Magazine ➤ 2022-2023

BANGLADESH MARINE ACADEMY, BARISHAL (BMAB)

Nautical Nexus

Bangladesh Marine Academy, Barishal

Khalid Mahmud Chowdhury, MP
State Minister
Ministry of Shipping
Govt. of the People's Republic of Bangladesh
Bangladesh Secretariat, Dhaka-1000

Message

I am highly pleased to learn that the Bangladesh Marine Academy, Barishal, is set to release its annual magazine, Nautical Nexus, on the momentous of Graduation Parade of the 2nd batch cadets. On this auspicious occasion, I wish to convey my heartfelt congratulations to the graduating cadets, their esteemed parents, the Commandant, and all the distinguished members of the academy.

Our maritime industry positioned with access to the Bay of Bengal, plays a crucial role in global trade and commerce, contributing significantly to economic growth and job creation. It serves as a pivotal factor in Bangladesh's ambition to achieve developed nation status by 2041. Father of the nation Bangabandhu Sheikh Mujibur Rahman, the architect of our maritime nation, established a dedicated shipping ministry immediately after independence, retaining direct oversight of its operations. Additionally, he revitalized the Bangladesh Marine Academy with support from British technical cooperation to nurture skilled mariners. The present democratic government under the dynamic leadership of Honourable Prime Minister H.E. Deshratno Sheikh Hasina continues the legacy of the father of the nation by prioritizing and advancing the country's maritime sector.

This academy is grooming its cadets to excel in the ever-evolving maritime industry, emphasizing adaptability, technological prowess and a commitment to sustainability. Bangladesh, deeply rooted in its maritime identity, is on the verge of achieving international maritime eminence through the cultivation of top-tier marine officers.

"Nautical Nexus" showcases the contributions of devoted instructors and aspiring cadets, complemented by a captivating photo gallery showcasing life at the academy. I encourage everyone to delve into this magazine and discover the remarkable achievements and pioneering initiatives undertaken by this Marine Academy. My best wishes accmpany your exploration of this insightful publication.

May Allah bless us all.

Joy Bangla, Joy Bangabandhu
Long live Bangladesh.

Khalid Mahmud Chowdhury, MP

Md. Mostafa Kamal
Senior Secretary
Ministry of Shipping
Govt. of the People's Republic of Bangladesh
Bangladesh Secretariat, Dhaka-1000

Message

It brings me immense pleasure to learn that the Bangladesh Marine Academy, Barishal is preparing to unveil its very fast magazine, Nautical Nexus. In light of this auspicious event, I extend my heartfell congratulations to the graduating cadets, the Commandant, and all the esteemed members associated with this publication.

Father of the Nation Bangabandhu Sheikh Mujibur Rahman held a deep passion for steering the country towards becoming a maritime powerhouse. His enduring legacy is underscored by his mitiatives such as the founding of the Bangladesh Marin Academy, the significant task of clearing the Karnaphuli Channel from mines and wrecks, and his pivotal role in introduction of the 1974 `Territorial Waters and Maritime Zones Act. Under the visionary leadership of the Prime Minister Sheikh Hasina, the `Mujib Barsha' centenial celebration became a pivotal moment, marking the inauguration of the Marine Academy, Barishal along with three other marine academies with a vision to establish similar academies in every division and several NMIs, in a concerted effort to further strenghthen the country's maritime presence. These institutions are playing pivoting role to spread maritime education throughout the nation.

At this academy, cadets are groomed for the ever-evolving maritime sector, emphasizing adaptability, technological expertise, and sustainability, Bangladesh, entrenched in its maritime identity, is on the verge of achieving global maritime eminence by producing top-notch marine officers. This academy will not just contribute to increasing foreign currency earnings but also assist in the development of skilled professionals.

The `Nautical Nexus' magazine offers a glimpse into the dedicated efforts of instructors and enthusiastic cadets, enriched by a captivating photo gallery capturing life at the academy. I extent my invitation to all to explore this magazing, uncovering the extraordinary achievements and innovative initiatives led by the Marine Academy. Wishing you an enriching experience as you navigate through this enlightening publication.

(Md. Mostafa Kamal)
Senior Secretary

Captain S M Atiqur Rahman, (G), NUP, psc, BN
Commandant
Bangladesh Marine Academy, Barishal

Message

Welcome to the inaugural issue of our magazine "Nautical Nexus", I am pleased to have you join us in exploring the Marine Academy, Barishal, a significant milestone in our nation's maritime journey. This publication offers an insightful look into the academy, embodying the maritime ambitions and dreams of our nation.

Our academy was inaugurated on May 6, 2021, by Honourable Prime Minister Sheikh Hasina, commemorating the 'Mujib Barsha', the birth centenary of Bangabandhu Sheikh Mujibur Rahman, our revered Father of the Nation. This inauguration marks a crucial step towards fulfilling Bangladesh's maritime aspirations, aligning with our Vision 2041 for national prosperity.

In 2022, the academy welcomed 70 cadets, and our numbers have grown to 112, we are rapidly emerging as a premier institution for maritime education, offering comprehensive training for aspiring merchant marine officers. The academy prides itself on its highly qualified faculty, diverse range of maritime courses, and a curriculum that adheres to stringent international standards. Education at our marine academy extends beyond conventional teaching methods. It is an immersive experience designed to foster the essential skills, resilience, and mindset required to excel in the dynamic maritime industry.

In "Nautical Nexus," you will find a window into the vibrant life of our academy. I invite you to explore these pages and join us on this voyage of excellence. Together, we will continue to raise the sails of knowledge, navigate the tides of innovation, and chart a course towards a brighter, more sustainable maritime future. Fair winds and smooth seas.

Joy Bangla

(Capt S M Atiqur Rahman, BN)
Commandant

Nautical Nexus

A Publication of Bangladesh
Marine Academy, Barishal

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Editorial

Bangladesh Marine Academy, Barishal stands as a beacon of maritime excellence, a place where dreams set sail and knowledge navigates the course to success. With a rich heritage and a commitment to sea faring tradition, we are poised to redefine the standards of merchant mariners' training, On 06 May 2021 Honorable Prime Minister of the People's Republic of Bangladesh officially inaugurated this academy as a pledged project of Mujib Barsha. This esteemed institution stands as a center of excellence, offering comprehensive training and education to individuals aspiring to excel as marine professionals. Boasting a diverse array of courses, the academy covers a wide spectrum of subjects within the maritime domain. We eagerly anticipate the inaugural batch's graduation, with the firm belief that our cadets will emerge as accomplished professionals. Through rigorous academic programs and a focus on sustainability, we are molding a new generation of maritime leaders.

"The inaugural edition of 'Nautical Nexus' marks the academy's debut in magazine publication. Comprising contributions primarily from dedicated instructors and cadets, this magazine showcases the academy's talent pool. The instructors have eloquently demonstrated their professional prowess through insightful articles while also delving into the ethical aspects of marine life, expressing their perspectives through poems. The magazine encapsulates the vibrant and morally conscious cadets' reflections on their daily lives as trainees, their aspirations within the demanding maritime profession, and intimate glimpses into their personal experiences conveyed through poetry, short stories, and various other captivating content.

Additionally, the photo gallery section vividly captures snapshots of diverse activities since the magazine's inception, providing a visual narrative of the academy's journey towards fulfilling the dream of a Maritime Bangladesh of the father of the nation Bangabandhu Sheikh Mujibur Rahman.

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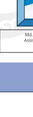

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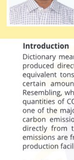

STEPS TO REDUCE CARBON FOOTPRINT IN PORT AND TERMINAL OPERATIONS - A CASE STUDY OF THE PORT OF CHATTOGRAM

Lt Cdr Robiul Islam (Retd)
Nautical Instructor

Introduction

Dictionary meaning of carbon footprint is the total amount of greenhouse gases produced directly or indirectly to support human activities, usually expressed in equivalent tons of carbon dioxide (CO2). When an engine burns fuel, creates a certain amount of CO2. It is an inseparable part of human daily activity. Resembling, when we buy our food and goods, the production also emitted some quantities of CO2. In the same manner, transportation and goods handling count one of the major sources of carbon footprint in the globe. There are two ways of carbon emission, direct carbon emissions that come from sources which are directly from the site that is producing a product. Whereas, indirect carbon emissions are from transportation of material, fuel or any energy used outside the production facility.

Industries, multimodal transports, and so shipping are one of the major sources of carbon emission around the world. For the sake of this paper, it will focus only on energy efficient port and terminal operations to reduce carbon footprint to an acceptable limit.

Port and terminal operation is the key part of the maritime supply chain and primarily aims to control the movement and storage of various types of cargo in and around a terminal or a Port. Since the early nineties, when industry became aware of the increasing relevance of sustainable development, many business enterprises in Asia have adopted environmental initiatives as an integral part of their business practice (Rao, 2014). The competitiveness of such business highly depends upon its external infrastructure, such as water, rail and road hinterland connections and logistical services provided in the port, including warehousing and customs processing. These infrastructures ultimately make up the logistics chain in which the ports operate. Furthermore, high quality transport link is the key to success of a modern port facilities. All such services are subject to emission of carbon dioxide and therefore need to control, mitigate and modernize such operation for sustainable living in the planet.

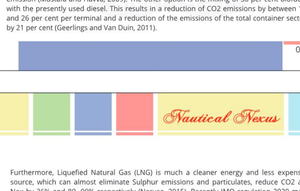

Diagram: Movement of cargo in port and terminal area

Initiatives in Reducing Carbon Emission in Port and Terminal operations

Port and terminal operations are one of the main sources of carbon footprint in the maritime diaspora. According to Entec (2005) as cited by Chen, Govindan and Golias (2013), about 1% of total shipping emissions are emitted at seaports. Despite the above fact, port and shipping are still in absence of effective control measures for emissions of greenhouse gas, and the importance of sustainable development is still being ignored by many port authorities (Wan et al., 2017). It is, therefore, green and effective operations in ports and terminals become now the predominant concern among seafaring nations to increase environmental sustainability and competitiveness over others in the region. Moreover, IMO target to reduce 50% of carbon emission by 2050 has triggered this effort further. Some of the initiatives towards environmentally sustainable port and terminal operations that have been adopted/practiced around the world are discussed in the following paragraphs.

On Shore Power Supply

Cold ironing or on shore power supply is one of the most effective tools for the reduction of carbon emission as accepted by the many ports around the globe. Ships will increasingly plug into the grid so as to reduce emissions of particulate matter that affect local air quality (Meyer et al., 2017). There are currently 120 berths fitted with shore power connections in the world: 60 in North America; 50 in Europe; and 10 in the Middle East/Asia-Pacific (Naruse, 2015).

Use of Alternate Fuel/Energy for Port and Terminal Equipment

Electrification of port machineries is the most cost effective and environmentally friendly solution in port and terminal operations. Besides, using bio-ethanol blended gasoline fuel for automobiles can significantly reduce petroleum use and exhaust greenhouse gas emission (Mustafa and Havva, 2009). The other option is the mixing of 30 per cent biofuels with the presently used diesel. This results in a reduction of CO2 emissions by between 13 and 26 per cent per terminal and a reduction of the emissions of the total container sector by 21 per cent (Geerlings and Van Duin, 2011).

Furthermore, Liquefied Natural Gas (LNG) is much a cleaner energy and less expensive source, which can almost eliminate Sulphur emissions and particulates, reduce CO2 and Nox by 26% and 80- 90% respectively (Naruse, 2015). Recently IMO regulation 2020 made the shipping industry encouraged to use LNG for propulsion and auxiliary engines. However, according to Bengtsson, Andersson, & Fridell, (2011) as cited by Winnes, Styhre and Fridell (2015), LNG as a marine fuel since a few percent of the fuel methane slip through the combustion process unburnt which is a potent GHG and 72 times more harmful than that of CO2 in a 20-year perspective.

Smart Port and Terminal Operations

Being smart is all about mindset. However, implementation of smart operation is the involvement of smart technologies. Smart operations of port and terminal uses all the latest innovation and technologies like internet of things. Mr Merk believes that, "A smart port policy, for example, could be to maximize local value, rather than maximizing cargo flows".

Smart Port and Terminal

operation improving terminal capacity, predictability and safety. In addition, it includes the increased focus on environmental sustainability. The most effective measure for CO2 reduction is the adaptation of the example of the Rotterdam Shortsea Terminal. This makes it possible to reduce the CO2 emissions by nearly 70 per cent (Geerlings and Van Duin, 2011). Furthermore, once it is established the cost of operation becomes lower than that of modest practices in the maritime commercial operations in the port and terminal areas.

Beside environmental benefit, a fully automated terminal can reduce the number of workers required by at least 45% (The future of automation at terminals and ports, 2018). Since then, with the inspiration of that success, few other major ports among the developed countries (e.g.port of Singapore) have changed into automated technology to gain competitive advantages.

