

Country report on animal welfare during long distance transport by land and sea

# Egypt

Speaker(s) name

**Captain Ahmed Mubarak**

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Multi-regional Whole Journey Scenario workshop on long-distance transport by land and sea between Europe, the Middle East, and North Africa

8 - 10 November 2022, Cairo, Egypt

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World Organisation  
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## Introduction

- Ahmed Mubarak , Master of the MV Maysora

More than 10 years experience with a proven track record of working on livestock carrier and sailing in various oceans.

Experience in directing huge livestock carrier to different regions of the world.

Committed to ensuring the safety of crew and livestock while at sea as well as the safe delivery of livestock.

Driven and enthusiastic, with a passion for life at sea.

## Live Export: Designing Ships for Animals

MV MAYSORA considered from the largest livestock in the world.

This is one hundred million dollars ship.

A ship operates on international voyages, usually from Australia to the middle east and to turkey.



# The impact of ship design and operation on animal welfare

**Ship Design (M.V MAYSORA)** A vessel to be used for the carriage of livestock must be provided with durable fittings so manufactured, assembled or positioned as to protect the livestock from injury.

Pens or stalls should provide access to animals so they can be easily inspected.

Hospital pens to be designated on each deck.

- Position of Livestock Spaces for this vessel: the ship has 11 decks in total
- On Exposed Deck: Dk 7 to Dk 11
- In Enclosed paces: Dk 1 to Dk 6

The voyage from Australia to Mersin takes 17 days of travel including the Suez canal transit, Ship carries 80 crew including a vet and three professional cowboys to better handle livestock while sailing.

- 1.The ship can carry more than 3,000 tones of fodder.
- 2.The ship can store more than 5000 tones of fresh water due its huge tanks.

## **Fodder & Water arrangements**

Fodder in pelletized or other concentrated form supplied to a ship should be accompanied by a certificate from the pellet manufacturer stating the average temperature and humidity content of the pellets.

On the Maysora Animals usually gain weight, A big reason is the fodder system.

While the animal feed, Chief officer must ensure the fodder keeps coming from the holding tanks. All those thousands tones of fodder must be kept dry or it will spoil.

Safety precaution to be taken; the light inside the holding tank must be fireproof and to protected with CO2 system incase of emergency. If the fodder does start burning; it can be smothered by carbon dioxide gas with one push button from the bridge.

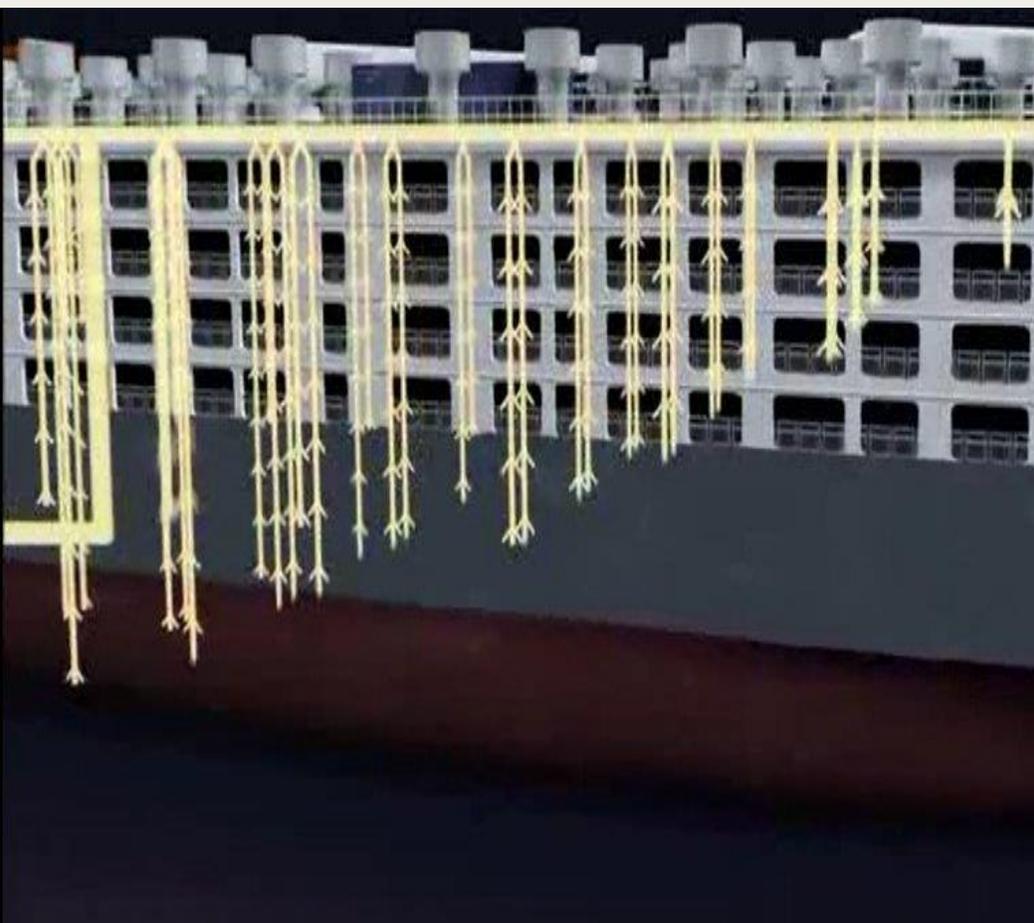
The food is so essential; As the Maysora has 3 holding tank for fodder with 2 pellet machines for each one

