JAN 2017 . ISSUE 36

Samundra Spirit

QUARTERLY IN-HOUSE MAGAZINE FOR SAMUNDRA INSTITUTE OF MARITIME STUDIES (SIMS), MUMBAI & LONAVALA

IN THIS ISSUE

SAMUNDRA INSTITUTE OF MARITIME STUDIES (SIMS)

A Training Commitment of Executive Ship Management Pte Ltd (ESM), Singapore
(Certified by leading maritime classification society, DNV GL, Germany for ISO 9001:2008)

INVITES APPLICATION FOR:

DECK CADETS (DNS) - AUG 2017 BATCH

Approved by Directorate General of Shipping, Govt. of India & The Maritime and Port Authority of Singapore (MPA), and affiliated under Indian Maritime University (IMU)

- One year Diploma in Applied Nautical Science at SIMS, Lonavala
- Minimum 18 months of practical shipboard training before 2nd Mate's examination

4-YEAR B. TECH. (MARINE ENGINEERING) - AUG 2017 BATCH

Approved by Directorate General of Shipping, Govt. of India and affiliated to Indian Maritime University (IMU), Chennai

- Four years B. Tech Marine Engineering course at SIMS, Lonavala
- 6 months shipboard training before appearing for Class IV examination

1-YEAR GRADUATE MARINE ENGINEERING (GME) - MAR 2017 BATCH

- One year training in Marine Engineering at SIMS, Lonavala which includes 6 months hands-on practical training in the **Ship-in-Campus**
- 6 months shipboard training before appearing for Class IV examination

Eligibility	For Deck Cadets	For B.Tech	For Engine Cadets
Age	For Class XII: **Not less than 17 years & Not more than 20 years** as on date of commencement of the course For B.Sc. in PCM or Electronics: N**ot more than 22 years** as on date of commencement of the course For B.E./B. Tech. Degree from I.I.T or a college recognized by AICTE: **Not more than 25 years** as on date of commencement of the course	**Not less than 17 years & Not more than 20 years** as on date of commencement of the course	**Not more than 25 years** as on date of commencement of the course
Marital Status	Unmarried		
Academic	**Results should be obtained at FIRST ATTEMPT All Boards (Class XII):** Minimum Percentage – 60% PCM minimum – 60% (Physics & Maths Min 60% each) (For Andhra Pradesh & Kerala State Boards, separate board exams held for each class(11th & 12th) & hence, aggregate of both marks are considered) **BSc:** Degree in Physics/ Chemistry/ Mathematics/ Electronics with minimum 55% in final year along with Min 55% in PCM in Class XII **BE (Mechanical) Engineering:** Degree from an AICTE/UGC Deemed University Approved Institute with min 55% in final year	**All Boards (Class XII):** Minimum Percentage – 60% PCM minimum – 60% (Physics & Maths Min 60% each) (For Andhra Pradesh & Kerala State Boards, separate board exams held for each class(11th & 12th) & hence, aggregate of both marks are considered)	Graduation in **BE (Mechanical) Engineering / Naval Architecture** from an AICTE approved Institute with a minimum marks of 55% in final year. Candidate must clear his BE/ B.Tech in 4 years only Numbers of ATKTs / Arrears / Repeats / "E" grades obtained during the entire degree programme: Not more than six attempts
Medical	Physically fit and meet the standards laid out by DG Shipping*		
Language	English shall be one of the subjects with minimum marks scored 50% in class X or XII		
Eyesight	No Colour Blindness , 6/6 vision in better eye and maximum permissible up to 6/9 in the other eye (without visual aids)	No Colour Blindness, Use of corrective lenses permitted but the maximum permissible limits, at entry are 6/12 in each eye or 6/9 in the better eye and 6/18 in the other eye for Distant Unaided Vision. (As given in M.S. Act, Medical Examinations, Annexure B.)	
IMU - CET	Candidates must clear IMU-CET		N.A