Providing Incentives

To provide incentive to the environmentally friendly ships, World Ports Climate Initiative (WPCI) operates "Environmental Ship Index (ESI)" system. In this system, WPSI identify the ships that perform better than usual ships in reducing GHG emission and ports offer incentive to those environmentally friendly ships. Since inception (2010), up to July 1st, 2015, about 3,800 ships and 35 incentive providers including 30 ports (Amsterdam, Rotterdam, Hamburg, Antwerp, Le Havre, Los Angeles, Busan, Tokyo and others) participate in the system (Naruse, 2015). Some examples of incentives are shown in the table below:

Table: Examples of incentives in providing incentives

Incentive Provider	Minimum Requirements	Incentives
Port of Amsterdam	ESI score 20 or more	6% or more reduction on port dues
Port of Rotterdam	ESI score 30 or more	10% or more reduction on port dues
Port of Oslo	ESI score 20 or more	30% reduction on port dues (tankers only)
Port of Antwerp	ESI score 30 or more, or 25 best ships	10% or more reduction on port dues
Port of Hamburg	ESI score 20 or more	10% or more reduction on port dues
Los Angeles	ESI score 25 or more	Incentive grant ($250 - $1,250)/call based on ESI scores

Source: IAPH's Initiatives to reduce Emissions from Ports (2015)

*Note: ESI is composed of credits (0 - 100) for above-baseline environmental performance regarding NOx, Sox (indirect PM) and CO2

Reduction of Port Time

Contemporary practice of the reduction of speed on voyage under certain conditions is beneficial in terms of reducing emissions and minimizing cost of fuel. The real effectiveness of such effort depends highly on reducing of port time (Kontovas and Psaraftis, 2011). The nexus of this practice eventually reduces the carbon emission in the port areas.

The Case Study of Chattogram Port

Chattogram port is the largest seaport of Bangladesh. It is the busiest port in the Bay of Bengal region as well. The port is located near the estuary of river Karnaphuli, It is about 7.4 nautical miles from the port outer anchorage. It is the main seaport of Bangladesh and major trade gateway to the outside world. Chattogram port has very good hinterland connection with the rest part of the country through road, rail, water and air. According to the port overview 2017-18, it handles about 92% of the country's total export and import. CPA contributes to 33% of Bangladesh government revenue (Ferdous and Das, 2018).

The growth rate remained almost steady for the last few years. It means that the port is going to be victim of its own success soon. However, it is foreseeable that the effort towards Bay terminal, Patenga container terminal and undergoing Matarbari deep seaport project will certainly ease the pressure the Chattogram port before it reaches to the saturation point of present container handling capacity of about 3.0 million TEU.

At present there is no limitation of ship's age to visit Chattogram port. Therefore, ships of older age are directed to Chattogram port for cargo transportation, which are relatively more injurious to the local environment. Furthermore, average age of diesel operated straddle carrier (23 out of 45) is 12 years and average age of trucks operating in the terminal more than 15 years. However, according to Thanh Khanh Tran (2012), two biggest contributors to harbour energy consumption are cranes and reefers (Tao et al., 2014). Since, both are them consume power from the grid, the source of energy (fossil fuel/coal/renewable energy) used for generating electricity is also a bigconcern in producing carbon footprint in the environment.

Initiatives towards the Reduction of Carbon Footprint by CPA

In quest for achieving sustainable development goals by 2030, the government of Bangladesh is emphasizing sustainable operations of the port of Chattogram. Deputy Conservator (DC) of the port master mariner CaptFaridul Alam said that in a step towards green port management, CPA has already estimated the amount of greenhouse gas (including CO2)emitted by different port and terminal machineries.

Measurement of Carbon Emission

CPA has primarily measured the amount of greenhouse gas emission resulted from port activities with the help of Institute of Forestry and Environmental Sciences, University of Chittagong funded by United Nation Environment. This paper will, however, consider only CO2 emission for final calculation. The team has used baseline Air Emission Inventory (AEI) for emission measurement. It is a quantification of all air emission criteria and other pollutants (including toxic pollutant and greenhouse gases) which may be produced in one area in certain period of time and based on its sources (ICF and EPA, 2009).

Total GHG emissions (in tonnes) resulting from port and terminal operations in Chattogram port in 2016

Ser	Category	NOx	CO	PM10	PM2.5	SO2	Black Carbon	CO2
1	Vessels at berth	2733.28	217.27	333.54	283.00	4629.00	79.24	257143.10
2	Harbor Craft	1156.36	307.332	32.73	31.746	141.826	8.888	75277.12
3	Cargo handling equipment	210.076	47.907	9.390	9.263	12.371	2.594	40904.299
4	Trucks							17520.00
Total		4099.716	572.509	375.66	324.009	4783.197	90.722	390844.5

Initiatives towards the Use of Renewable Energy
Terminal manager Mr Qudrat said that, with the inspiration of ports of EU countries, Chattogram port authority is actively considering the introduction of solar energy inside the terminal facilities. In doing such, two of the warehouses are going to be built with self-sustained solar powered facilities. This is going to be a break throw implementation towards the initiative of green port development of CPA. The terminal manager thinks that, this project will be price worthy since significant volume of electric power will be saved and can be used for other necessities.

Gradual Transformation of Port Equipment
Electrification in the terminal handling equipment has clear advantage over fuel depended equipment. The first thing is that they do not use complex diesel engines. They are environmentally friendly and need relatively lower maintenance. Furthermore, for the same weight of diesel fuel, stores fifty times the energy of a modern battery (Shirres, 2017).

In connection to the above efficiency, all the possible port equipment like Quay Gantry Crane (QGC), Straddle Carrier (SC) are being replaced from diesel powered to electric power. The terminal manager Mr Qudrat mentioned that almost half of such machineries are electrically powered and operating in the terminal. He further added that all the new purchases are taking place keeping the emission efficiency in perspective.

Introduction of Cold Ironing Technology
The terminal manager informed that, CPA is not also far behind to adopt cold ironing for ships calling at Chattogram port. As an endeavor towards it, a pilot project is underway to facilitate in shore power facilities in two of their berths. He further mentioned that the vessels calling Chattogram port are mostly more than twenty years old. Therefore, majority of the vessels are unable to receive the shore side supply because of the limitation of on-board facilities. He urged the requirement of mandatory regulation from the major maritime stakeholders on such facilities for the sake of common benefit.

Establishment of New Power Plant
At present, the port of Chattogram is maintaining a 05-Megawatt self-sustaining independent power generation system to cover emergency requirement in case of power failure at the national grid line. According to Deputy Chief Engineer CPA, Mr Saiful (consulted on 11 May 2019), despite the commitment from the government of Bangladesh, to provide uninterrupted power supply to the port, CPA is planning to increase own power generation capacity as high as 50 Megawatt. However, the use of LNG fuel instead of fossil fuel is not considered during the panning phase. It is foreseeable that, once the new power generation will be in service, all the berths can be provided with sufficient in-shore power supply required for the ships at berths.

Address to Environmental Sustainability in New Developments
Development of port facilities is a continuous process of CPA to meet increasing demand and to reduce congestion of the port. Number of revolutionary approaches are underway to fulfill the future need of Bangladesh in general. Amongst them Matarbari deep-sea port, Bay Terminal, and PatengaContainer Terminal are the biggest initiative to date. Member (Harbor and Marine) of CPAmentioned that all the new builds will be developed keeping focus on environmental sustainability. Interestingly, CPA is analyzing the feasibility of converge belt to transfer containers from port to Patenga container terminal as terminal manager mentioned.

Conclusion
The trade activities of the country through the port of Chattogram is growing more than 9% (therefore, increase of 35176 tonnes of CO2 emission annually) per annum for the last few years. It will continue to rise further in the predictable future. Furthermore, considering the geostrategic importance of the country, the port of Chattogram is highly promising for the years to come.

On the other hand, persuasion towards achieving sustainable development goal by 2030, the government of Bangladesh has put special emphasis on environmentally sustainable operations of the port. The Chairman of CPA is also driving his administration in the same direction as well. In addition, the international community is continually vocal on green operation of the port. Therefore, achieving the status of green port management will result winning the competitive advantage over the other ports in the region.

As stated by the terminal manager, modern technologies are not only environmentally friendly, but also efficient and cost effective. Therefore, future up gradation/replacement of the existing machineries means, the introduction of environmentally friendly port equipment in the inventory. Nevertheless, considering the gradual swelling port activities due to ever-increasing demand, it will be extreme challenge to achieve the goal within the period of 2030. However, active participation by all the stakeholders along with subsequent efforts justify the green operation of the port is a feasible option for CPA.

Address to the environmental sustainability issues is now of the major consideration of the port of Chattogram. The port is driving towards environmentally sustainable port operation step by step. The measurement of GHG emission is the breakthrough initiative amongst all. Furthermore, initiative in using renewable energy and gradual transformation of cargo handling equipment is the most advanced step that the port has undertaken. Introduction of cold ironing technology and expansion of port and terminal areas with more efficient environmentally friendly machineries are also underway.

Maritime ports and terminals, remaining at the heart of maritime supply chain, has the responsibility to control, mitigate and remove all possible harmful, toxic and noxious substances arising from their operations. The lethal consequence of carbon dioxide for the environment, and the challenges for the developing countries to minimize such deleterious effects are more than that of the advanced nations.However, acceptable compliance of IMO regulations along with gradual implementation of newer technologies in the port operation will make the effort easier. End of the day we all demand a smoother, greener and sustainable blue planet in our foreseeable future.

THE CULTURAL SIGNIFICANCE OF SEAFARING

Capt. Abdullah Al Mamun
Nautical Instructor

Seafaring has been an integral part of human civilization since ancient times. It has played a crucial role in the development of trade, exploration, and cultural exchange. From the voyages of the Polynesians and Vikings to the Age of Discovery and beyond, seafarers have pushed the boundaries of human knowledge and imagination. But seafaring is not just a practical or economic activity - it is also a deeply symbolic and cultural one. In this article, we will explore the cultural significance of seafaring, looking at some of the ways in which sailors, ships, and the sea have been represented and mythologized in different cultures and periods.

One of the most enduring cultural motifs associated with seafaring is that of the sailor as a hero or adventurer. From Odysseus to Sinbad to Captain Ahab, seafarers have often been portrayed as brave, resourceful, and tenacious individuals who face great dangers and overcome seemingly insurmountable obstacles. This hero archetype is often associated with qualities such as courage, independence, and a willingness to take risks. The sailor-hero is typically depicted as a rugged individualist who is able to survive in harsh and unpredictable environments, relying on his wits and skills to navigate the treacherous waters.

At the same time, seafarers have also been depicted as vulnerable and at the mercy of the elements. The sea has been portrayed as a force of nature that is both awe-inspiring and terrifying, capable of giving life or taking it away in an instant. Sailors have often been portrayed as humble and mortal beings who must rely on their faith, their companions, and their ingenuity to survive the perils of the deep. This vulnerability is often contrasted with the image of the sailor-hero, creating a tension between the individual and the community, the self and the other.

Another aspect of seafaring that has been culturally significant is the ship itself. Ships have been depicted as both practical and symbolic objects, representing both the means of transportation and the vessel of the soul. In many cultures, the ship has been associated with journeys of initiation or transformation, such as the Greek myth of Jason and the Argonauts, who sailed on the ship Argo in search of the Golden Fleece. The ship is often seen as a metaphor for the human body, with its sails representing the lungs, the keel representing the spine, and the mast representing the spine. The ship can also be seen as a microcosm of society, with its crew representing a diverse range of personalities and backgrounds, working together towards a common goal.

In addition to the hero, the sea, and the ship, there are many other cultural motifs associated with seafaring. One of these is the idea of the sailor as a trickster or shape-shifter. In some cultures, sailors are seen as cunning and adaptable individuals who are able to navigate different social and cultural contexts. In other cultures, sailors are seen as liminal beings who are able to cross boundaries and challenge social norms. The figure of the pirate, for example, has long been associated with the idea of the trickster, as a subversive and anarchic figure who disrupts established hierarchies and challenges authority.

Another motif associated with seafaring is that of the sea as a site of encounter and exchange. Throughout history, seafarers have encountered different cultures, languages, and religions, and have often been involved in the exchange of goods, ideas, and technologies. This cultural exchange has had a profound impact on the development of human civilization, as it has led to the spread of knowledge, innovation, and creativity. In some cases, the encounter with the other has also led to conflict and domination, as seafarers from more powerful nations have sought to impose their will on less powerful ones. Nevertheless, the cultural significance of seafaring lies in its ability to create bridges between different worlds, and to foster understanding and dialogue between people of different backgrounds.

In conclusion, seafaring has been a cultural and symbolic activity as much as a practical one. Through the figure of the sailor-hero, the ship, the sea, and other motifs, seafaring has played a crucial role in shaping our imaginations and our sense of identity. Seafaring has also been a site of encounter and exchange, creating connections and dialogues between different cultures and civilizations. Today, as we face new challenges and opportunities in the maritime domain, it is important to remember the cultural significance of seafaring, and to embrace its potential for fostering understanding, creativity, and innovation.

THE HUMAN SIDE OF MARITIME DISASTERS

Capt. Sujoy Kumar Acharjee
Nautical Instructor

Maritime disasters are events that can have profound and lasting impacts on the individuals involved, as well as on their families, communities, and society as a whole. These disasters can occur for a variety of reasons, including human error, mechanical failure, natural disasters, and acts of terrorism. While the causes of these disasters are often complex and multifaceted, it is the human side of these tragedies that often remains the most poignant and enduring. In this article, we will explore the human side of maritime disasters, examining the ways in which individuals have responded to these events and the impact they have had on their lives.