Even the Supply in one is ruined, The Second can keep the animals fed long enough to finish the journey.

## **Fodder & Water arrangements; automatic feeding system**

The feed falls into pellet machine use high power and run the fodder through pipes and deliver the fodder to 6 Silos on sundeck.

Then Gravity takes over and deliver the fodder through a serious of pipes to each trough in all decks from 1 to 11.





## Fodder & Water arrangements

good animal feed while cattle at sea



## Fodder & Water arrangements

### Water System

So those dry pellets require more fresh water than the Maysora can load or store.

That's why The Ship have 2 units of Reverse Osmosis;  
One RO Plant can produce 400m<sup>3</sup>/day.

That's more than half million liter a day.



For the issue of an ACCL the ability of a ship to provide an emergency water reserve from the ship's tanks will be assessed on the basis of a requirement of 36 liters per square meter of pen area per day for cattle and 6 liters per head per day for sheep.

# Ventilation System

*Fresh Air is even more important.*

*Poor ventilation increase levels of ammonia.*

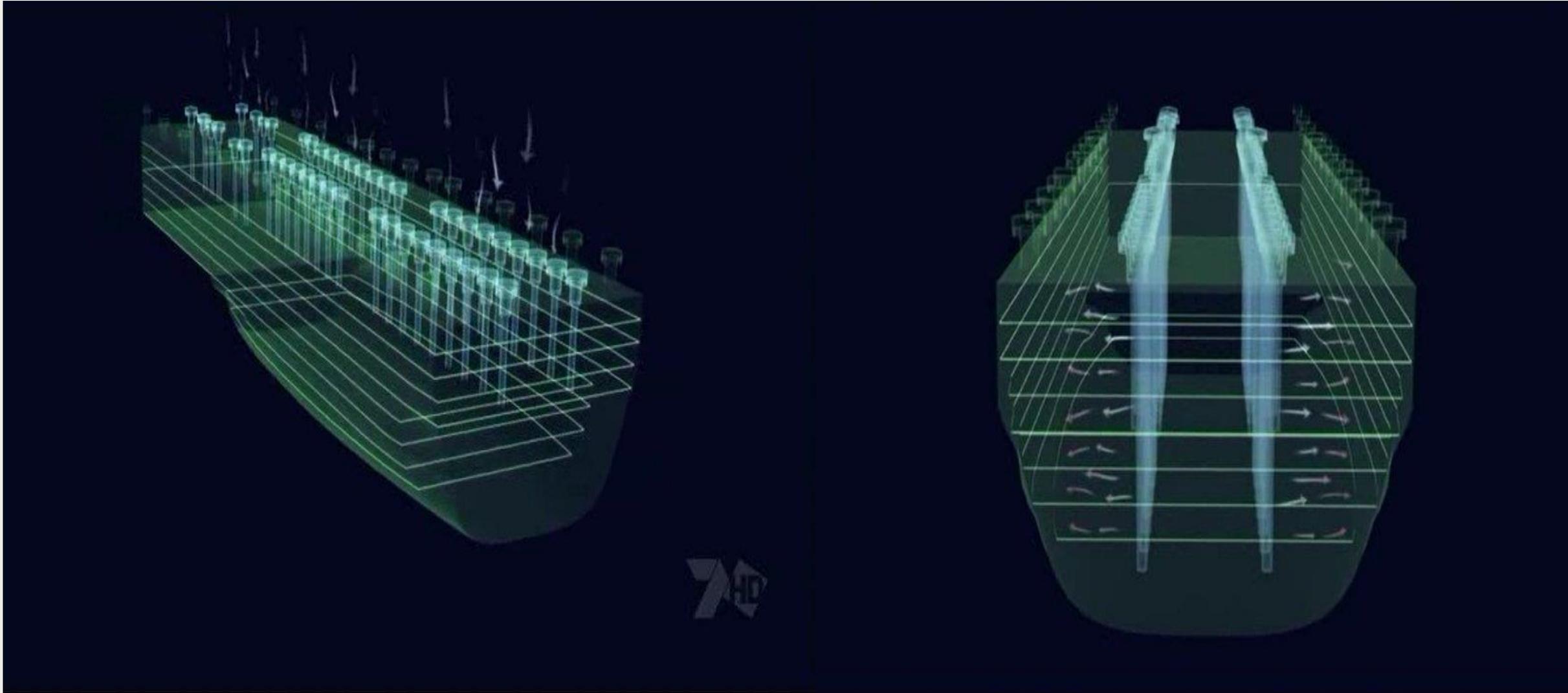
The cattle would suffocate if there is no sufficient source of air supply.  
62 high power fans drop fresh air from the top deck and push it below through huge duct.

On each deck deflectors divert the rushing air out through openings.

The other 22 fans suck the hot air out of the pens



## Diagram of Ventilation System On board



# Source of lighting

*Sufficient lighting is really important, and lux reading to be taken by third parties when required.*

*For example cattle prefer to move from dark to light areas, rather than from light to dark.*

# Animal Handling

When you considering your handling system you've got three elements in total.

- 1) The cattle themselves their behavior how they're going to behave within the system.
- 2) Your workforce and the people are handling the animals.
- 3) Hardware; so that's the fabric of handling system itself.

Hardware means the gates, the sides, the passage way and the races, the floor and the lightning.

