

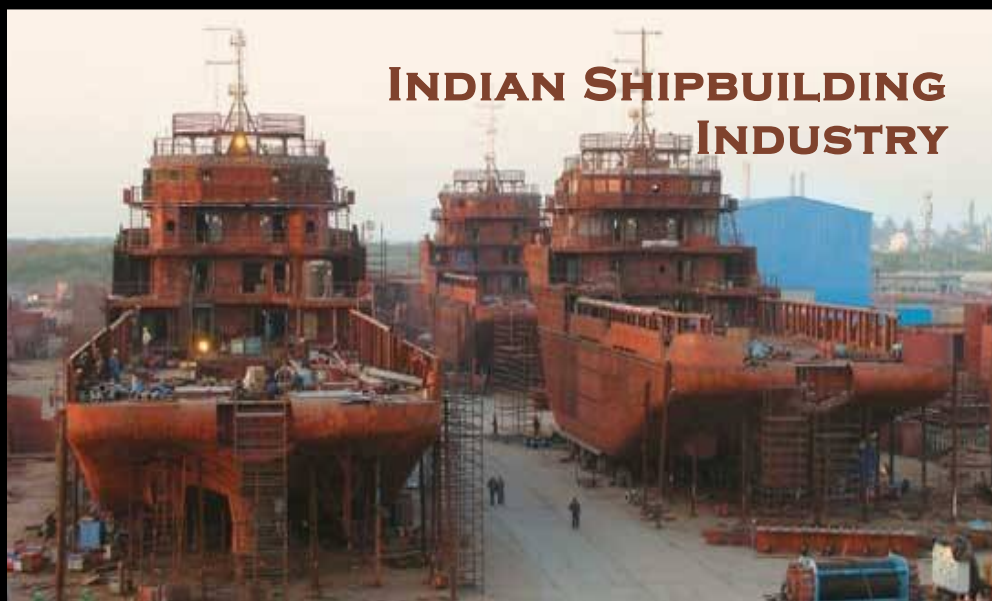


La Ola

**The E-Newsletter Of Indian Maritime University
Visakhapatnam Campus**

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Issue XII



MARITIME HISTORY

HOW TO MAKE YOUR CV??



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Vice Chancellor's Message

Dear Students,

It is good to know that as students at IMU V, you have created your own positive energy outlets, of which La Ola is one. As I glance through some of your past issues, I find there is an interesting collection of snippets related to the shipping sector. The student buzz also brings out your efforts at connecting with the other institutions like IITs at Kharagpur and Chennai and the NIOT... On the same lines, my best wishes for Tech Samudra.



I would encourage you to connect to the other IMU Campuses and see how 'the wave' can gently envelop the entire IMU student community. I would also encourage you to take the lead in organising and participating in an inter-campus students' festival some time during this academic year.

My best wishes to all of you, and especially the pioneering batch of the B.Tech students for efforts towards a successful placement and a challenging career.

I do hope teacher's day offers you an opportunity to re-dedicate yourself to some of those who have played an important role in 'making' you.

- Prof. G Raghuram



SUBMARINE DESIGN - VOLUME I

What is a submarine??

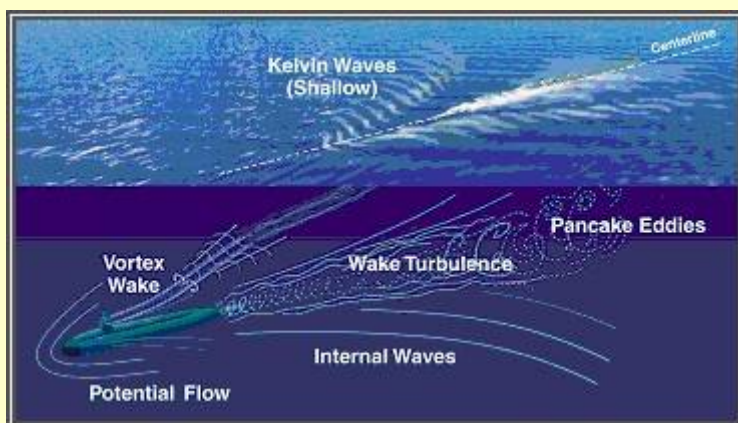
Submarine is a watercraft that can be operated under water. It is a large crewed autonomous vessel which is usually referred to as a “boat” rather than a “ship” irrespective of its size. They are normally military vehicles with stealth capacity and most of the non-military submarines built are only for marine & oceanographic research. Since 1775 when it was first constructed, till date submarine designs have undergone numerous changes as per the need of the time. Here is a humble attempt to familiarize with the design aspects/features of a submarine.