Perhaps the most striking aspect of maritime disasters is the sheer scale of the loss of life that can occur. Whether it is the sinking of the Titanic in 1912, the sinking of the Estonia in 1994, or the capsizing of the Costa Concordia in 2012, these events have claimed hundreds or even thousands of lives, leaving behind grieving families and shattered communities. The loss of life in these disasters is often compounded by the fact that many of the victims are unknown or unidentifiable, making it difficult for families to find closure and move on.

In addition to the loss of life, maritime disasters can also have a profound impact on the mental health and well-being of survivors and their families. The trauma of surviving a shipwreck or witnessing the loss of loved ones can have long-lasting effects, including post-traumatic stress disorder (PTSD), depression, and anxiety. In some cases, survivors may also feel guilt or survivor's remorse, wondering why they were able to survive while others perished.

The aftermath of maritime disasters can also be marked by a complex legal and political landscape, as different stakeholders seek to assign blame and responsibility for what has occurred. This can involve investigations, lawsuits, and even criminal charges, all of which can prolong the trauma and uncertainty for survivors and their families. The legal and political aftermath of these disasters can also highlight broader issues of accountability and transparency in the maritime industry, raising questions about the safety and security of ships, crew, and passengers.

Despite the challenges and difficulties associated with maritime disasters, there are also many stories of resilience, bravery, and compassion that emerge in their aftermath. Survivors and their families often come together to support one another, sharing their experiences and offering comfort and solace. Communities may rally around those affected by a disaster, providing food, shelter, and emotional support. These acts of kindness and solidarity can help to counteract the trauma and despair that often accompanies these events.

There are also stories of heroism and selflessness that emerge from maritime disasters, as individuals put their own safety at risk to help others. In the sinking of the Titanic, for example, many crew members sacrificed their own lives to ensure that passengers could escape, while in the sinking of the Costa Concordia, a crew member famously stayed on board to help passengers until the very end. These acts of heroism and sacrifice can provide a source of inspiration and hope in the midst of tragedy.

Another important aspect of the human side of maritime disasters is the impact they have on broader society. These disasters can raise important questions about the safety and security of maritime transportation, as well as broader issues of social justice and inequality. For example, the sinking of the Titanic highlighted issues of class and privilege, as wealthy passengers were given priority in lifeboats over poorer passengers. Similarly, the sinking of the Estonia raised questions about the safety of ferries and the responsibility of governments to ensure the safety of their citizens.

In conclusion, maritime disasters are events that can have profound and lasting impacts on individuals and society as a whole. While these disasters are often marked by loss and trauma, they can also inspire acts of heroism, compassion, and resilience. By examining the human side of maritime disasters, we gain a deeper understanding of the ways in which individuals respond to adversity and the ways in which communities come together in times of crisis. We also gain insight into broader issues of social justice and accountability in the maritime industry, as well as the complex legal and political landscape that can emerge in the aftermath of these events. Ultimately, by acknowledging the human side of maritime disasters, we can better support those affected by these tragedies and work to prevent similar events from occurring in the future.

EMISSIONS THE ROLE OF TECHNOLOGY IN IMPROVING PORT EFFICIENCY AND REDUCING SHIPPING

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The shipping industry plays a crucial role in global trade, transporting goods and commodities from one part of the world to another. However, it is also one of the largest emitters of greenhouse gases, which contribute to climate change. As a result, there is a growing need for the industry to adopt sustainable practices that can reduce emissions and improve efficiency. Technology has emerged as a key driver of change in the industry, with numerous innovations aimed at reducing environmental impact and improving efficiency. In this article, we will explore the role of technology in improving port efficiency and reducing shipping emissions.

Port Efficiency

Ports are critical nodes in the global supply chain, acting as gateways for goods and commodities to enter and exit countries. They are also vital economic engines that generate employment and contribute to national GDP. However, ports are often plagued by congestion, which leads to delays, increased costs, and reduced efficiency. This can have a significant impact on the entire supply chain, as delays at one port can ripple through the entire system.

One of the key ways technologies is improving port efficiency is through the use of automation. Automated systems, such as container cranes, can move containers on and off ships faster and more efficiently than manual labor. Automated systems also reduce the risk of accidents and injuries, which can result in downtime and lost productivity. In addition to container cranes, automated guided vehicles (AGVs) and automated stacking cranes (ASCs) can also improve port efficiency by reducing the time it takes to move containers around the port.

Another area where technology is improving port efficiency is through the use of data. Smart port technologies, such as the Internet of Things (IoT) and artificial intelligence (AI), can collect and analyze data in real-time, providing insights into how to optimize port operations. For example, data can be used to identify bottlenecks in the supply chain, such as ships waiting for berth space, and to adjust operations to reduce wait times. This can improve the flow of goods through the port and reduce delays, improving overall efficiency.

Shipping Emissions

The shipping industry is responsible for approximately 3% of global greenhouse gas emissions. The majority of these emissions come from the burning of fossil fuels, which power the engines that propel ships through the water. As a result, reducing emissions from shipping requires a focus on two main areas: improving fuel efficiency and reducing the carbon intensity of the fuel used. One of the key ways technologies is reducing shipping emissions is through the use of alternative fuels. LNG (liquefied natural gas) is one of the most promising alternative fuels, as it emits significantly less carbon than traditional marine fuels. In addition, LNG can be used in existing engines with minimal modifications, making it a relatively easy transition for the industry. Other alternative fuels, such as hydrogen and ammonia, are also being explored, but are still in the early stages of development.

Another way technology is improving fuel efficiency is through the use of digitalization. Smart shipping technologies, such as ship-to-shore communication systems, can provide real-time data on fuel consumption and performance, allowing operators to optimize ship operations and reduce fuel consumption. In addition, predictive maintenance technologies can identify potential issues before they become major problems, reducing downtime and improving efficiency.

Automated systems, data analytics, and smart technologies are all playing a role in improving port efficiency, reducing delays and increasing productivity. Alternative fuels, digital Another technology that can improve port efficiency and reduce shipping emissions is the use of electric cranes. Electric cranes powered by renewable energy sources can reduce emissions and noise pollution in ports. These cranes are also more efficient, as they have higher productivity and lower operating costs compared to diesel-powered cranes.

Furthermore, the use of automated stacking cranes (ASC) can also improve port efficiency. ASCs can handle containers at a faster rate compared to manual handling, as they can operate 24/7 without the need for breaks. Automated systems also reduce the risk of accidents and improve the accuracy of container placement. As a result, ports can increase their throughput capacity and reduce waiting times for ships. In addition to technology, collaboration between ports and shipping companies is crucial in reducing emissions and improving efficiency. Ports can work with shipping companies to optimize vessel speeds and routes, reducing the amount of fuel burned and emissions produced. Collaboration can also lead to the development of more efficient and sustainable supply chains.

Finally, governments can play a crucial role in promoting the use of technology to improve port efficiency and reduce emissions. Governments can provide incentives for shipping companies to use low-emission vessels, invest in sustainable infrastructure, and promote the use of renewable energy sources. In conclusion, the role of technology in improving port efficiency and reducing shipping emissions is crucial. The use of digitalization, automation, and electrification can improve the efficiency of operations and reduce the environmental impact of shipping. Collaboration between ports and shipping companies, as well as government support, is necessary to achieve a sustainable future for international shipping.

HOW MUCH ASSETS REQUIRED TO LEAD A LIFE HAPPILY

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Let's Start with a question what is asset?

By the way every person has his own opinion. I can only give mine, you can spare few precious moments of your life to co-relate. Firstly, it acknowledges the fundamental truth that individuals have unique viewpoints shaped by their experiences, beliefs, and knowledge. It highlights the diversity of opinions among people, recognizing that what one person thinks or believes might not necessarily align with another's perspective. The phrase, "I can only give mine," implies a limitation-an acknowledgment that the speaker can only present their own viewpoint, not impose it as an absolute truth or expect everyone to share it. It suggests humility and respect for differing opinions. The latter part of the statement, "you can spare a few precious moments of your life to correlate," urges the listener or reader to take the time to consider the presented opinion. It encourages an open-minded approach, inviting the audience to engage in a thoughtful reflection or comparison between their own viewpoint and the one being offered. It emphasizes the value of investing time and effort in understanding different perspectives, promoting empathy and tolerance for diverse opinions. Overall, this statement promotes a sense of mutual respect for differing opinions, advocating for open dialogue and the willingness to consider alternative viewpoints without dismissing them outright. It encourages individuals to engage in meaningful discussions, fostering understanding and empathy in the exchange of ideas.

The concept of assets should revolve around items essential for personal enjoyment within one's lifetime, encompassing necessities like clothing, food, and shelter until the end of life. Additionally, it includes treasured moments and the love received from companions. Consider the practicality of expenditure without waste. The accumulation potential is rather limited, likely equating to what one might earn in a single year or, at most, five years.

Therefore, what purpose lies in a lifetime's earnings? Surplus wealth isn't solely for personal gratification; it serves a communal role, intended to benefit those within one's immediate and broader social sphere-parents, spouse, children, siblings, relatives, neighbors, and even individuals in need, such as the roadside beggar who seeks assistance invoking the name of Allah. This perspective prompts reflection on wealth management, stressing the significance of balancing personal comfort with contributing to the well-being of the community, ultimately highlighting the responsibility of surplus wealth towards enhancing the lives of others.

Consider those individuals we honor and remember respectfully when they departed from this world. Their possessions were minimal-perhaps a horse for transportation, a blanket, a bowl, or a few essential items necessary for that particular moment. Reflecting on this notion, I recall a conversation with a knowledgeable colleague about what possessions would be easier to explain on Judgment Day-a bike, a car worth millions, or a lavish vehicle exceeding expectations. In jest, he amusingly remarked that he'd sell his car in such a scenario.

Now, consider the effort invested in managing lands, houses, or flats, dedicating ten, twenty, or more years of hard work, all to ensure a comfortable last phase of life spanning five to ten years of old age. However, there's no guarantee of reaching that stage. Instead of toiling relentlessly to amass assets for an uncertain future, ponder on the opportunity to relish the 20 to 30 years of vitality and enjoyment available in the present. This reflection questions the value of excessive material accumulation when weighed against the richness of experiences and moments that life offers in its prime years.

The concept of assets reveals diverse perspectives shaped by individual experiences. Each person's view varies, highlighting the beauty of differing opinions. Acknowledging limitations, it emphasizes humility in presenting personal truths. This prompts reflection and open-mindedness towards alternate viewpoints, fostering empathy and tolerance. It challenges excessive material wealth pursuit, urging a reevaluation towards valuing experiences over possessions. This encourages balance between necessities and benefiting our social sphere. Overall, it advocates for respectful dialogue, recognizing diverse opinions, and prioritizing shared experiences and communal well-being over material accumulation.

INFLUENCE OF DIFFERENT SHIPS' STRUCTURE AND DESIGN

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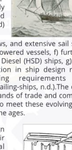
Introduction

The captivating journey of ship design and the remarkable changes that have shaped the maritime world over millennia. It is a tale of constant evolution, fueled by the ever-changing demands of trade, transportation, and warfare. From the earliest traces of boats in ancient Egypt to the majestic full-rigged ships and the graceful clipper ships, this transformation stands as a testament to human ingenuity. In our voyage of exploration, we embark on a historical pilgrimage, tracing the evolution of ship design from primitive rowed vessels to the era of steam and nuclear-powered behemoths. This progression has been characterized by an unceasing pursuit of excellence and an unwavering commitment to adapt to the evolving needs of naval and merchant marine sectors.

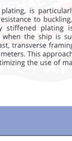
Ship design's core, the structural framework, adapts to a vessel's purpose, offering longitudinal, transverse, and mixed framing. Hull shape, defining performance, ranges from displacement to planning hulls, impacting speed and stability. In shipbuilding, materials shift from wood to steel, with welding replacing traditional methods for plate connection, ensuring modern vessel integrity. Ship structure's influence on combat is evident in events like the Battle of Salamis and the development of submarines and destroyers. Merchant marine ships, be it ocean liners or modern cruise ships for leisure, and cargo vessels, from bulk carriers to container ships, tailored to trade needs, showcase ship design's adaptability and impact.

The writing unfolds the evolution of ship design, illuminating its profound impact on human history, commerce, and military strategy. Across the ages, ships have been catalysts for innovation, profoundly shaping the world we inhabit today.

Historical Evolution of Ship: The history of ship design is rich and extensive, shaped by continuous advancements in trade, transportation, and military needs. The earliest documented evidence of boats can be traced back to ancient Egypt in the 4th millennium BCE. The evolution of ship design can be categorized into several stages: a) early rowed vessels, b) sailing ships, c)more complex variations, including the simple lateen sailing ship, square sailing ship, standard triangular and lateen fore-and-aft sailing ship, Venetian buss (a fully rounded two-masted ship), and the full-rigged ship with three masts and five to six sails, d) Clipper Ships, famous for their elegant, elongated three-masted design, distinctive bows, and extensive sail spreads, e) transition to machine-powered ships, starting with steam-powered vessels, f) further advancements with machine-powered ships, including High-Speed Diesel (HSD) ships, g)introduction of nuclear-powered ships. This journey of transformation in ship design reflects the continuous adaptation of ships to meet evolving requirements throughout history. (https://www.britannica.com/technology/ship/Sailing-ships, n.d.).The evolution of ship design was primarily driven by the ever-evolving demands of trade and combat. Both the naval and merchant marine sectors frequently adapted to meet these evolving requirements, marking the relentless progression of ship design over the ages.



