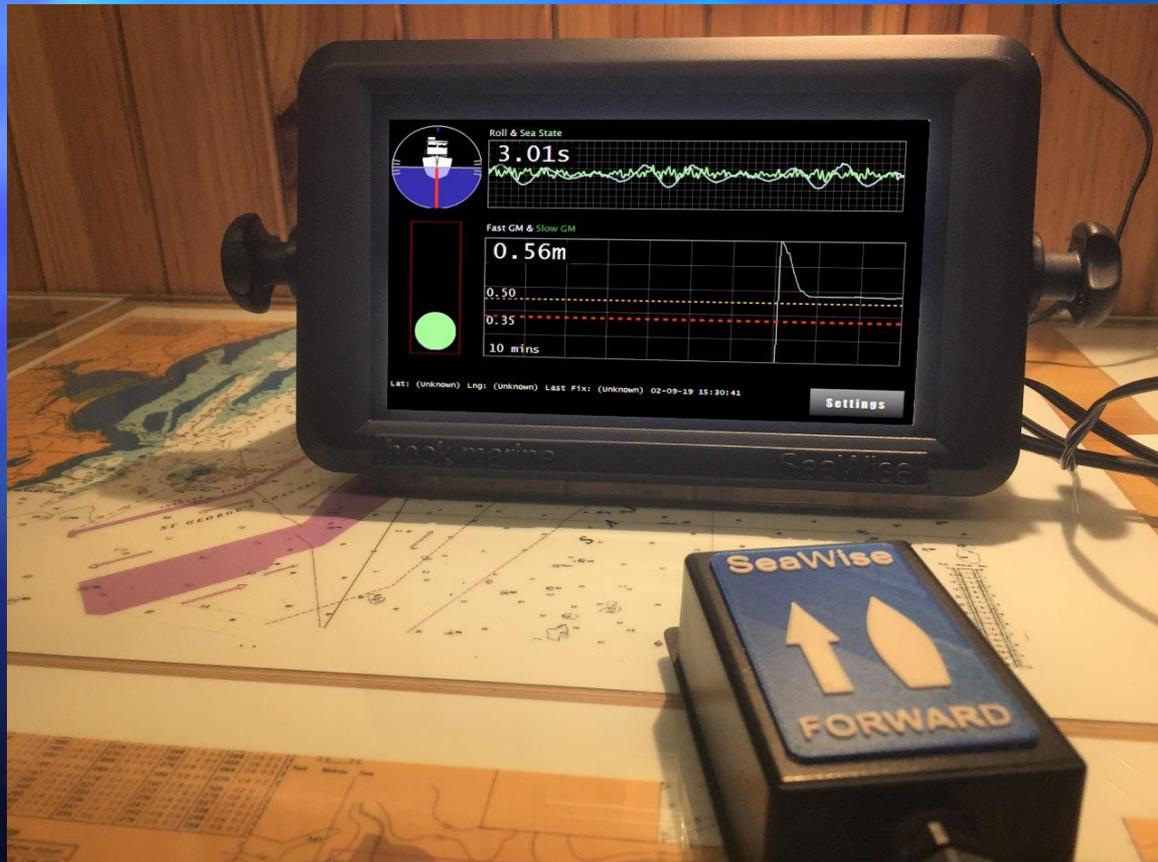
Bering Sea

11/02/2017

6 lives lost



# SeaWise® Stability Monitor



New or Retrofit

Visual &  
Audible alarms

30 minute  
installation

IMO factors  
used

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Where are we now?

**If we knew what we were doing,  
it wouldn't be called research**

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Those who wait .....

Gloucester, USA



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