Design Approach

Interactions

It is a principle of successful design that no particular feature can be considered in isolation but must be considered with all its interactions.



Most submarines constructed during the last quarter of the 20th century can be characterized as demonstrations of single purpose innovations. The integration of selected new technologies to improve overall system efficiency and affordability is the achievement that will characterize the more capable, yet still affordable submarine systems.

In their book ‘Concepts in Submarine Design’, Burcher and Rydill discuss the interaction of each feature of the design on all the other features and for success they must fit together like a jigsaw puzzle. If one piece is altered then the adjacent pieces have to be altered to allow it to fit.



Priorities in design

The priorities in the design with regard to internal volume and all that is needed on-board, the range will determine the fuel load, the operating depth will determine the strength, the technology will play a large part in determining the crew requirements, the feeding, accommodation and thus the interactions.

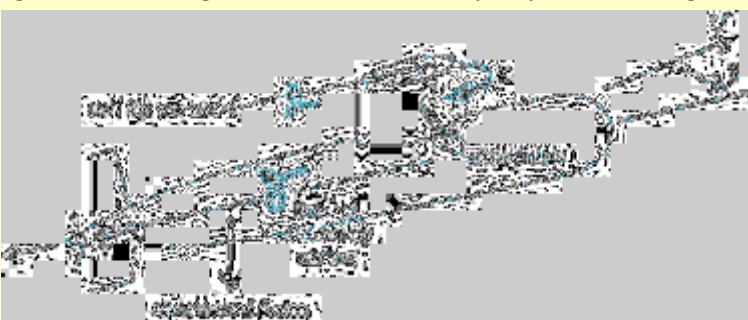
Area of interest, Range and Transit time

An Indian submarine may be required to travel from its base along the coast of India to as far as the Arabian Sea or the China

Sea, which gives a round trip of over 10,000 nmi plus time on patrol without refuelling. So a range of over 12,000 nmi might be required. A transit time of 12 knots over two weeks would be required to reach the furthest operational area, an unduly long time.

Speed

Transit Speed is another feature composed of part snorkelling and fully submerged battery powered operation. Then the snorkelling speed cannot be too great, being limited not only by the drag, the vibrations and wake signature left on



the surface, but also by the power available to recharge the batteries and the exposed time. Consequently the snorkelling speed is reduced well below the maximum.

Diving Depth

In the design of a submarine the depth to which it operates also plays a crucial role. The hull has to be stronger as we go deeper and the more weight is proportioned to the structure leaving less available for all the other requirements like fuel, armaments, machinery, etc.

Further Design priorities are based on combat systems, maintenance, resupply, crew size, type of power-plant to be used etc.

References: 1) [Aspects of Submarine Design By Prof. P N Joubert.](#)

2) [Concepts in Submarine Design by Burcher & Rydill.](#)



REVOLUTIONS AT SEA

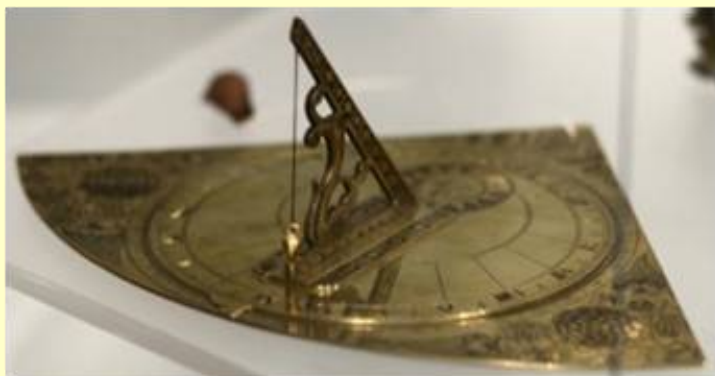
As promised in the last edition, La Ola presents a series of articles on Maritime History

Gone are the days when a ship navigation officer had to take help of unconventional ways to plan and navigate a voyage at sea. Today, a ship officer has myriad of marine navigation equipment which makes his life a lot simpler, thanks to the advancement in technology.

However, it is very interesting to note the various methods & crude tools used by yesteryear navigators and yet produce commendable results. The following are some ancient navigating tools used

Astrolabe

The mariner's astrolabe was a simple metal graduated ring used for measuring celestial altitudes. It was well developed in the Muslim world by 800 AD, but it wasn't introduced to Europe until the 12th century. Despite thwarting Columbus' best attempts during his first voyage, the astrolabe was the most popular astronomical instrument until the 1650s.