Types of Ship Structures: The structural design of ships varies significantly based on their intended purpose and operational requirements. At the heart of modern ship structures lies the concept of framing, which forms the fundamental framework for ship construction. There are three primary framing systems in use: longitudinal framing, transverse framing, and a hybrid approach known as mixed framing. Longitudinal framing, characterized by stiffeners that run lengthwise along the hull in both the deck plating and the bottom shell plating, is particularly well-suited for larger vessels. This arrangement imparts enhanced resistance to buckling, a critical consideration for the upper deck of ships. Longitudinally stiffened plating is particularly adept at withstanding compressive stresses, especially when the ship is subjected to the bending forces encountered in turbulent seas. In contrast, transverse framing finds its niche in ships of shorter lengths, typically those less than 120 meters. This approach provides the necessary structural integrity for smaller vessels while optimizing the use of materials and construction techniques.



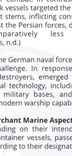
In the pursuit of even greater strength and resilience, the contemporary trend is toward mixed framing. This innovative approach combines the best of both worlds, leveraging a combination of longitudinal and transverse framing to ensure the structural integrity of modern ships. By incorporating elements of both framing systems, mixed framing strikes a balance between strength and versatility, meeting the diverse and demanding needs of today maritime.

Hull Shape and Performance: A ship hull can be categorized into three main classes: the displacement hull, the semi-displacement hull, and the planning hull. The displacement hull features a shape, while the planning hull adopts a shape, with the semi-displacement hull falling somewhere in between these two designs. The ship speed, displacement, gross tonnage, and other important characteristics are closely associated with the specific shape of its hull (https://www.marineinsight.com/naval-architecture/types-of-hulls-used-for-vessels/, n.d.).

Materials in Shipbuilding: The wooden ship stands as a distinguished icon within the rich tapestry of ancient maritime heritage. Throughout most of the 19th century, vessels and ships were painstakingly crafted from various types of wood. However, as we ventured into the 19th century, the maritime industry began to shift towards the utilization of iron for ship construction. In our modern era, steel, aluminum, and a myriad of other alloys have become commonplace choices for crafting vessels. In the past, the practice of securing the plates of a vessel often involved the meticulous use of the nut-bolt joint method. In contrast, today, welding has emerged as the prevailing and extensively adopted method for connecting these plates securely.

Influence on Different Ships' Structure (Combat Aspect): From previous study it is evident that the structure of ships played an important role in combat aspects. Only due to structure and strength, the size of the ship didn't have mentionable significance. Battle of salamis, invention of submarine, destroyer as counter measure can be a good example.

Battle of Salamis: In the year 480 BC, a historic naval clash unfolded, pitting an alliance of Greek city-states led by Themistocles against the formidable Persian Empire, led by King Xerxes. This pivotal encounter marked a crucial juncture in the second Persian invasion of Greece.



The battleground itself lay in the narrow waters separating the Greek mainland from Salamis, an island nestled in the picturesque Saronic Gulf near Athens. In terms of sheer numerical superiority, the Persian forces held a distinct advantage. Nevertheless, the Greeks secured victory through a combination of ingenious tactics and the design of their warships.

The Greeks excelled in their strategic acumen by choosing to engage the Persians in the shallow waters within a strategically placed barrier. One key aspect of their success lay in the structural strength of their vessels. While the Persian ships were grand in size, their midsections lacked the fortitude required for combat. In contrast, Greek ships boasted sturdier stems. During the heat of battle, Greek vessels targeted the vulnerable midsections of their Persian counterparts with their robust stems, inflicting considerable damage. As a result, the Greeks emerged triumphant against the Persian forces, despite being ostensibly outnumbered and possessing comparatively less powerful vessels. (https://en.wikipedia.org/wiki/Battle_of_Salamis, n.d.)

U Boat and Destroyer: During World War II, the German naval forces extensively utilized U-boats (submarines), posing a significant challenge. In response, the development of destroyers, initially referred to as U-boat destroyers, emerged as a countermeasure. Additionally, the era saw innovations in naval technology, including the introduction of aircraft carriers, which served as floating military bases, and the development of supercarriers, representing advancements in modern warship capabilities.

Influence on Different Ships' Structure (Merchant Marine Aspect): Ships of varying sizes are employed for various functions. Depending on their intended use, ships can be categorized as cargo vessels, bulk carriers, container vessels, passenger ships, and so on. Their dimensions and configurations vary according to their designated roles.

Passenger Vessel: Prior to the advent of aircraft, ships were widely popular for long-distance travel. Today, their primary roles have shifted towards inland travel and entertainment. Designs of a cargo vessel and a passenger ship have significant differences. Passenger vessels fall into two main categories.

Cruise Ships and Ocean Liners: Cruise ships are designed for relatively shorter journeys, typically with the same departure and arrival points, mainly for recreational purposes. Ocean liners, on the other hand, are larger vessels initially intended for transoceanic passenger transport between continents.

Ferries and Inland Transport: Ferries and launches serve as examples of inland transportation. They are smaller in size, with nearly flat keels and shallow drafts, suitable for operating in areas with lower water density.

Cargo Vessel: Ships play a vital role in transporting goods across the globe. Cargo vessels are highly efficient and widely used for this purpose, and they can be categorized into types such as bulk carriers, container vessels, chemical and oil tankers, and roll-on/roll-off (RO-RO) vessels. These cargo vessels vary in size according to their specific transportation requirements.

Name	Capacity (TEU)	Length	beam	Draf	Example
Ultra Large Container Vessel (ULCV)	14,501 and higher	More than 1200 ft	160.7 ft and wider	49.9 ft and deeper	Maersk Triple E class (L- 400m, capacity- 18270 TEU)
New Panamax	10,000-14,500	1200 ft	160.7 ft	49.9 ft	COSCO Guangzhou
Post Panamax	5,101-10,000	1200 ft	160.7 ft	49.9 ft	
Panamax	3,001-5,100	965 ft	106 ft	39.5 ft	Bay Class
Feedermax	2,001-3,000	965 ft	106 ft	39.5 ft	
Feeder	1,001-2,000				MV TransAtlantic
Smaller Feeder	Up to 1000				

Source: (https://en.wikipedia.org/wiki/Container_ship, n.d.)

Use of Bulbous Bow and Transom: A vessel is given an aerofoiled shape for overcoming the resistances she faces while underway. A vessel faces frictional resistance, residuary resistance, air resistance wave making resistance, eddy making resistance, appendage resistance and so on while moving. To reduce the influence of resistance these additional structures were invented. Bulbous bow is added to counter the wave making resistance. (Stoke, 2003), to strengthen the stern of a vessel, transom is used. These are the special features of a vessel and an excellence of ship design.

Conclusion

In conclusion, the history of ship design is a remarkable journey that underscores human ingenuity and adaptability. From ancient rowed boats to modern nuclear-powered vessels, ship design has continuously evolved to meet trade, transportation, and warfare needs. This evolution has influenced combat strategies, trade routes, and leisure travel. Specialized ship features reflect the precision in ship design. Ships have played a pivotal role in human history, fostering innovation and shaping the world. This ongoing story promises more fascinating chapters in maritime evolution, highlighting our enduring ability to adapt and excel.

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THE IMPACT OF CLIMATE CHANGE ON MARITIME INDUSTRIES IN BANGLADESH

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The impact of climate change on maritime industries in Bangladesh has been significant, and the effects are only expected to intensify in the coming years. Bangladesh is a low-lying country with a long coastline, and as such, it is highly vulnerable to the impacts of rising sea levels and extreme weather events. These impacts have already had a significant impact on the country's maritime industries, including fisheries, shipping, and coastal tourism. In this article, we will explore the impact of climate change on these industries, using data and statistics to illustrate the scale of the challenge facing Bangladesh.

According to the World Bank, Bangladesh is one of the most vulnerable countries in the world to the impacts of climate change. The country is exposed to a range of climate hazards, including flooding, cyclones, and storm surges, which can cause widespread damage to infrastructure and disrupt economic activity. The maritime industries of Bangladesh are particularly exposed to these hazards, as they are located in low-lying coastal areas that are highly susceptible to flooding and storm damage.

The fishing industry is one of the most important maritime industries in Bangladesh, providing employment for over 14 million people and contributing significantly to the country's economy. However, climate change is posing a major threat to the future of this industry. Rising sea temperatures and changing ocean currents are affecting fish stocks, making it more difficult for fishermen to catch enough fish to make a living. In addition, extreme weather events such as cyclones and storm surges can damage fishing boats and infrastructure, leaving fishermen unable to work and exacerbating poverty and food insecurity in coastal communities.

According to a study by the World Wildlife Fund, Bangladesh's fisheries sector is expected to lose up to 50% of its catch potential by 2050 due to the impacts of climate change. This could result in significant economic losses and a rise in poverty levels in coastal communities that rely on fishing for their livelihoods. In addition, the loss of fish stocks could have wider environmental impacts, as marine ecosystems become less healthy and less resilient to future climate change impacts.

The shipping industry is another important maritime industry in Bangladesh, with the country's ports handling over 90% of its international trade. However, rising sea levels and increasing storm intensity are posing significant challenges to the infrastructure and operations of these ports. According to a study by the International Union for Conservation of Nature (IUCN), sea level rise is expected to cause a 50% increase in the frequency of flooding at Bangladesh's main port in Chittagong by 2050. This could result in significant disruptions to shipping operations and a rise in the cost of trade, which could have wider economic impacts for the country as a whole.

In addition to these challenges, the coastal tourism industry in Bangladesh is also facing significant impacts from climate change. The country's long coastline and rich cultural heritage make it an attractive destination for tourists, with the industry contributing around 2% of the country's GDP. However, rising sea levels and increasing storm surges are damaging coastal infrastructure and eroding beaches, making it more difficult for tourists to access and enjoy these areas. In addition, the threat of extreme weather events is deterring tourists from visiting Bangladesh, which could have significant economic impacts for the industry and the wider economy.

The impacts of climate change on maritime industries in Bangladesh are not just limited to economic impacts. They also have significant social and environmental consequences. For example, the loss of fish stocks and the damage to fishing boats and infrastructure can exacerbate poverty and food insecurity in coastal communities, leading to wider social impacts such as migration and displacement. In addition, the loss of marine ecosystems can have significant environmental impacts, affecting the health and resilience of these ecosystems and the species that depend on them.

In conclusion, the impact of climate change on maritime industries in Bangladesh is significant and multifaceted. The challenges posed by rising sea levels, extreme weather events, and changing ocean currents are affecting fisheries, shipping, and coastal tourism, with significant economic, social, and environmental impacts. The statistics cited in this article illustrate the scale of the challenge facing Bangladesh, and the urgent need for action to mitigate and adapt to the impacts of climate change.

To address these challenges, the government of Bangladesh has developed a National Adaptation Plan to strengthen the country's resilience to the impacts of climate change. This includes measures such as strengthening coastal defenses, improving early warning systems, and promoting the use of climate-resilient technologies in the fishing and shipping industries. In addition, the government is working with international partners to secure funding and technical assistance to support these efforts.

However, the scale of the challenge facing Bangladesh is immense, and there is a need for continued investment and innovation to support the country's efforts to adapt to the impacts of climate change. This will require a collaborative effort involving government, the private sector, and civil society to develop and implement effective strategies that can protect the livelihoods and well-being of millions of people who rely on the country's maritime industries.

In conclusion, the impact of climate change on maritime industries in Bangladesh is a complex and multifaceted issue with significant implications for the country's economy, society, and environment. The statistics cited in this article underscore the urgent need for action to mitigate and adapt to the impacts of climate change, and the importance of a collaborative and innovative approach to tackling this challenge. By working together, we can help to protect the livelihoods and well-being of millions of people in Bangladesh and ensure a sustainable future for the country's maritime industries.

LIFE WANDERING MONEY

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"Alone, alone, all, all alone, Alone on a wide wide sea!
And never a saint took pity on My soul in agony."
- The Ancient Mariner by S. T. Coleridge

Finding yourself in the midst of traveling around the world. With different situations, cultural differences & challenges one can be honed to be the best version of man. The adrenal rush throughout your veins, standing up to take the test of achievement, trying unknown things is something that common people are afraid to do which resulting them tied with comfortable situations. Make no pity your soul in agony like Coleridge because you are alone, all alone in the wide sea of life. The best time to travel is at a very early age in your life when someone don't have to think about family or anything else.

That's the best time of someone's life to explore the natural beauty and terror. The excitements to know about different culture, roaming around the jungle, camping nowhere in hostile environment middle of raining is something beyond imaginations.About imagination, one can't describe the feeling of the first touch of snowing or clouds at 14000ft elevation from the sea level.Trips to those adventures are something for a lifetime experience. Money, the second God of the world is something that desired by everyone. Why? Because the liquidity of money can transform from anything to something else in no matter of time. Most of the peopletry to earn as much as possible because of today's need for everything. Food to toilet, birth do death everywhere need money to get facilities, nothing is free in this world and whom has more money get the most benefits of everything. Relatives, society, government, everyone wants some cut from your earnings to provide you with something else due to the nature of earnings.

