

Biggest civilian hospital ship newbuilding moves closer to delivery

The \$200m Global Mercy will double the capacity for charity Mercy Ships to deliver medical aid to African countries



THE GLOBAL MERCY: Mercy Ships' newbuilding changes births after being painted at Tianjin Xingang Shipyard
Photo: Mercy Ships

Paul Berrill
London

The world's largest civilian hospital ship is nearing delivery from Tianjin Xingang Shipyard in northern China five years after its keel was laid.

The 37,000-gt newbuilding Global Mercy, costing \$200m to build and equip for deployment in 2021, will more than double the medical capacity of Mercy Ships to deliver free operations to people in African countries.

The vessel will join the charity's existing hospital ship — the Africa Mercy, a train ferry converted in 2007. Both ships will provide basic but life-changing surgical and dental procedures.

Stena RoRo has been responsible for the design, contracting and construction oversight of the vessel, which has two decks of operating rooms and hospital wards in place of car decks.

Per Westling, chief executive of Stena RoRo, said the Swedish company modified one of its concept designs from the RoPax-class of passenger and freight vessels for

international voyages into a pure passengershhip with hospital capabilities.

The 174-metre-long Global Mercy will have six operating rooms and accommodate up to 950 volunteers, including surgeons, maritime crew, cooks and teachers. It will be equipped with first-class training facilities, including equipment for virtual reality training and other care simulation.

Mercy Ships is planning to return the Africa Mercy to Dakar in Senegal in 2021, where it was when Covid-19 hit and had to leave a couple of months early. The ship has undergone repairs and maintenance in Tenerife since then.

"We will go back to Senegal because there are several hundred people there who we promised a chance at a new life and we can't just leave them hanging," Mercy Ships executive director Bryce Wagner told TradeWinds.

Mercy Ships has been providing medical care on vessels for more than 30 years, visiting nearly 600 ports in more than 70 countries



PER WESTLING: Chief executive of Stena RoRo

Photo: Bob Rust

and helping more than 2.5m people.

It stays up to 10 months in beneficiary countries, where it also helps build medical infrastructure by training local health professionals.

The two ships will later meet

up, and crew and medical staff will transfer to the Global Mercy to allow the older vessel to go for a more major refit.

"Our current scenario is that both ships will be fully functioning in 2022," Wagner said.

Hospital operations place very specific requirements on hull design and layout of a ship's interior, but despite being more than double the size of the Africa Mercy, the Global Mercy is only 4m wider and 24m longer — so it can still fit into cramped port berths.

However, the new ship is a lot taller with 12 decks, up from eight, Mercy Ships senior consultant of marine operations Jim Paterson said.

He worked on the older vessel's conversion and said he started to daydream about what they would do if they could build a new ship from scratch.

Problems identified on the Africa Mercy were mainly that the hospital was not big enough once local doctors were brought in for training, and storage and social space was limited. Con-

tainer loads of materials need to be sent each month from the US and Europe, and shortages are quickly felt if there is any hitch in the supply chain. Some cabins house six people.

Fortunately, Paterson and his colleagues' hopes for a bigger and better ship closely matched Stena's vessel concept, and plans could be hatched that led to the order for the Global Mercy.

Each year, 16.9m people around the world die from a lack of access to surgical care, 93% of whom stem from Africa. Over the Global Mercy's 50-year expected lifespan, it is estimated that more than 150,000 lives will be changed on board through surgery alone.

Westling, who visited the Africa Mercy when it was stationed in Madagascar in 2017, said: "It feels very satisfying to be able to contribute with our expertise in this project, which will make such a big and important difference to so many people in the poorest parts of the world."

"Mercy Ships is doing a fantastic job."

GLOBAL MERCY: A HAPPY BLEND OF HOSPITAL SHIP AND STENA FERRY



THE INSIDE VIEW: An operating room on the Global Mercy
Photo: Mercy Ships

Mercy Ships and Stena Ro Ro were able to blend hospital ship and ferry designs for the 37,000-gt Global Mercy newbuilding — but there are major differences.

Stena's ropax ferries are designed to sail a lot faster than the 12-knot service speed of the Global Mercy, which has a diesel-electric propulsion system as it spends a long time berthed.

Cabins on the hospital ship are bigger as more than half the volunteers stay on board for a year, and public spaces and meeting rooms serve different functions to those on a passengershhip.

It has taken a long time for the complex vessel to be built since its keel was laid in December 2015.

Jim Paterson, senior consultant of marine operations for Mercy Ships, said: "We knew there could

be delays because we were the first passengershhip to be built to international regulations in China."

The ship's heating and ventilation system has been especially adapted to minimise vibration and noise. Nothing like it before had been attempted on a ship built in China, while a sophisticated solid and liquid waste handling system was also new to the yard.

"The hospital scares everybody but, from a construction point of view, is not so difficult," Paterson said. "It is just a bunch of rooms. Obviously, the HVAC [heating and ventilation system] is different, and we have a piped oxygen delivery system."

Safe return to port rules requiring ships to be able to get underway at six knots in a Beaufort scale force 8 gale when

half the machinery has failed were new when the contract was signed in 2013. It meant six months were lost in the design phase ensuring it would not be a problem.

In any case, the Global Mercy has the advantage of being equipped with two ABB Azipod thrusters and its main engines.

The Global Mercy has to undergo sea trials before delivery to Mercy Ships, but Paterson said more than 90% of the vessel's interior is finished.

"Just like building a house, it is the last 5% to 10% that takes most of the effort finishing off," he said.

Hospital equipment will be put in close to the end to avoid damage, and CT scanners, X-ray machines and sterilising equipment will all be installed by the end of October.