Quadrant

Favoured by Columbus, the quadrant is a metal plate in the shape of a quarter-circle, with a weight on a string that crossed the opposite edge of the circle hung from its centre. The navigator would sight the North Star along one edge, and the point where the string crossed the edge would show the star's altitude or angle above the horizon.



Indian Shipbuilding Industry

India is a major maritime country, predominantly peninsular in nature having a coastline of 7500 Km and more than 1500 islands, that are located along major maritime routes of the world. The excavation of the world's first 'Tidal Dock' at Lothal, Gujarat – A niche of the Harappan Civilization, is a testimony of the eternal shipbuilding history of our country.



In spite of having such a hoary history of maritime & shipbuilding industry, India has not established itself as a major shipbuilding nation. Shipbuilding is an important and strategic industry, which is globalised, technology based and capital intensive. The industry is influenced by developments in the shipping sector and dynamics of commodity trading. The uniqueness of this industry is that a ship is custom made and is sold even before the construction begins. Hence is characterized by a time bound delivery system without delays.

Owing to the lower costs of labor & efficient working conditions, the world shipbuilding industry has seen a gradual shift from the European regions towards the east. However, India has not been able to capitalize on this changing scenario with the country's share in the Global Shipbuilding Industry remaining at an all time high of 1.24% between 2002-2007 but declining gradually to a meager 0.01% which is extremely alarming.

The interim rise was due to a 30% subsidy provided by the government, but was eventually pulled out in the year 2007. The Working Group of the 11th Five Year Plan, in its report has said that the continuance of the subsidy would lead to India reaching the levels of China which enjoys a 34% share in Global Shipbuilding.

These things point towards an imminent revival of the Indian Shipbuilding Industry.

Indian Growth story has been possible mainly due to a growth in the Service Sectors of our economy. The share of Manufacturing Industry in India's GDP is only 16% unlike countries like China and South Korea, where the shares are a mighty 42% & 30% respectively. Manufacturing Industry is a source of both employment & revenue, and Shipbuilding, being



a manpower and capital intensive industry can contribute abundantly to our growth story. As the American President Barack Obama recently said 'A robust, vigorous & dynamic Manufacturing Sector is the lynchpin of **“an economy built to last”**'. It is extremely vital that we take a cue from this.

Indian Shipbuilding Industry has long being dogged by low capacity, poor productivity and lack of modernization. There should be an urgency to improve our shipyards.

There is also a need to identify and promote apt locations on our 7500km long coastline. The formation of Shipbuilding Clusters as in South Korea & China is a wonderful model. The emulation of such a cluster at the mouth of River Narmada in Gujarat is a welcome step in this direction.

Two very positive steps taken by the government in this direction includes-

- 1) Increasing Share of Indian Shipbuilding in the global arena to up to 5% as per the Maritime Agenda 2020.
- 2) National Manufacturing Policy 2011 identifying Shipbuilding as an 'Industry with Strategic Importance'.

Furthering Public Private Partnership Models is an important step to bring in entrepreneurs in the main stream, which can increase competition in the markets and thereby act as a check on falling standards. It can be observed today that shipyards like Mazagaon Dock, Cochin Shipyard, Pipavav & Adani have brought about greater vigor & competition in the otherwise sluggish industry.

India's growth as a manufacturing hub in shipbuilding industry can be envisaged by ensuring proper policy facilitation leading to conducive environments for business to prosper and creation of a robust Research & Development to upgrade and improve the standards of our shipyards and make them world class.

All these steps can lead to attracting numerous investments and hence be a contributor to the Indian Growth Story.





Your Life Ahead....

How to make a catchy & impressive Curriculum Vitae...??

The best starting point for writing curriculum vitae is to think of you as a product. Your goal is to convince the buyer—whether he is an employer or a college admissions officer—that you are the best product for the position they have. Grasping this concept early on will fundamentally change how you write your CV and give you the best chance.

Think of your CV as a brochure, highlighting the reasons you should be recruited. It's critical to get it right first time.

Length

If you are a recent graduate, a 2-3 page CV is fine. It needs to be brief enough to read through quickly yet containing the essentials.



Mirroring the employer's needs

When an organisation advertises a vacant role, it is saying to the market: "We have a problem: we don't have someone who can fill this position." Therefore it is important that both your CV prove that you are the solution to its quandary.