What's life about? Just living, earning, or enjoying? Nah, that's the worst way to die in a fixed schedule. Most of the time as our days go by, we forget about ourselves. Completed graduation, find some job to do and then settled down for life till death for money? Where's the charm of exploring everything?"Your achievements are seldom rewards, but your mistake is never forgotten." Are you rewarding yourself for the small deedsyou are doing after lots of mistakes in life? Life is very short my friend, you'll make mistakes because we are human. You'll lose time, money, health, even life by trying to go beyond the edge of a mountain or finding the unrivaled cave somewhere desert. Back to the question, what's life? Life is those short moments when you fill you lived; like the fresh breath at the ridge of mountain or the waving current of sea where you don't know if you able to reach the shore or like lose the trail of trekking in 18000ft altitude. You don't know what's going to happen next yet the urge for completing the tasks no matter how is the proof that you lived.The serenity of mountains, the sound of currents falling each other's peak or the viewing of splashing of rainwater in barn's frontwind alone very much important to discover near years. Cause, you are going to die along, so why don't just take some time off and enjoy yourself a little break when you have still the time.

HOW SEAFARERS ARE CONTRIBUTING TO NATIONAL GDP IN BANGLADESH

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Engineering Instructor

The maritime industry has always played a significant role in the economic development of Bangladesh. As a country with a long coastline and an extensive network of rivers, Bangladesh has a rich history of seafaring and maritime trade. Today, the contribution of seafarers to the national GDP of Bangladesh is significant, and this industry remains a critical driver of the country's economic growth.

Seafarers are an essential component of the maritime industry, playing critical roles in the operation of ships and the transportation of goods across the world. In Bangladesh, the role of seafarers in the maritime industry is particularly significant, with a large number of Bangladeshis employed as seafarers on ships around the world.

The contribution of seafarers to the national GDP of Bangladesh is significant. According to the Bangladesh Bank, the total remittances from Bangladeshi seafarers amounted to USD 6.15 billion in 2020, making seafaring one of the top sources of foreign currency for Bangladesh. This represents a significant contribution to the national GDP, as well as a vital source of income for many families and communities in Bangladesh.

The contribution of seafarers to the national GDP of Bangladesh is not limited to their remittances. Seafarers are also critical to the operation of the maritime industry in Bangladesh, which includes shipbuilding, ship repair, and other related activities. The maritime industry in Bangladesh has a significant impact on the country's economy, contributing to the creation of jobs, the generation of foreign exchange earnings, and the development of key infrastructure.

One of the significant ways in which seafarers contribute to the national GDP of Bangladesh is through the operation of ships. Bangladesh has a substantial number of ships registered under its flag, and many of these ships are operated by Bangladeshi seafarers. These ships transport goods and commodities around the world, generating revenue for the country and supporting international trade.

In addition to operating ships, seafarers in Bangladesh also contribute to the development of the maritime industry through shipbuilding and ship repair. Bangladesh has a growing shipbuilding industry, with several shipyards operating in the country. Seafarers play a vital role in this industry, providing expertise and knowledge related to ship design, construction, and operation. The shipbuilding industry in Bangladesh has significant potential for growth, with the government and private sector working to develop this sector further.

Another way in which seafarers contribute to the national GDP of Bangladesh is through their remittances. As mentioned earlier, Bangladeshi seafarers remitted USD 6.15 billion in 2020, making seafaring one of the top sources of foreign currency for the country. These remittances support many families and communities in Bangladesh, providing a critical source of income that contributes to the country's overall economic growth and development.

The contribution of seafarers to the national GDP of Bangladesh is not limited to their financial contributions. Seafarers also play an essential role in promoting the country's image and reputation on the global stage. Bangladeshi seafarers are known for their professionalism, expertise, and commitment to safety and security. They represent Bangladesh and its maritime industry to the world, contributing to the country's reputation as a reliable and trustworthy partner in international trade.

Despite the significant contributions of seafarers to the national GDP of Bangladesh, there are several challenges facing the maritime industry in the country. One of the most significant challenges is the lack of infrastructure and facilities to support the growth of the industry. Bangladesh has limited port infrastructure and inadequate facilities for ship repair and maintenance, which can hinder the growth and development of the maritime industry.

Another challenge facing the maritime industry in Bangladesh is the shortage of skilled seafarers. Although Bangladesh has a large pool of seafarers, there is a shortage of skilled personnel, particularly in technical and engineering positions. This shortage of skilled seafarers can limit the growth and development of the industry, as well as impact the safety and efficiency of ship operations.

The COVID-19 pandemic has also had a significant impact on the maritime industry, with many ships facing delays and disruptions due to travel restrictions and quarantine measures. This has had a direct impact on the income of seafarers and the overall contribution of the industry to the national GDP of Bangladesh.

To overcome these challenges, the government and private sector in Bangladesh are working to develop the maritime industry further. Efforts are underway to develop port infrastructure, including the construction of new ports and the expansion of existing ones. The government is also working to improve the regulatory framework for the industry, with the aim of attracting more investment and promoting growth.

In addition to infrastructure development, there is a growing focus on training and education in the maritime industry in Bangladesh. The government and private sector are investing in the development of training programs and facilities to improve the skills and knowledge of seafarers in the country. This investment is aimed at addressing the shortage of skilled seafarers and improving the overall quality of the workforce in the industry.

The future of the maritime industry in Bangladesh looks promising, with significant potential for growth and development. The country's long coastline, extensive river network, and strategic location make it an ideal hub for international trade and maritime transport. The government and private sector are committed to developing the infrastructure, facilities, and workforce needed to support the growth of the industry and increase the contribution of seafarers to the national GDP of Bangladesh.

In conclusion, the contribution of seafarers to the national GDP of Bangladesh is significant and plays a critical role in the country's economic growth and development. Seafarers contribute to the maritime industry in Bangladesh through the operation of ships, shipbuilding and repair, and their remittances. However, there are several challenges facing the industry, including infrastructure limitations and a shortage of skilled seafarers. Efforts are underway to overcome these challenges and develop the maritime industry further, with the aim of increasing the contribution of seafarers to the national GDP of Bangladesh and promoting the country's reputation as a reliable partner in international trade.

FUTURE OF MARITIME TOURISM IN BANGLADESH

Engr. Mehedi Marzan
Electrical Instructor

Maritime tourism in Bangladesh has the potential to become a major industry in the future. Bangladesh is a country rich in natural beauty, with a long coastline along the Bay of Bengal and numerous rivers and waterways. Despite these advantages, the maritime tourism industry in Bangladesh is still in its infancy, with relatively few operators and limited infrastructure. However, with the right investments and policies, Bangladesh could become a major player in the global maritime tourism industry.

One of the main challenges facing the maritime tourism industry in Bangladesh is the lack of infrastructure. Many of the country's rivers and waterways are underdeveloped, with limited facilities for tourists. Additionally, the country's ports and harbors are in need of modernization and expansion to accommodate larger cruise ships and other vessels. To address these challenges, the government of Bangladesh has initiated several projects to improve the country's infrastructure, including the construction of new ports and the development of river tourism.

One of the most promising areas for maritime tourism in Bangladesh is river tourism. The country has a network of over 700 rivers and waterways, providing ample opportunities for river tourism. River tourism can include activities such as river cruises, fishing trips, and water sports. To promote river tourism in Bangladesh, the government has initiated several projects, including the development of river tourism circuits and the establishment of river ports and jetties.

Another area with potential for maritime tourism in Bangladesh is coastal tourism. Bangladesh has a long coastline along the Bay of Bengal, with numerous beaches and islands. However, many of these areas are underdeveloped and lack infrastructure. To promote coastal tourism, the government has initiated several projects, including the development of infrastructure and facilities in popular coastal areas such as Cox's Bazar and Kuakata.

One of the main challenges facing the maritime tourism industry in Bangladesh is the lack of awareness and promotion. Many potential tourists are unaware of the country's natural beauty and tourism potential. To address this challenge, the government and private sector need to work together to promote Bangladesh as a destination for maritime tourism. This can include initiatives such as advertising campaigns, participation in international tourism fairs, and the development of tourism packages and itineraries.

Another challenge facing the maritime tourism industry in Bangladesh is the lack of skilled manpower. The industry requires a range of skilled professionals, including tour guides, boat operators, and hospitality staff. To address this challenge, the government and private sector need to invest in training and education programs to develop the necessary skills and expertise.

The future of maritime tourism in Bangladesh is promising, with numerous opportunities for growth and development. However, to realize this potential, the country needs to address the challenges facing the industry, including the lack of infrastructure, awareness, and skilled manpower. With the right investments and policies, Bangladesh could become a major player in the global maritime tourism industry and contribute significantly to the country's economic growth and development.

One of the key areas for growth in the maritime tourism industry in Bangladesh is adventure tourism. Adventure tourism includes activities such as white-water rafting, kayaking, and hiking. Bangladesh has numerous opportunities for adventure tourism, including the Cox's Bazar hill tracts and the Sangu River. To promote adventure tourism in Bangladesh, the government and private sector need to invest in infrastructure and facilities to support these activities, such as camping sites and equipment rentals.

Another area for growth in the maritime tourism industry in Bangladesh is cultural tourism. Bangladesh has a rich cultural heritage, with numerous historical and archaeological sites. These sites include the ancient city of Bagerhat, the Sundarbans mangrove forest, and the Paharpur Buddhist monastery. To promote cultural tourism in Bangladesh, the government and private sector need to invest in the preservation and promotion of these sites, as well as the development of tourism packages and itineraries that highlight the country's cultural heritage.

Overall, the future of maritime tourism in Bangladesh is promising, with ample opportunities for growth and development. However, realizing this potential will require significant investments in infrastructure, promotion, and human resources. The government and private sector need to work together to promote Bangladesh as a destination for maritime tourism and to develop the necessary infrastructure and facilities to support this industry. With the right investments and policies, Bangladesh could become a major player in the global maritime tourism industry and contribute significantly to the country's economic growth and development.

SCIENCE FICTION (A MARINER'S TIME TRAVEL)

Mushfikul Haque
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3rd Batch 2nd Semester

Nafis, a Chief Engineer of renowned shipping line, 'MAEWRSK Line.' He is such a talented person who does not only think about himself, but also thinks about the betterment of his marine community. He always wants to do something for his community as he treats the xcommunity as his family. He thinks about marine profession like how mariners can do better, how more people can join in the job market or how they can improve their livelihood by this profession.

One day, Nafis was reading newspaper early in the morning with a cup of coffee sitting on rooftop. Suddenly, he heard a big sound behind him and he became shocked.

He looked at the behind and saw something fallen down from the sky. He saw it was a small space-ship. He heard about this type of things but couldn't believe it exists too! He saw it opened and an alien came out. He was so surprised. He couldn't believe in his eyes. The alien started conversation, "Hey Nafis. I'm from planet 3037V of Delta galaxy. I've came here to the earth for searching some brilliant minds, who can serve the mankind.

You'll be happy that you're the lucky one. So now tell me what do you want?" Nafis was astonished. After a few seconds, he could understand what the visitor was telling. Then he remembered, he was always curious about time machine. He knew that the existence of time machine could not be happened. These are just hypothesis.

But as he saw the alien could come to the earth then they might have something like time machine. So, he directly told, "I need a time machine to see the future of my community. Can you help me?" The alien answered, "Oh! Time machine. Alright, we invented it so long ago. But I'm too much disappointed to see that why you human couldn't invent it yet." Saying that he went to the spaceship and vanished within a second. After a few minutes, he came back and gave a machine to Nafis. Then said, "Here is your gift. Do whatever you want, but don't misuse it."Nafis told, "You can trust me. I won't do anything wrong by using it." The alien said, "OK. Then do your job. See you another day. Good bye." Saying so he went away.

Next day, Nafis used the machine, for which he desired for long time. He went 500 years forward. He saw the world was so advanced. There was robot, artificial intelligence, modern technology everywhere. Those things made human life easier. Then he went to a port of Singapore and got up into a merchant ship. He saw there was a huge change in shipping industry. Almost everything was digitalized. Artificial intelligence was in every corner. It had made mariners' job too much easier.

Nafis remembered his cadet life. That time he had to do almost everything 'manually.' Those things required too much hard work and also very time consuming. He had to work day to night, anytime. But on that ship, he saw almost every task of a cadet was performed automatically by robotic technology. In fact, deck officers and engineers were too much relaxed. They just had to check the system after few hours it there is any troubleshoot or not.

Anyway, Nafis was so happy to see that the sufferings of mariners reduced a lot. He was roaming around the ship and trying to gather more knowledge. But after a few minutes, he noticed a massive change, which was really an irony for human being. He saw less people in the ship than his time. For example, in his time, there should be 15-20 mariners and 10-15 other workers on board ship. But on that ship, he could find around 10 people only.

He was too much wondered to think that how only 10 people could operate a 300-350meter long ship! Then he realized using of modern technology is responsible for this. He came to know that many workers were losing their jobs due to the 4th industrial revolution, where artificial intelligence and robots were taking places of human. So, people could not survive on their job field. It created very bad impact on their lives as well as on their family. Nafis became sad and tensed. He came back to his time using the time machine.