Mercy Ships' Cargo Day aims to fund more life-changing surgery

New vessel doubles medical capacity but also operating costs, so hopes are that last year's \$1.3m will be matched — or bettered

Paul Berrill
London

Mercy Ship's newbuilding hospital vessel's total cost of almost \$200m has largely been raised from private donations, but the \$20m annual operating costs have still to be found.

The charity's Cargo Day, which has raised \$3m from the shipping industry since 2016, is a major boost for funding the 4,500-dwt Global Mercy.

It is hoped this year's effort on 4 November can go some way to matching last year's record, despite difficulties caused by the pandemic.

"For us to hit the same mark of \$1.3m last year will be a challenge. I am really hoping we bring in over \$1m because the needs are so huge in Africa. Now is not the time for us to slow down," Mercy Ships executive director Bryce Wagner said.

"Hospitals are saturated right now with Covid patients, but there is a huge backlog of children with cleft lips and blind people. The backlog of regular surgery needs is growing exponentially."

Wagner stressed: "We are so grateful about what has been done with Cargo Day — \$3m over four years has literally changed the lives of hundreds of thousands of people in Africa."

LONG-HAUL FOCUS

"We are in it for the long haul, so if this year is a challenge I would rather continue to build our relationships and say 'how do we create this flywheel that creates a regular revenue so we can do more five and 10 years from now'."

Most of the money raised has come from the tanker broking sector. Last year 27 charterers, 21 ship-owners, 28 shipbrokers, three port agents and four other organisations participated.

In total, 135 cargoes were allocated by brokers and charterers, 20 address commissions were contributed by charterers, and ship-owners stepped forward with 34 pledges of money.

Four companies who gave the most were awarded trophies that



HIGHEST DONATION:
Eastern Pacific Shipping team members with Mercy Ships 2019 Cargo Day trophy Photo: EPS

would normally have been handed over at a gala event in Geneva, but this year were presented virtually by video.

Lukoil-Litasco was awarded best charterer in last year, while ST Shipping won the honorary prize for giving all its address commission on Mercy Cargoes to match the 50% commissions given by brokers.

Eastern Pacific Shipping (EPS) made the highest donation last year, and in the lead up to Cargo Day promoted the event to its brokers and partners to maximise as many fixtures as possible, not only with EPS but with their counterparties as well.

Chetan Desai, corporate communication manager for EPS, said it will "not be hosting any in-person events this year, but that will not stop it or Mercy Ships' many other partners from promoting and contributing towards this

Bryce Wagner: If we can branch out and get double the number of people giving half as much because times are hard, then we are growing

great cause". Social channels will be important.

BRS set up Cargo Day but tanker vice president Tim Webb stressed that other brokers, including Clarksons, Braemar ACM and Fearnleys, have become strongly involved.

Webb said brokers brought in about 50% to 60% of the funds raised last year through giving 50% of their cargo commissions. Donations raised about 30% to 35% and address commissions about 10%.

It is not just about cargoes on the actual day, the effort is spread out over a month, as charterers

cannot give out all their fixtures in one go. The cut-off is at the end of November.

ADDRESS COMMISSIONS

Address commissions, now that they are generally 2.5% rather than 1.25%, could and should be more important.

However, Webb conceded that it is more difficult for big charterers and traders to get permission to donate because they need to ensure compliance issues and get corporate go-aheads when companies may already support other charities.

Webb added that he has sought

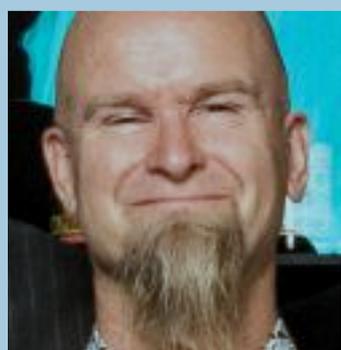
to involve dry cargo brokers who like the idea but have not been able to sell it to the overall industry.

"We need to find one guy in dry bulk who is charismatic, that's got a voice and can push some of the brokers and charterers to participate," he said.

The hope is that tanker owners who made strong profits early in the year will be willing to give something back.

But Wagner added: "If we can branch out and get double the number of people giving half as much because times are hard, then we are growing for the long term."

All funds raised by Cargo Day are used for the work in Africa — not paying for the ships. Mercy Ships, he said, is extremely cost efficient because the doctors, nurses and people on board all volunteer their services and even pay their own airfares and for room and board on the vessel.



BRYCE WAGNER
Photo: Mercy Ships

CREW NEEDED URGENTLY FOR AFRICA MISSION

Mercy Ships executive director Bryce Wagner says the hardest thing he has to do is turn down people the charity could help.

"We need more volunteers, more ships, more Cargo Day initiatives because I don't want to have to say 'no' to someone just because we don't have the capacity."

Doubling the Mercy Ships fleet

though creates a headache for him.

"If I had both ships running today, I only have 60% of the crew. I have 95% of the medical people that I need, but I only have 25% of the maritime and technical people I need.

"I'd love to find a way we can create partnerships that we can get more maritime people that

can come and help us. We need everyone: deck staff, engineers, a hairdresser, food services, a banker."

BIG-NAME HELP

Senior consultant marine operations for Mercy Ships Jim Paterson, who was chief engineer on the charity's first ship, said Berge Bulk sponsor a second officer and Stena

advertise internally for volunteers.

"We have a waiting list on the medical side, but it's an ongoing need for qualified deck and engine officers and ratings.

"Not everybody is going to stay 33 years, like I did. Some come for a couple of years, but a lot of younger officers come for a few months' experience. Reaching the crew is a challenge."