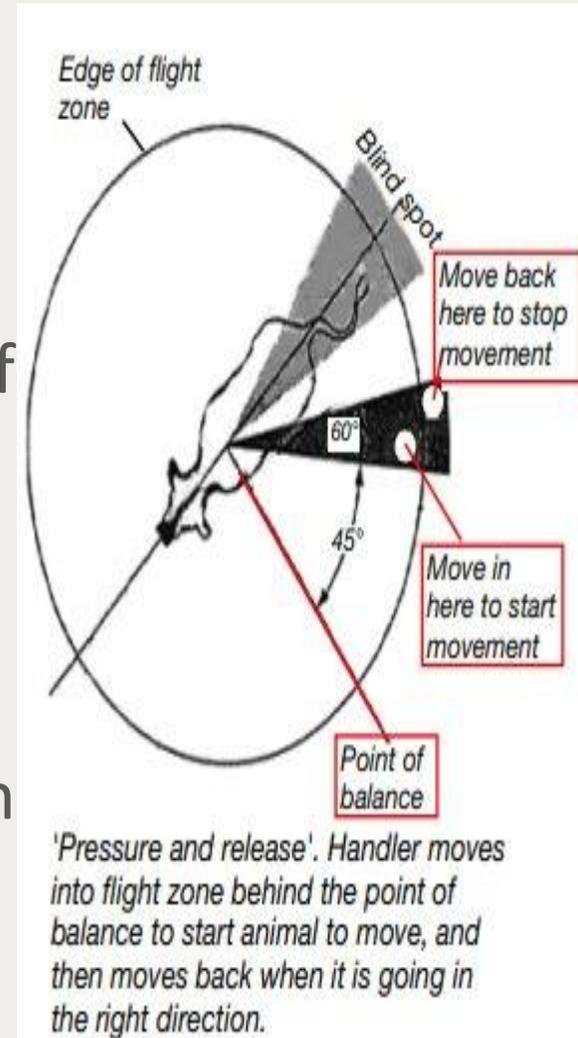
# Handling Facilities

Good design is looking at the handling system from the Animals perspective all the time.

So their point of view of the system you know does it give them somewhere to go and can come a clear way a head of them is the plenty of space.

Is it sending them in the right direction?

That's one of the key things so looking your handling system From animals point of view.



## Disposal of dead livestock

The master of a ship must ensure that the carcass of any dead livestock is disposed of in accordance with the requirements of Annex V of MARPOL 73/78. The master of a ship must ensure that no carcass of any dead livestock is disposed at sea within 100 nautical miles of nearest land.

## The Challenges that face the live animal export industry worldwide

1. Extreme Weather conditions

2. Heat stress and high humidity

3. Conditions cause livestock vessels run out of supplies

## **The Challenges that face the live animal export industry worldwide**

### **1. Extreme weather conditions**

Rough seas and bad sea conditions can threaten the safe operation of livestock at sea especially when its loaded.

Vessels transport through the ocean may find the threat of the hurricane or violent typhoon.

On Sep-1<sup>st</sup> 2020 Gulf Livestock ship carry 5800 cattle on board with 42 crew fall victim in the center of typhoon enroute to China from New Zealand.

It's hard to believe that the master missed typhoon on converging track

Or disregarded typhoon as a threat. May be the Master miscalculated typhoon trajectory or maybe he hoped the ship will overtake it.

Whatever were the the reasons, the ship sailed straight into the typhoon with total loss of crew life and animals which carry.

# The Challenges that face the live animal export industry worldwide

## 2. Heat stress and high humidity

We must take great care when we travel through areas where heat stress is high, for example, the Somali straits, strait of Hormuz, Persian gulf and the red sea especially in the summer.