This is where "mirroring" the job description is the key. In job descriptions there is a section highlighting the specific skills and abilities the employer is seeking. Mirror these in your CV.

Highlighting your achievements

When most people write a CV, they usually just list their experience, education, responsibilities etc. However, the second key to an effective CV is showing how you excelled in these areas. As a graduate, there are many ways to do this, like:

- Have you gained any high level grades?
- Were you awarded any responsibility (like class rep. or committee member)
- Did you receive any awards or scholarships?

If you have had any practical work experience, highlight this to show your ability to work in teams, relate professionally to customers and demonstrate your work ethic. Any voluntary experience can also be a value addition.



KEY AREAS OF YOUR CV

- **Contact Details**

This should be the first thing the employer sees. If they want to contact you, it's should be easy. Also make sure that they are correct.

- **Objective**

Ensure you mirror what the firm is seeking, as well as highlight the job title. This will immediately draw the eye of the reader, and start to show 'you' as the solution to his problem.



- **Personal Summary**

Generally this section is around 4-5 bullet points, concentrating on the specifics of the role, team orientation, software knowledge and personal traits such as being proactive and having a high attention to detail. Assess & highlight the key words from job description.

- **Career History**

Almost any work experience is relevant when you are starting your career. Recruiters at the early stages are looking for reasons *not* to interview you, so a candidate with some part-time experience may have an extra edge.

After each position have another "Major Achievements" section, highlighting any commendations you may have received/ further responsibilities you may have been awarded.

- **IT Knowledge**

This section should be a brief account of the main software packages you know. Also note that if a specific program is not listed, it will be assumed that you do not know it.

- **Interests**

It is important to be seen as an all-rounder, not just a machine who is only interested in work 24/7. Therefore briefly list 4-8 of your interests. This section can also include any voluntary or community support activities you may be involved with.

These small points should help you form a impressive & catchy Curriculum Vitae.



KILL YOUR TIME.....

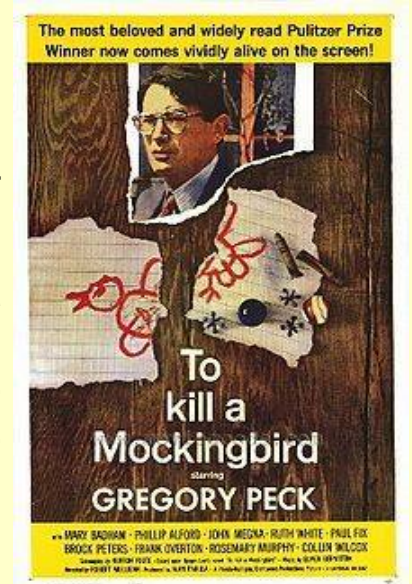
CLASSICAL REVIEW- TO KILL A MOCKING BIRD

"It's a sin to kill a mockingbird." - Atticus Finch

It's a rare that a movie captures the magic of a great book, and yet holds its own as a masterpiece of cinema. To Kill a Mockingbird does just that.

Set in a small Alabama town during the Great Depression, it raises great questions of racism, poverty, ignorance and injustice with enormous grace and emotional power. Moral and deeply humane, the movie is a classic coming-of-age story of childhood innocence lost in the segregated American south.

Go for it to get a classical feel....

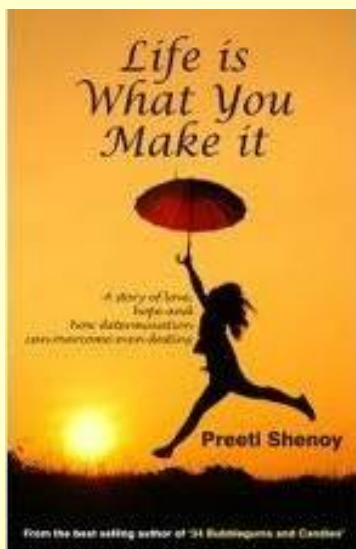


MUST READ-LIFE IS WHAT YOU MAKE IT (PREETI SHENOY)

After the success of her first book Preeti Shenoy pens down another masterpiece about how determination can overcome destiny. Set in two cities Kochi and Mumbai, this heart warming tale is about Ankita who has achieved every possible success that a girl of her age would envy her for- a great graduate degree, admission to a most prestigious B-School of India.

But then you never know what destiny has in store for you.....

Read this tale about love, success, failure and how will power can overcome even destiny.



Tickle your brain....

A man has a gold chain with 7 links. He needs the service of a laborer for 7 days at a fee of one gold link per day. However, each day of work needs to be paid for separately. In other words, the worker must be paid each day after working and if the laborer is ever overpaid he will quit with the extra money. Also he will never allow himself to be owed a link.