"100% in-house placement on ESM-managed vessels upon successful completion of the course"

**Approved Educational Loans from IDBI, SBI & other Nationalised Banks available! *Scholarships available basis SIMS entrance test and first semester results.*

For more information on what we have to offer and downloading the application form, please visit our website at www.samundra.com or contact us at the following:

Email ▸ admission.sims@samundra.com **I** Tel **▸** **MUMBAI:** 9819608686, **LONAVALA:** 02114399500/517,
DELHI: 011-49882700/9871791166, **CHANDIGARH:** 0160-6667777/ 9888599076, **CHENNAI:** 044-30453300/ 9940962616,
COCHIN: 0484-3002300/0484-3219591 / 7736937755, **PATNA:** 0612-3223692/0612-3222622 / 8051808332, **GUWAHATI:** 8051808332

Samundra Spirit

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Background of cover picture:
Swimming event, SIMS Sports Day 2016.

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Samundra Spirit is a quarterly in-house magazine produced by Samundra Institute of Maritime Studies (SIMS) for private circulation.

Our Editorial Team wants to hear from you!

If you wish to submit any feedbacks and/or contributions, feel free to write to the Editor at: samundraspirit@samundra.com

**Please note we reserve the right to publish your letters/articles or an edited version of it in all print & electronic media.*

Editorial Note

The year 2016 would remain as a defining year of the world keeping in mind the upheaval we witnessed be it economic, political or at social fronts. A deep sense of despair and disorientation prevailed all around as events took us on a roller coaster drive through dangerous cliffs and edges of uncertainty. But humanity still prevailed as does the human spirit under all circumstances.

Here we are once again with another issue of the Samundra Spirit - the 36th and the first ever issue for 2017. Happy to share the spirit of SIMS and the Executive Group bringing in our eclectic collection of articles, news, poems and wide ranging thoughts and experiences of both our veteran and future generation of seafarers.

Dry docking of a ship is an integral part of ship's maintenance and demanding activity of the ship staff on board. Capt. VR Krishnan provides an overview for easy understanding and appreciation of uninitiated readers and cadets. Engineering faculty members Mr. KV Hariprasad, Mr. Abhiram Wakankar and Mr. Biju Baben are back again with their forte of various engineering topics and their interesting interpretations. Article on Offshore operation by Cdr Susroto Das represents the repository of industry knowledge in SIMS. Mr. S. Viswanathan who has stepped down recently as principal continues to be an adviser and an active contributor of Samundra Spirit. His article on Stern tube cooling water tank is yet another presentation of his mastery on practical engineering on board.

We are also pleased to include an article on leadership role from the perspective of NLP (Neuro Linguistic Programming) based on a presentation from Dr. David Lincoln – a NLP trainer. Ex SIMS cadet Anandu T Sajan's "No Shadow Day" is true exploration of an inquisitive mind and not to miss reading.

Our regular topics like campus news, cadet's projects, photographs, poems, and sports news will keep our readers updated on SIMS. Do flip the pages and enjoy the fare brought in with care by our contributors= veteran and amateur alike.

On behalf of my editorial team, I wish you all a new year of hope, fulfilment, and excitement. But most importantly a year of peace and safety for one and all around the world.

Till our next issue in April.

Be happy and be safe,

Sikha Singh

Message from Mr. A.V. Pradhan

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SAMUNDRA INSTITUTE OF MARITIME STUDIES.

Attributes required of a seafarer are 1.Physical fitness and Mental toughness 2. Discipline and 3. Competence. Maritime Training Institutes are mandated to provide these attributes to the Cadets.

Having known Samundra Institute of Maritime Studies from its inception, and comparing with the birth of other legendry centers of excellence in the field of education, I wonder if we are looking at one in the making.

The centers of excellence are invariably initiated and motivated from top to down and the campus of SIMS is ample evidence of almost all the facets. Designed by the top architect Mr. Christopher Charles Benninger, the basis of the formation of this pristine Institute is clearly "passion" The passion was to make the "Best Maritime Training Institute", not only in the region, not only in the country but "the best".