**The humidity can be stifling and life threatening.**

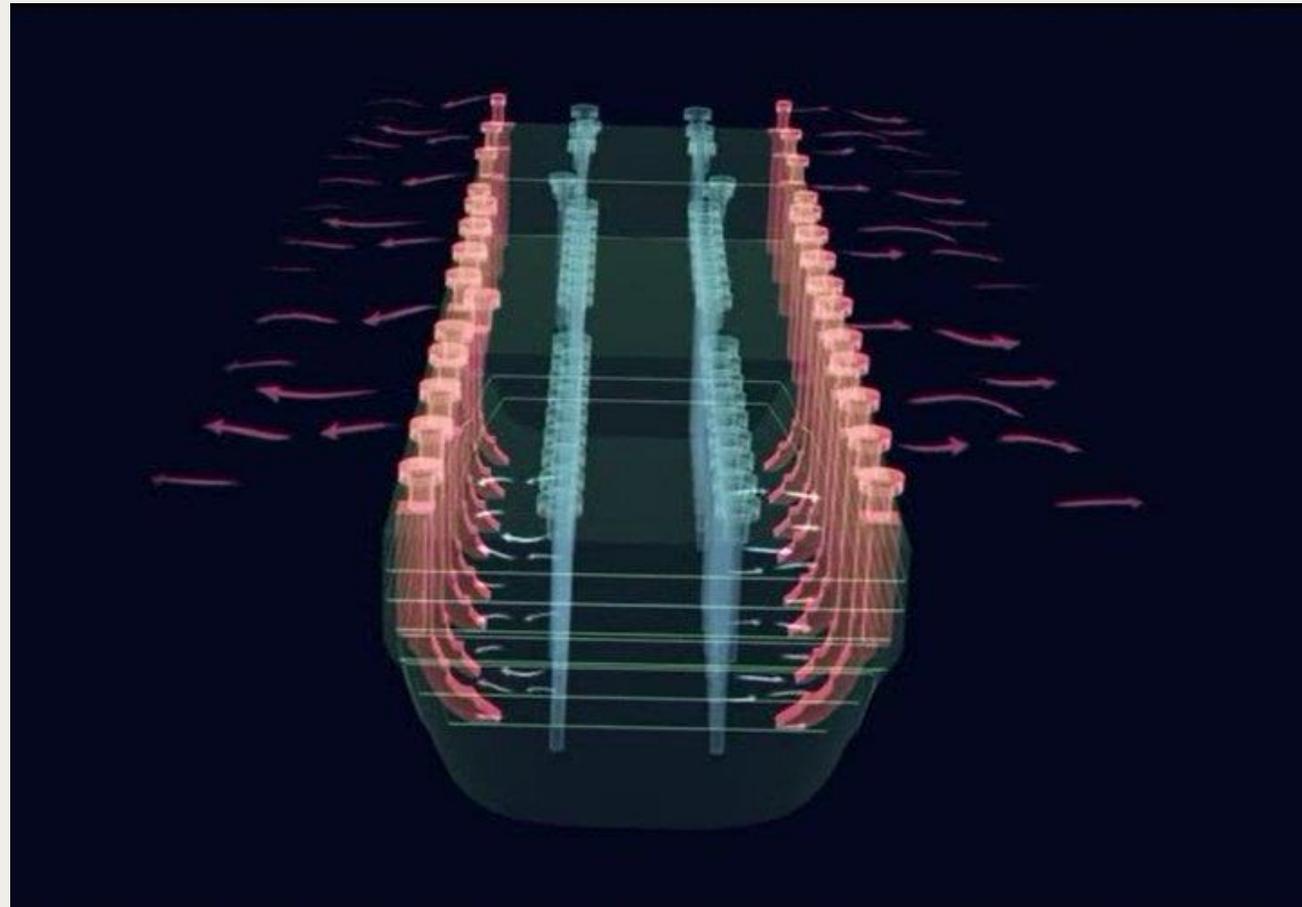
### If a ship will sail through these areas:

- 1) Decrease the loading density of the pen.
- 2) Use ships with adequate ventilation.
- 3) Zig-Zag the course so that the humid air is always dispersed.

Above all, plan the voyage and the adjust your ETA in these areas.



## Use of adequate ventilation; help to reduce heat stress



## **The Challenges that face the live animal export industry worldwide**

### **3. Conditions cause livestock vessels run out of supplies**

Getting stuck on board means there is a risk of starvation, dehydration, injuries.

On 23<sup>rd</sup> March 2021 Ever Given blocked the Suez Canal Transit.

Not only cause disturbance of global trade but also concerns for the animals welfare as some livestock vessels were jammed in the canal.

#### **Recommendations:**

- 1) Authority to send Veterinarians to examine cattle and sheep onboard .
- 2) The nearby ports of port said and Suez could be used to reload fodder.
- 3) Nearby Livestock ships which in ballast condition should take responsibility; they may approach the canal with fodder and water on board.

## Conclusions

Animal welfare is a journey not a destination.

Well managed animal welfare requires cooperation with ship captains and ship owners to provide enough feeding, water, fresh air, veterinary care, and training to stockmen for a better handling.

I want to clearly state that 98% of voyages from Australia are very successful and comply with standards and expectations.

About 2% don't and those 50% can be easily fixed by proper management, applying welfare principles.

# Thank you

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