Now a days, Nafis is taking necessary steps to solve the problem coming after a few decades. He is arranging seminars to aware the global communities and forums about the next industrial revolution. They are trying to find out the ways of balancing the human resource and artificial intelligence. Obviously, it is not easy to reach in a permanent solution so early. But it is sure that the earth will remain stable and happier until people like Nafis will exist.

ROBOTICS IN MARITIME SECTOR

Sourov Kumar Saha
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2nd Batch 4th Semester

Automation and self-acting technology are becoming more and more common in many industries around the world. The idea here is that machines and devices can do tasks on their own without people needing to control them. For instance, think about Unmanned Underwater Vehicles (UUVs), which are like self-acting drones but underwater.

These special machines can carry out tasks like watching over things and doing research under the water without needing human guidance. They have smart sensors and computers on board to help them do their jobs more effectively. In the world of maritime transportation, there's a big focus on using robots and machines to do tasks without people having to do the hard physical work. Many ports worldwide are now using self-acting equipment to handle cargo, like loading and unloading ships, faster and more efficiently. This is a good thing for the economy because it speeds up how things are moved from one place to another. Some famous ports in countries such as the UK, China, India, France, and Spain have introduced special robots called "robotic cranes." These cranes are like machines that can lift and move big cargo containers with precision. For example, a company named DP World has come up with a successful system called the "Robotic Rack System" for managing containers, which makes things work more smoothly. In the UAE, the Jebel Ali terminal has introduced a system known as "Boxbay," and it can handle up to 800 containers at the same time, proving how automation is changing how ports operate.

But automation isn't only happening in ports; it's also making its way onto ships themselves. Nowadays, ships have systems that can operate without people guiding them. This opens up exciting new possibilities for the maritime industry.

Some ships have even completed successful voyages without having a human crew onboard. For example, there's the LNG carrier "Perizoma Courage," which made history by crossing the vast Pacific Ocean for the first time ever without any accidents. It covered a long distance of 5,400 nautical miles all by itself. This shows how robotic technology can make maritime transportation safer and more efficient.

In conclusion, the maritime industry is going through a significant transformation thanks to automation and self-acting technology. From underwater vehicles that work independently to robots in ports and ships that can navigate without human help, automation is making maritime operations quicker, safer, and more productive. As the industry continues to embrace these innovations, we can expect even more exciting advancements that will shape the future of global transportation and trade.

ABOUT NEXT SPACE TRAVEL

Lubit Chakladar
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Space is the place which is always upholds the vrosity of everyone. 50 years ago, astronauts travelled to space in rockets built by space agencies as NASA. Today, the astronauts are often billionaire enjoying a journey into low orbit on a rocket they paid for from their billion-dollar bank account. The change feels like a giant leap but it makes sense. More and more civilization relics on space. Huge number of satellites orbit the planet, connecting us to everything from mobile phones to GPS to most favorite Netflix and there is big money into maintain those system.

There are many private companies who wants to get into space. As a private company are putting rockets and satellites into space, they're able to help the ladies of NASA on their mission. NASA Itself has become financially constrained due to lees government spending on space travel. Now NASA on using commercial companies to build a lot of the hard wane to do a lot of those services of ladling scientific pay loads to the surface of the moon. By 2030 people will achieve this If you're wondering why we are going back to the moon while human kind already stepped on. Astronauts could enplane only a part of it!

Some even see the moon as an eventual staging area for human kind of the explanation of deep space.

MARS is seen the next stepping off point to wands the final frontier though whether we'll get there in our life time is another question.

But here is something to think about. A fuel-efficient return trip to MARS would take 21 Months.9 months to get there, 3 months on the planet and 9 months to get back.

However, as the faith and Mars around the sun at different speeds and distances, they are aligned in way that allows the most energy sufficient time to travel to MARS every 26 Months. Isn't it interesting?

MAYAN CIVILIZATION

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The Maya was a remarkable group of Indigenous people who inhabited regions in southern Mexico, Guatemala, and northern Belize. These areas were where their society and culture thrived for centuries. In the 21st century, their legacy continued, with more than 5 million Maya individuals speaking over 30 different Mayan languages. Additionally, many of them were bilingual, also fluent in Spanish.

Long before the Spanish arrived in Mexico and the broader American continent, the Maya had established themselves as an advanced civilization. Their accomplishments were numerous and left a lasting impact on history. Here are some key aspects of their civilization:

Agricultural Prowess: The Maya were skilled farmers. They cultivated essential crops such as corn, beans, and squash. This form of agriculture allowed their society to thrive and sustain a growing population.

Architectural Marvels: One of the most striking features of the Maya civilization was their architectural prowess.

They constructed impressive stone buildings and pyramid temples that still stand as a testament to their engineering and construction abilities. These structures served various purposes, including religious ceremonies, governance, and even astronomy.

Metallurgy: The Maya were adept at working with metals, particularly gold and copper. They crafted intricate and beautiful ornaments and tools from these materials. Their metallurgical skills were highly regarded.

Hieroglyphic Writing: The Maya had a unique system of writing known as hieroglyphics. This form of communication was not only a practical means of record-keeping but also a way to express complex ideas and narratives. Their hieroglyphic inscriptions have provided invaluable insights into their culture and history.

The Maya civilization's achievements were substantial, and they played a pivotal role in shaping the history of Mesoamerica. Their advanced knowledge of agriculture, architecture, metallurgy, and writing set them apart as a culturally rich and innovative society. Their legacy continues to be a subject of fascination and study, shedding light on the history of Indigenous peoples in the Americas and their significant contributions to human civilization.

Around 1500 BCE, the Maya had established villages and were growing crops like corn, beans, and squash. They started building special areas for ceremonies. By 200 CE, they had developed more advanced structures that included temples, pyramids, courts for playing ball games, and open plazas for gatherings. The Maya even made a type of paper from fig trees, and their written books were known as codices.

They were also talented in creating beautiful sculptures and relief carvings. When it comes to understanding the early Maya civilization, we mainly rely on their architectural works, stone inscriptions, and carvings.

All in all, the Maya were one of the most advanced civilizations in ancient times.

OUR PROMISE

Rakib Uddin
Department: Engineering
2nd Batch 4th Semester

14th January 2022, not too far ago the day. when we joined Bangladesh Marine Academy, Barishal as junior cadets. Already more than twenty-two & half months have passed but everything seems like we have just joined the academy. Yes, it really feels like we have just step on the academy only a few days ago. officially 2nd batch but practically we are the very first cadets of our beautiful academy, the bridge over the river 'Kirtonkhola' situated just beside our academy has added some more glory one her exceptional beauty.

On the joining day, after our parents depart from the academy leaving us on an unknown place with unknown faces, we were standing on badminton field at the ground level of the academic block, there our honor able seniors welcomed us warmly in a mesmerizing way, we were really very warmed up after thathilarious un forget able joining tradition.

After that, our first 7 days in the academy was wary difficult as were continuously getting those spicy sweets. But very surprisingly, as were continually those spicy sweets. But very surprisingly on the 8th day we got a vacation because of the coved-19 pandemic situation. That was probably one of the best moments of our life. when we came to know about the vacation news. We packed ourselves within no time and left the academy, within a few days. We came back and again our academic life started. The royal life style of a gentleman cadet. Here we learned discipline, manner Punctuality, leadership, teamwork, & so on we also learned how to keep ourselves calm in difficult surviving situation.

Those unknow faces means those unknown batchmates become our dearest once. By following all the rules and regulations and all other academic activities, we passed our junior life within a blink of an eye. Our pea letter got double stripes; the black belt turned into the white one. What we haven't done in this period? The invaluable night fallen moments, those punishments, our cultural programmers, enjoyment happiness all are be yond any description.

On 31st January 2023, our juniors came to this academy. Now it was our turn to give them the joining tradition. just back a year we were in the same stage to get those things, Now it was our responsibility to teach them everything that we have learned from our seniors and instructors.

Our tome is almost over in this academy, very soon we will gonna pass out from here. We will leave our beloved juniors, our instructors and also that loyal remark of the senior cadets will be changed into ex-cadets of BMAB 2nd Batch. our juniors will become the senior cadets. They will now take over the royal holy responsibility on their shoulder to teach their juniors and thus carry on the legacy and all the traditions.

And now, whenever we close our eyes, we can see it is our last day in this beautiful dream land. we are taking death in the passing out parade our whole academic life is clearly vivid in our hearts Those glorious days & nights of struggle and enjoyments is being hashed in our mind within a blink of an eye. within these 2 golden years, every single grass of our academy has got our footsteps,our sweat. we are at the main gate but none of us can say anything. We are unable to talk because of our heavy clogged voice salty tears filled our eyes with shivering voice and gloomy blur eyes we could somehow tell the last few words to our beloved juniors yes juniors it is now your responsibility to keep yours if safe and make your bonding stronger and also keep up the legacy of the mariners.

After we will pass out, we will wary badly miss the whole arena of our academy, especially our cadet block parade ground, blue room, galley swimming pool academic block, our grassy fields, auditorium, mosque, infect cache and everything, but now it is our duty to serve our nation and also fulfill our dream to be a royal mariner, faunally we can promise to ourselves that "The discipline & unity that we keep now will last forever in our whole life".

ROUGH SEA BATTLE

Md. Sadik Al Asif
Department: Engineering
2nd Batch 4th Semester

In a small coastal town nestled between towering cliffs and the tumultuous sea, there lived an old fisherman named Thomas. Its weathered face bore the wrinkles of a life spent battling the relentless waves of the ocean. Thomas had seen it all calm seams and raging storms, beautiful catches and barren nets. But what he cherished most were the stories he carried in his heart, stories of a life about in a rough sea.

One stormy evening, as the gray clouds gathered ominously overhead, Thomas prepared his boat, The "Sea serpent" for another treacherous journey. Its gnarled hand expertly secured the nets and adjusted the sails, all while his toasty dog, skipper watched with unwavering loyalty.

As they set out into the tempest, Thomas couldn't help but reflect on his decades of fishing, the sea had given him moments of unparalleled beauty a pod of dolphins dancing alongside his boat a ferry sunset painting the sky with hues of orange and purple. But it had also taken from him friends lost to the depth's boats crushed by towering waves.

Tonight, the sea was in one of its must unforgiving moods. Enormous waves rose like mountain peaks, orating down with a deafening roar. The rain came down in sheets, stinging his face as its nature itself was challenging him. Yet, Thomas persisted, his heart full of the knowledge that a fisherman's duty was to brave the mouthiest seas.

Hours turned into an eternity and fatigue gnawed at Thomas bones. His hand ached from gripping the wheel, and his eyes strained to see through the relentless rain. But just as he contemplated surrendering to the tempest, the old man felt a powerful tug on his line. His eyes widened with excitement form he knew his could be the catch of a lifetime.

With every ounce of strength left in him, Thomas battled the mighty fish that threatened to pull him into the abyss. The struggle raged on, Man against nature and for a moment the line between them blurred, it was as if the sea itself challenged Thomas to prove his worth.

Finally, with a triumphant cry, Thomas reeled in a colossal marlin, its silvery scales glittering likediamonds in the stormy night. Gasping for breath, he crackled the magnificent creature in his arms, feelings an inexplicable bond with this creature of the deep. with his prized catch secured Thomas steered the "Sea Serpent" back towards the safety of the shore. The storm still raged but the old fisherman's heart was light form he had once again conquered the track hero's sea.

Bock in the cozy warmth of his collage, Thomas regaled the tale of his battle with the marlin to a captivated cadence of villagers who had gathered to welcome him home. It was a story of resilience of a life about in a rough sea and of the unbreakable bond between man and the untamed forces of nature.

As the fire crackled in the heath, the rain continued to pour outside but, in that moment, the old fisherman and his community were reminded of the enduring spirit that could weather any storm life tossed their way.

A TOOL TO ENHANCE STUDENTS' ACADEMIC EXCELLENCE

Ataullah Akunnd
Department: Nautical
2nd Batch 4th Semester

Technology has become essential in every part of human life. The world is Leaning towards artificial intelligence and automation day by day. We have developed some resources that were once unimaginable one of these technological advances is chat GPT. This AI language model can generate human like responses to various queries. Some people use it to decrease their workload. This technology can be a game changer for student providing personalized support and resource to improve their learning ability. The ethical use of chat GPT is essential to ensure academic integrity and originality.

Chat GPT has the ability to write essays papers on assignment for student, allowing them to pass of someone else's. Work as their own. So, it displays work beyond their capability. Moreover, this AI is having a tremendous influence on their writing capability. The proficiency of language develops a lot. However, it hampers their writing skill. A student loses his interest to write at his own. Thus, his original capability is being hindered. He also loses his interest to develop his writing skill as well.

If you want on avatar to give on introductory speech for your final presentation synthesis can amaze you and your audience making interactive presentation slides with beautiful themes and colour combination is a real head for students beautiful AI can help student in this case.

The student, however need to be wince of the ethical implication of using AI tools and use those responsibly. AI tools can enhance their learning and overcome barriers to academic success but the students should not use them by relying on them to do the work for them. Students can use Chat GPT for learning purpose. He should go through the output of Chat GPT. Thus, both his writing efficiency and subject knowledge will increase and he will be benefitted indeed.