One visit to the Institute reveals the attention accorded to the details of the infrastructure.

The decision to install world's longest SOLAR panel for electrical and heating needs of the institute way back in 2005 shows the foresight in the field of Green and sustainable Energy.

The highest standard are visible everywhere, be it material used even for student hostels, (which are likely to be used the roughest). We understand that the equipment used in the "Ship in Campus" were acquired brand new. Even the main engine and other auxiliaries were purchased new, they were not purchased from Alang, as is done elsewhere. Single piece black granite mural in the campus is a one of the several crown jewels in the campus.

The direct beneficiary of the result of this "passion to be the best", is the customer ie the "Cadet". High quality Cadets emerging from the Institute go to boost the Shipping Industry and therefore the society at large.

The visionary actions are seen in the teaching departments as well. Discipline has a very high priority in conjunction with freedom for creativity. Discipline imbibes systematic and organized approach to each task to be dealt with. Even when a creative activity is undertaken, discipline while performing it surely enhances the end results.

The advanced techniques of "blended learning" are a signature learning process of SIMS. It is understood to give a very high rate of success. Simulation techniques have been widely undertaken by several Maritime Training Institute, but at SIMS the range is exhaustive. This is possibly the first maritime institute which commenced research as one of their activities showcasing its promotion to creativity.

The faculty is of a very high competence level. They are the catalyst to convert available data and resources provided by the Institutes to knowledge to the Cadets.

All the students of the Institutes, the faculty, Ship owners, Managers and anyone connected with the Institute including organizations such as Classification Societies are indeed very fortunate to be associated with this Institute.

Do take full advantage of all the opportunities provided to you, imbibe as much as you can and use it in your profession.

A.V. Pradhan
Regional Manager of India
Nippon Kaiji Kyokai

A Glimpse into the Dry Docking Process

The process of dry-docking refers to when a vessel is taken to the service yard and brought to dry land so that submerged portions of the hull can be cleaned and inspected.

A Dry dock is a place where a ship's underwater hull structure is closely examined after certain defined intervals of time subsequent to her delivery from the yard as well as few years in service. A ship may have to dry dock at times in emergency conditions for bottom damage or propeller or tail shaft repairs. Normal dry docking of ship coincides with her dates for docking and hull surveys, which are done by surveyors of the Classification Society under which the ship is classed.

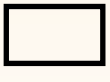
There are many types of dry docks namely - Graving Dock, Floating dock or Marine Railway. The use of a particular type of dry dock depends on the size of the ship as well as the proximity of the dry-dock to the ship's location.

A lot of preparation is needed on board as well as ashore before it is decided to dry dock a ship. On shore the operator needs to negotiate the dry-dock costing with the yard after giving them a scope of work schedule and time period. Several factors such as schedule of the vessel and the yard are taken into account while preparing the budget and agreement on the costs.

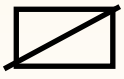
- Advance booking is needed with the yard so that they can also prepare for the ship and also their other engagements with other operators and ships. Some dry-docks need time to organise sub-contracts as well for certain jobs to be done after dry docking of the ship. It is the aim of a prudent ship manager to ascertain and rectify all identified deficiencies during dry docking. Needless to say that advance preparation is required in apprising oneself for new regulations and plan ahead for implementing the same while keeping an eye on upcoming regulatory issues. Preventing future loss of time as well as to ensure trouble-free operations will require addressing, classification and customer recommendations, as well as taking guidance from our dry-dock modules so that nothing is inadvertently missed out.