What is the fewest number of cuts to the chain to facilitate this arrangement and how does that guarantee payment?

CAMPUZZZZ.....



- The new Vice Chancellor Prof. G Raghuram visited the Visakhapatnam Campus on 2nd August, 2012. During the visit, he inaugurated the new hostel block which was recently constructed. He also had a n interaction with the students.
- Mr. Yoshiaki Gonno from Sumitomo Heavy Industries & Marine Engineering visited the Campus. He addressed the students on 'Ship building Industry in Japan'. The talk was interesting & knowledgeable.



- The students of the campus celebrated Krishna Janmashtami on 10th August, 2012 with a lot of pomp & joy. A 'Dahi Handi' was organized which was participated with a lot of vigour & enthusiasm.



- A new batch of students joined the campus under the Undergraduate Program in Naval Architecture & Ocean Engineering & Post Graduate Program in NAOE & Dredging & Harbor Engineering.



- Onam was celebrated at the campus on 29th August, 2012. Beautiful floral designs were put up by the students. Our celebrations were graced by the benevolent fictitious King Mahabali from the Legend of Onam.

- A Cricket Tournament was held in the campus between the four houses– Kiltan, Veer, Nirghat & Nipat. Nipat emerged as the winner with Kiltan at second & Veer third.
- At the end of the sports Tournament, House Championship was declared. Veer is placed First, followed by Kiltan at Second Place & Nipat at Third Place.
- The new NASS committee has assumed office. The various office bearers are: Abhinow Kumar Singh(Secretary), Prudhvi Raju (Cultural Secretary), Ramsingh Chauhan (Sports Secretary), Saurav Chandra(Treasurer), Shantanu(Asst. Secretary), Anmol Panda (Asst. Cultural Secretary), Anand Choubey(Asst. Sports Secretary), Saurabh Prajapati (Member– Executive Council), Sarath Babu S (Member– Executive Council).



From the Chief - Editor's Desk

La Ola takes pride in releasing the twelfth edition. This edition is marking its glory by being the first edition of this academic year. Prof. S C Misra our beloved Director who had the vision of having an e magazine in the campus conceptualised this news letter in the year 2010. Since then this vision was nurtured by Bikram Senapati as the chief editor and successfully released 11 news letters.

My team and I were bestowed upon the job of carrying it forward through the academic year 2012-2013. As the magazine has made considerable movement it will be easy for our team to move forward under the guidance of our beloved Director Prof. S C Misra and editorial advisor Mrs. Padmasree.

The year 2012 has brought in new changes in university. Prof. G Raghuram has taken over as the vice chancellor of our University. An open letter to us shows his interest in building up our campus and reminding us of our responsibility in making campus a better place to live.

Our director has brought new faculties in different departments marking the growth of our campus in terms of the knowledge which they will impart. His ability and contacts have enabled our Final year students to carryout their internship successfully at Mazagaon Dock, Cochin Shipyard, L&T Design office, ABG Shipyard, GRSE- Kolkata, Zebec Marine, Hindustan Shipyard. La Ola expresses sincere gratitude to all these institutions for accommodating them as a part of the internship program.

The new batch of students have joined the campus and in terms of the freshness the fragrance is everywhere. Team La Ola welcomes each and every student. You are going to be groomed by the best of the faculties and above all you will be proud to say that we are students of Prof. S C Misra.

This month being September we are reminded of our teachers and as we celebrate teachers day lets pray for there good health and thank them for teaching us the values and principles of life & making us who we are today.

La Ola being a campus magazine you have an opportunity to put forth your wonderful ideas and develop the creativity of writing too. Hence use the space of La Ola to exhibit your valuable thought provoking talents.

Through this edition of La Ola, we present a wide spectrum of knowledge & information. Being a naval architect, it is both interesting & important to understand the design of a submarine, keeping that in mind, we present a series on 'Submarine Design'. A comprehensive study on India's ship manufacturing industry and tips on how to write your resume, this issue is overflowing with snippets that will make you ask for more.

The La Ola team is committed to give its readers the best of the available talents of this campus.

We thank our beloved Director, Prof. S C Misra, former chief editor Bikram Senapati and the university for having faith in us to carry forward the work for La Ola. La Ola is on Facebook too, follow us there.

What you see is a beginning.....'picture abhi baki hey'.

Enjoy Reading!!

*Anish Chacko
Chief Editor – La Ola*



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