"DON'T GIVE UP"

Md. Sabith
Department: Nautical
3rd Batch 2nd Semester

Once upon a time, in a peaceful village, there lived a cheerful boy named Rahim. His days were filled with happiness, surrounded by his loving family. However, this idyllic life was destined to face a severe and prolonged challenge. Rahim, along with his fellow villagers, found themselves grappling with a relentless drought that threatened their way of life. Their once lush and vibrant surroundings had withered away, leaving behind desolation.

As they gazed at the cloudless skies, hopelessly awaiting the life-giving rains, their hearts sank with each passing rainless day. The unforgiving drought had caused their crops to wither, their once-fertile land had turned to dust, and even the proud trees stood as lifeless sentinels. The suffering extended to their livestock, which were now weakened, starving, and dying of thirst. The very stream that had quenched their thirst for generations was slowly dwindling away, mirroring the villagers' despair.

One fateful night, Rahim, who had always been known for his unwavering determination and optimism, gathered the villagers for a crucial meeting. In the dim glow of the moon, Rahim spoke with conviction, "My friends, we've all heard stories from our grandparents about an underground river that flows beneath our village. Why don't we take matters into our own hands and dig to find it?" The villagers, though weary and skeptical, nodded in agreement. They embarked on a journey that required not only strength but also a powerful belief in the face of adversity.

Days turned into weeks as the villagers began digging with crude tools, their hands blistered and bodies aching. However, the relentless sun and their growing fatigue began to chip away at their spirits. Many of them were on the verge of giving up, believing it to be a futile endeavor. But Rahim, driven by an unshakeable faith, refused to be deterred.

He continued to dig, his determination unyielding, his resolve unwavering. When others questioned the sense in persevering, Rahim proclaimed, "I believe God is guiding my way, and with His help, we will find the solution we seek."

And then, one miraculous day, as Rahim's hands delved deeper into the earth, he felt something unexpected-the touch of water. A gasp of astonishment escaped his lips, and his eyes widened with disbelief. Water, the lifeblood of their village, had been discovered. Rahim's unwavering spirit had led them to salvation. The villagers rejoiced as the water flowed, their cries of joy echoing through the once-dry land.

This resolute attitude of not surrendering, despite the odds stacked against them, had saved the entire village. From that day forward, the villagers were never again in want of water. Whenever challenges or problems arose, the villagers came together, inspired by the indomitable spirit of Rahim, to seek solutions and face adversity head-on. Rahim's story became an enduring lesson in resilience, unity, and the power of unwavering determination, reminding them that even in the most challenging times, hope, faith, and persistence could lead to triumph.

WAY OF LIFE

Sayem Ahmed
Department: Nautical
2nd Batch 4th Semester

I am Sayem Ahmed. I am going to write something which flowed through my life. Let's start...From my childhood I was totally not interested in defence profession (Army, Navy, Air Force) though I had a little knowledge about it and I always respect them because of their sacrifice. Come to point, when I was in class seven, I cut my face in an accident and it made stain on my face. Then one thing came in my mind that I will never join in defence profession so it will not hamper in my career, because in childhood I heard if there is any cut mark on the body then it is difficult to join in defence. However, main story started after admission in college. I went my first orientation class with my father. That day some BNCC cadets were volunteering the programme. My father liked their activities and told me to join BNCC. After that I jointed But I had no idea about them. After joining for the first time, I fall in love for defence profession specially for 'Bangladesh Army'. Then I tried my best to be an Army Officer. But I never applied for Bangladesh Navy because I didn't like their life style at sea without Family for a long time. Whatever at the last stage everything went in vain.

But, Now see my luck, I am in such a profession where I will not be able to perform any duty without sailing on the big open ocean. Before joining 'Merchant Navy' I was very disappointed, but my parents always encourage me. After Joining I met few royal people from this royal profession those who are always motivating me in such a way that I already fall in love for this royal profession though I have not sailed yet.

Life is like that what I never expect, what I never liked, from where I always wanted to stay away, it automatically comes and goes through life. But one thing I realize that, whatever comes in life if there are correct people behind of this to encourage and motivate you, you are bound to fall in love for that.

Now my mind says: Sail through the ocean, feel the beauty find happiness and enjoy life.

IMPORTANCE OF MARITIME SECTOR IN PERSPECTIVE OF BANGLADESH

Md. Atikur Rahman Sagar
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2nd Batch 4th Semester

Blue Economy for Bangladesh

The Blue economy is a concept that has opened numerous windows of opportunity of economic development. This concept has opened the doors for improving human welfare, creating employment opportunities, alleviating poverty, ensuring national food security, protecting environmental balance and finding solutions for adverse impacts of climate change. Bangladesh is at the earliest stage of development of the blue economy.

Marine Food Production

The total marine water area of Bangladesh is 284, 813 square km, with a coastal belt of 710 km in length and 118, 813 sq. km of the Exclusive Economic Zone. In 2016, about 626, 528 metric tons of fish were found in this vast body of water, which was 16.15% of the total fish production of Bangladesh. According to several surveys, 149 fish species, 13 shrimp species and 14 different species of other crustaceans and molluscs are found in the marine waters of Bangladesh. Much of Bangladesh's revenue comes from marine fisheries, which amounted to the USD 505.80 million in 2017.

Shipbuilding

Maritime shipping is the most secure, cost effective and environmentally sound mode of international trade. 90% of the external freight trade of Bangladesh is done through the seas. There are 74 registered merchant ships and 124 registered shipyards in Bangladesh. Bangladesh also has an emerging shipbuilding industry, where the majority of the shipyards can design and build ships up to 3500 deadweight tonnage and eleven of them are capable of building ships up to 10,000 DWT. Bangladesh has started to compete with China and India with lower labour and overhead cost, where about 50,000 skilled and 100,000 semi-skilled workers are now employed in the Shipbuilding Industry.

Tourism

Bangladesh has immense potentials to garner benefits from the tourism sector, which creates jobs and business. The contribution of tourism to the GDP of Bangladesh was 4.3% or 10,567.4 million USD in 2017m creating over 2.8% of total employment in the country. One of the most important tourist spots is Cox's Bazar Sea Beach, the largest sea beach of the world. Every year a huge amount of revenue is being generated from this place to the national economy.

New Technology

Bangladesh has to embrace new technology, in the form of biotechnology, to extract the full benefits of the blue economy in a sustainable manner. Modern biotechnological tools for rearing and enhancing the production of aquatic species can meet the global demands of seafood and enhance aquaculture farming at the same time.

Conclusion

As a coastal state, maritime sector and blue economy has a huge potential. But it has some hard challenges too. Bangladeshi shipbuilding companies are working within significant financial constraints with a lack of capital and limited investments. Marine food production is hampering due to climate change and lack of proper regulations. During COVID-19 pandemic the whole tourism industry was stopped. Marine ecosystem is being destroyed because of environment pollution. To extract the 100% benefit from the blue economy Bangladesh has to take a proper action. The Government has to take a sustainable approach in order to save the maritime industry. Public awareness has to be improved to stop the pollution and investors have to be encouraged to investment their capital in our industry. Only this can establish Bangladesh as a sustainable benchmark of Blue Economy in front of the developing world.

WARMER OCEANS POINT TO GROWING SCALE OF THE CLIMATE CHANGE PROBLEM

Boni Yeamin Sajib
Department: Nautical
2nd Batch 4th Semester

Humankinds greatest ally in showing down culture ultimately climate change is the Earth's oceans. But if they continue to warm up and scientists say this is due to human activities then the battle to contain climate change and the warming of our planet will surely be lost leaving us all to face an uncertain future.

As we all welcomed the spring season full of hope and the regeneration of nature, new data ponied to fresh records being broken, with "unprecedented" water temperature highs recorded last month. Scientists stated that the Earth had reached "Uncharted territory" in the ongoing battle to contain the intensification of climate change that we have witnessed over the past three or four decades.

While trying to prepare a table of the conflicts plaguing our planet for a piece I wanted to write in the future, I randomly looked at this crisis, which requires the immediate and urgent attention of the international community. The rising temperature of the oceans keeps on ranking higher in my amateurish table of existential threats to the survival of humanity.

However, the rapid acceleration in the rise in ocean temperatures over the last 40 days is being seen as anomaly scientists are unable to explain. Data collected by the US National Oceanic and Atmospheric Administration, known as the optimum Interpolation Sea Surface Temperature Series, has shown ocean temperatures higher than in any previous year stretching back to 1981. Warmer oceans, we are told by scientists result in sea water taking up more space, hence accelerating sea level rises. Many scientists also believe that unexpected warming at this rate might be a sign that the climate crisis is moving aa faster rate than previously thought.

It is common knowledge that ocean has along acted as a buffer to prevent rapid climate change by absorbing vast amounts of carbon di oxide that we have emitted into the atmosphere. They store 90 percent of the excess energy and warming these emissions have created, tempering some of the excess heat on land.

So, the percentage rapid and the recent rapid rise in ocean temperatures is a cause for concern for scientists, as may be the oceans are reaching their limit in terms of the amount of excess heat they can absorb.

This latest data points to the scale of the problems ahead. If nations states do not put aside their differences or if simple human greed over powers the rush to do work together, slow down if not to stop, the first decent of our planet into health, our food security and even the air we breathe is at risk.

JOKES

Tahidul Islam
Department: Nautical
3rd Batch 2nd Semester

All that glitters

After his jewellery shop was robed five times in two weeks by the same thief, the police asked the owner if he could give a description of the robber, "yes", said the owner, "He was dressed a little better each time he robbed the shop",

Beats that all

Many Years ago, my grandfather taught carpentry at a technical college, and part of his job involved proctoring written exams,
During one of these exams, a couple of students were tapping their pens quite loudly, on the face of it, this wasn't so unusual, plenty of people in exams tap pens, drum fingers, etc. as an aid to memory -or at least, they certainly did when I took my exams. These taps, I seemed rather more...well rhythmic, A few taps later, Grandfather who was in the naval cadets as a boy- realized that these two students were using their code' Without saying a word, Grandfather picked up a pen of his own, glaring pointedly at the guilty student's and tapped out the phrase, 'I K-N-O-WM-O-R-S-E C-O-D-E T-O-O.'
Funnily enough, the tapping stopped immediately after that.

JOKES

Sk. Imtias Ahmad
Department: Nautical
3rd Batch 2nd Semester

Santa: Oyez! What are you doing?
Banta: Recoding this baby's voice.
Santa: Why?
Banta: When he grows up, I shall ask him what he meant by this.
_____-_____

Wife: Had your lunch?
Husband: Had your lunch?
Wife: I'm asking you.
Husband: I'm asking you.
Wife: You copying me?
Husband: You copying me?
Wife: Let's go shopping.
Husband: Yes, I had my lunch.
_____-_____

Patient: Doctor, I have a pain in my eye when even I drink tea.
Doctor: Take the spoon out of the mug before you drink.
_____-_____

Teacher: Why one you late?
Student: Man & Dad were fighting
Teacher: So, what makes you late if they were fighting?
Student: My one shoe was in monies hand and one in dad's
Man: Why is your Wife shouting at you?
Friend: Instead of posting her photo on Facebook I uploaded her photo on bikroy. com!
_____-_____

Boy: Our principle is so stupid.
Girl: Don't you know who am I?
Boy: No.
Girl: I'm the principal's daughter.
Boy: Do you know who am I?
Girl: No.
Boy: Good.....(walks away).

OH SAILOR

Shahadat Hossain
Department: Nautical
3rd Batch 2ndSemester

Alfred was a sailor, a brave one
Sailing meant life and ocean was his home.
Used to breath high while he sails
Waves sounds to him as rime.
To him sound of the wind was song
Always felt in sea younger.
His whole life was devoted to sail
Without ocean he felt like jail
Loved to sail at his beloved horizon
In sea he had no limitation.
Once in a while he came to land,
Stepped on the ground and felt the sand.
There met a woman of blue eyes
Felt like ocean and he fell for her
But his first love was the sea
As he always wanted to go far and far
So, he left her behind out of fear
Although he saw her eyes filled with tear.
But for him life goes on and on.
Sailing was thing for what he born,
He felt in the sea some one's lack,
But he never thought to look back.

WHEN MY LESSONS ARE NEVER COMPLETED

Maher Md. Chowdhury Tanim
Department: Nautical
2nd Batch 4th Semester

When I became a deck cadet,
I knew a few things.
When I became a 3rd officer,
I knew almost everything.
When I became a 2nd officer,
I came to know that,
I am not as smart as I think Iam.
When I became a 1st officer,
I realized that I had so much to learn.
When I became a master,
I understood that the things I knew are not enough.
But in the end, It didn't matter.
Because my 3rd officer knew almost everything.

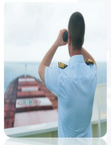
THE SEA

Sk. Imtias Ahmad
Department:Nautical
3rd Batch 2nd Semester

The sea can be angry.
The sea can be rough.
The sea can be wild.
The sea can be tough.
The sea can rip.
The sea can tear.
The sea can roar,
Like a hungrybean.
The sea can be gentle.
The sea can be flat.
The sea can be as calm as a sleepingcat.
The sea can glide over the sand.
Stocking the beach like a giant hand.

FUTURE SEAFARERS

Shamil Shahid
Department: Nautical
2nd Batch 4th Semester



To all my batch mates and juniors out there
We're a kind of man that is rare.
We will sail port to port which is never easy.

For our family or our homeland
Too far but cannot cut our bonds.
Even if we are far from our lovedones.
A day with them will be our lance.

It's sad to say how people judge us.
Disregarding it but it has a mass.
We don't talk for us to believe.
Are these works is what you give?

They say we're fool and full
Fool to trust our "I Love You".
It feels good when you will be the way back home.
Stealing kisses and hugs that comes years and Month.
Then again it will be hard when we need to learn again.
Our eyes won't lie to "I Miss You"
All I wanted is to be with you.

Sailing one land to another land will not make love to other girls
When I'll finish my job, I'll buy you a rose".

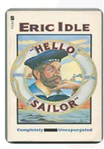
DIGNITY

Md. Ehsanul Haque Fardin
Department: Engineering
2nd Batch 4th Semester

You get dignity,
When you stop thinking wrong
when you do what you barn right
You can live dignified,
when you live a lifestyle that,
matches our vision.
You can get dignify,
when you renounce that, "ego of individuality",
And rejoice in the ups & downs of life.
There is dignity,
When you have good thoughts,
in your heart & mind.

SAILOR'S IDLE

Syed Sakin
Department: Engineering
2nd Batch 4th Semester



When my sailing days are over,
And I sail the seas no more,
I shall build myself a refuge.
By the ocean's murmuring shore.
As I watch the foaming breakers
When the tide comes rushing in,
I will contemplate my life time
with its virtues and its sins
Where the azure of the heavens
Meets the undulating blue,
Where the sweeping, soaring seagull
Flies its endless quest for food.
It is there that I would rest,
When my work on earth is done
At the endless blue horizon
Neath the crimson, setting sun.

THE TWO FORMS OF "HER"

Md. Sadik Al Asif
Department: Engineering
2nd Batch 4th Semester

You are very reserved, don't listen to words
You are very selfless, relieve pain through music.
You are very passionate, cannot be touched up close.
You are very calm, adorned with tranquility.
You are very solitary,don'twant anyone as a companion!
You are very generous, never diminish someone's rights.
You are very stern; your words arefinal.
You are cruel, love with an ulterior motive.
You are very bad, don't want to understand your own good.
You are very good, spread love among everyone.
You are very oblivious, don't accept true love.
You are very knowledgeable, in the midst of truth and falsehood.
You are very aggressive, don't hesitate to strike
You are very compassionate; service is your row.
You are very uncompromising, can't be held
you are very responsible, be cautious in your work.

You are very restless, run around timelessly
You are very steady, play with your eyes.
You are very foolish, don't think about the consequences.
You are very wise, know how things will unfold.
You are very evil, ignite fires in the face of injustice.
You are very beautiful, make everything end with love.

RHYTHM OF LIFE

Md. H M Junayed Hossain
Department: Engineering
2nd Batch 4th Semester

What a wonderful day!
Sky is both blue and gray.
Very common scenario of life,
sorrow and happiness come in a line,
But after the rain the sun will shine.
life goes like that.
because after sadness happiness in line.
That's what life means,
If there is no dark than,
Why light is in need?

Dark makes the light complete
As happiness to sadness.
That's how life works,
By completing each other's.
Life goes on.
Even there is no-one.
Emptiness will be felt,
But everything will come to an end.

Oh! My dear,
Don't lose hope.
It's just the beginning.
of a new bright hope.

DEAR JUNIORS

Majharul Islam Shihab
Department: Engineering
2nd Batch 4th Semester

To my juniors, I proudly say
March on with strength, come that may.
with courage in your heart, and honor held high
You'll conquer all challenges, reach for the sky.

In unity and teamwork, your strength will grow,
In the face of adversity, let your spirit flow.
with each step you take, in this noble career,
know that your seniors stand with you, always near.

From cadet's first steps to chief engineer's throne.
A journey marked by training hardship well-known.
They toil and they learn, from deck to machine,
In their eyes, the spark of maritime dreams.

Through the rough seas they sail with courage and cheer,
Endurance and loyalty, their royal veneer
In epaulets of honor, they proudly appear,
From cadet to chief, their journey premiere.

CADET'S LIFE

Md. Noman Sarker
Department: Engineering
2nd Batch 4th Semester

In the heart of the academy's domain,
Where knowledge and courage intertwine,
Lies a world of Cadets, young and bold,
A story of adventure waiting to be told.

With uniform crisp and hearts set high,
They march to the call rhythm, they find their tune,
Underneath the radiant, silvery moon.

Form cleanroom to dorm, their journey unfolds,
As they chart their path through challenges untold,
with mentors as guides, and friendships as glue,
They forge them spirts like tempered steel true,

In the wept of night, under starry constellation,
They learn the art of navigation's calculations,
And in those dark hours, the sea whippers its lore,
To cadets who hunger for knowledge & more.
Through tempests and calms, they brave the tide,
with unwavering purpose, the stand side by side,
In the camaraderie of ship and shared dreams,
They find strength, resilience and life's endless themes.

Cadet life, a chapter in the grand voyage of youth,
Where character is shaped, and they find their truth,
with hope as their compass and courage as their guide,
They sail into the future, side by side.

In the annals of time, their stories will glean,
form cadet life is more than just a dream,
It's a journey of discovery, then just a dream,
It's a journey of discovery, honor and grace,
In this maritime world, a cherished place.

BENEATH THE AZURE WAVES

Md. Noman Sarker
Department: Engineering
2nd Batch 4th Semester

Beneath the azure waves, a world unknown,
Where mysteries in depths of blue are sown,
Marine cadets embark with hearts aflame, to
learn the secrets of the ocean's name.

They Navigate the dudes, bath high I low,
Through storms and calms where mighty trade winds blow,
Their compass set by stars and ancient lore,
guiding them stately to distant shore.

In cleanrooms filled with charts and maritime chart,
They study Charts, with passion in their hearts,
for in their hands, with passion in their hearts,
for in their hands, the ocean's future lies,
A legacy of stewardship to the slices.

They learn to cherish cache coral's brilliant hue,
Protecting habitats where creatures thrive and grew,
with every knot they tie, every sail they raise,
They honor nature's beauty in countless ways.

So, raise the anchor high, set troth with pride,
with the oceans as their muse and faithful guide
Marine cadets, a beacon in the night,
Navigating towards a future pure bright.

CAPTAIN'S GUIDELINE

Sheakh Mohammad Tazim
Department: Engineering
2nd Batch 4th Semester

In the halls of Marine Academy, we stand
Under Commandant's Command
A leader, a mentor, with wisdom so grand
Guiding us, shaping future, hand in hand

With the sea in his heart and a steady hand's grace,
He sails through challenges, sets the pace.
In the Ocean's embrace, he finds his place,
A Captain of honor, a sailor's embrace

With stars in his eyes and the wind in his sail,
He steers our ship through every storm's trail.
His dedication and courage will never fail
Commandant! We set our sail.

In his maritime world, he's a beacon of light
Guiding us through day in to the light
With knowledge and courage, he takes every fight
Commandant! Our guiding star so bright.

To the captain who inspires, our gratitude true.
We dedicate his poem, our heartful tribute to you,
In the wave of life, through the ocean so blue
Respected Commandant! We salute and thank you.

THE CALL OF THE SEA

Maher Md. Chowdhury Tanim
Department: Nautical
2nd Batch 4th Semester

The day I left my home,
My siblings cried, and also my mom.
I also cried, knowing that it was the beginning
Of a long journey, with no ending.
But it was my destiny.
To sail under the stars,
With a heart full of scars.
To sail across the seven seas,
To sail as far as I can see.
To raise over the waves,
Not to sleep inside a cave.
To behold the world full of wonder and mystery
To travel back to the hours of history.
And, If I ever die at the sea,
Remember, I am a sailor, A man of the sea.


- Sayem Ahmed (2nd Batch)
(03.10.2023)
Sayem Ahmed
Department: Nautical
2nd Batch 4th Semester

Bangladesh Marine Academy, Barishal

Photo Gallery

Father of the Nation
Founder of Maritime Bangladesh

Mujib Corner, Bangladesh Marine Academy, Barishal

Photo Gallery

Inauguration of BMAB by Honourable Prime Minister Sheikh Hasina on 06 May 2021

Inauguration of Bangladesh Marine Academy, Barishal

Photo Gallery

Oath Taking Program at BMAB on Golden Jubilee of Independence

Morning Procession on the Occasion of International Mother Language Day

Photo Gallery

Cake Cutting Ceremony by Khalid Mahmud Chowdhury, MP, State Minister

Visit of Khalid Mahmud Chowdhury, MP, State Minister

Photo Gallery

Tree Plantation by Khalid Mahmud Chowdhury, MP, State Minister, MoS

Inauguration of Fire Fighting Simulator by Mr. Mostafa Kamal, Senior Secretary, MoS

Photo Gallery

Training Program Inaugurated by Ms. Laila Jashmin, Additional Secretary, MoS

Cadets' First Day at BMAB

Photo Gallery

Recapitulations of First Step of BMAB Cadets

Rally by BMAB on World Maritime Day

National Days

Wreath Laying by Commandant, BMAB at Portrait of Father of Nation Bangabandhu Sheikh Mujibur Rahman on 15th August National Day of Mourning

Cadets at Bangabandhu Uddyan on the Occasion of Independence Day

National Days

Inter Division Football Match on Sheikh Kamal Day

Wreath Laying on the Occasion of Sheikh Russel Day

National Days

Cadets' Talk on the Occasion of Sheikh Russel Day

Wreath Laying on the Occasion of Mother Language Day

National Days

Documentary Exhibition on the Occasion of the Historic 7th March

Discussion on Genocide Day

National Days

Cultural Program on the Occasion of Independence Day

Bangabandhu's Biography Discussion on the occasion of National Mourning Day

National Days

Cadets Participated in National Parade on the occasion of Victory Day

Tree Plantation on World Maritime Day

National Days

All Officers, Instructors, Staffs and Cadets of Bangladesh Marine Academy, Barisal are Listening to the Historic 7th March Speech

Distribution of Food by BMAB to Orphans on Father of the Nation Bangabandhu Sheikh Mujibur Rahman's Birth Anniversary and National Children's Day

Visit by Important Personalities

Cake Cutting by Col (Retd) Zahid Farooq Shamim, MP

Visit by Admiral Nazmul Hasan, Chief of Naval Staff, Bangladesh Navy

Visit by Important Personalities

Visit by VC & Faculty Members of University of Barishal

Meeting of all Commandants at BMAB

Foregin Delegation

Visitors from China at BMAB

Commandant's Visit to China

Inspection

Semester Final Exam-Invigilator from BSMRMU

Inspection by BSMRMU Team

Inspection

Audit Team from the Office of CAG

Training Inspection from DG Shipping

MoU Signing

MoU Signing Ceremony between Bangladesh Marine Academy, Barishal & University of Barishal

MoU Signing Ceremony between BMAB & BMA, Chattogram

Visitor's Book Signing

BMAB Visitor's Book Signing by Maj (Retd) Rafiqul Islam, Biruttam, MP, President, Parliamentary Committee, Ministry of Shipping

BMAB Visitor's Book Sign by VC, University of Barishal

Training Visit

Training Visit at BNA

Training Visit at Khulna Shipyard

Training Visit

BMAB Cadets' Training Visit On board Ship at Mongla Port

Training Visit at Sundarban Shipyard

Training Visit

Training Visit at Chittagong Dry Dock Ltd

Training Visit to Mongla Port

Study Tour

19th SSAC Officers' Visit at BMAB from Supply, Secretariat & Management School, Khulna

BMAB Visit by BSMRMU Students & Faculty Staff

Games and Sports

Inter Division Cross Country Competition

Inter Division Swimming Competition

Games and Sports

Inter Division Basketball Competition

Billiard Competition

Games and Sports

Inter Division Table Tennis Competition

Inter Division Football Competition

Co-Curricular Activities

Parade Inspection by Commandant, BMAB

BMAB Cadets' Bar Awardeing Ceremony

Co-Curricular Activities

Commandant's Debrifing on Cadets Performance

Camp Fire

Co-Curricular Activities

Cadets' Celebration of Camp Fire

Cadets' Performing in Cultural Program

Co-Curricular Activities

Duet by Cadets

Mess Night

Co-Curricular Activities

Mess Night

"Bangladesh Marine Academy, Barishal is dedicated to preparing its cadets to become leaders in the maritime sector & aboard ocean-going vessels. In addition to academic, professional, leadership and physical training, the academy organizes various co-curricular activities aimed at maximizing the potential of future marine leaders. Cadets at BMAB actively engage in cultural programs, cadets talks, mess nights, gala nights, cam fires, and more, organizing these events with the academy's support."

Exchanging of Souvenir

Chief of Naval Staff Visiting BMAB

Exchange of Souvenir by Commandant, BMAB & Commandant, BMAR

Exchanging of Souvenir

Exchange of Souvenir by Commandant, BMAB & MD of Meghna Group

Exchange of Souvenir by Commandant, BMAB & MD, Aquamarine BD Ltd

Exchanging of Souvenir

Cadets' Training Visit to CDDL

Exchange of Souvenir by Commandant, BMAB to Visitor Team from Bangladesh Merchant Maritime Officers' Association

Ancillary Course

Fire Fighting Drill

Personal Survival Technic