- On board the ship, a detailed specification is drawn out by the top management on board for all the works to be carried out on the hull, fittings as well as deck and engine room machinery, months in advance. Spares and stores for various overhauls need to be ordered in advance and kept ready at the yard before the ship's arrival there. Hull paint is another major item, which is consumed in a dry dock as the bottom; lower and upper parts of the shell are thoroughly cleaned, freed from corrosion and then painted with several coats of hull paints. Anti-fouling paint is applied at the bottom of the ship at the very end of the ship's stay in dry dock as it acts well only when applied within a few hours of the flooding of the dry dock to prepare the vessel for refloating before leaving the dock. Another important item to be ordered in advance is sacrificial anodes which are prominent in way of the propeller and rudder of the ship.

- Bottom survey is a kind of visual inspection. It is very difficult to find any small indentation or cracks while walking around the dock. Some ships' bottoms and side shell areas could be as large as 25,000 to 30,000 square meters which is about three times the area of a football ground. Large local dents can be easily detected but it is easy to overlook a dent that extends over a wide area. In particular, dents in the curved shell plate in the bilge, fore and aft peak parts are difficult to identify. If the side shell plate is viewed directly from the dock side, dents can be overlooked easily due to the effect of light rays striking the plate at this area. It is essential to detect cracks or leakages from bottom plugs of ballast, fuel or water tanks. The shell openings such as water intakes or overboard discharges are also carefully checked for clogging or breakage of their protective gratings. The side shell damages, which are earlier recorded on board in her CSR records as well as those identified during the dry-dock are verified from the Shell Expansion plan of the ship. Surveyors use internationally accepted symbols on Shell Expansion plans to indicate the nature of repairs required on the plating



Remove, fair and refit



Crop, fair and refit

Fair in place

Capt. VR Krishnan
Superintendent - Fleet Personnel
ESM, Mumbai

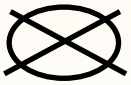
- Propeller and Rudder need close up examination for cracks and deformations. Rudder bearing surfaces guide and pintle clearances need to be taken so as to verify that they are within the tolerable limits after wear and tear. Rudders may have holes in them which will have to be repaired.

  Propeller blades could be cracked or deformed or broken, which needs to be checked and rectified according to specifications. They also need to be polished after all repairs. At specific intervals after the ship's delivery, they need to be extracted to measure the tail shaft clearances. Oil leaks from the propeller boss in the stern frame of an oil—lubricated system can sometimes be detected during a bottom inspection. This is probably due to a defective seal, therefore, a detailed examination of the seal is necessary.

- Bow or side thrusters, if installed should be inspected at the docking survey. Frequently observed damage includes damage to guards at sea water ports due to impact with submerged or floating objects, and bent propeller blades. If the shaft seal is defective, water enters into the ship. Inspection results should be entered in the Survey Report. When the stainless plate is used at the surface of the nozzle, the corrosion of adjacent steel plate should be carefully inspected.

- Anchor chains should be lowered on both sides and the chains cleaned and ranged. The connection between the chains and the anchors should also be checked for wear and tear especially the swivel links. Since the chains are lowered into the dock for inspection and ranging, the chain

Renew partly (deformed section)



Renew partly (deformed section)

Continued on Page 10

Salvaging Of Motors

Mr. K. V. Hariprasad
Faculty Electrical
SIMS, Lonavala

Most of the machineries on board a ship, employ Induction Motors as their prime movers. The electrical safety associated in dealing with these motors is of concern depending on their applications as well as location. Even after complying with the stringent safety precautions, it is likely that at certain occasions during handling of these motors, they may incur contact or submersion in sea water or even fall into the bilge. The process of rescuing of the motor from such mishaps & repairing to bring it back to reusable condition is called Salvaging.

Even though an Induction Motor is called a no maintenance motor, the above occurrence cannot be ignored even though utmost care is taken. This may occur due to any of the following:

(i) Oil/water leakages nearby
(ii) While dismantling the Motor
(iii) Any pipeline repairs undertaken nearby, etc.

Damaged Stator & Rotor

The process of Salvaging is narrated as detailed below:

(a) Stop the machinery & remove the motor from the affected location. Care should be taken while removing the motor from the coupled mechanical load so as to reinstall without any misalignment, like, identifying and markings on both sides of couplings as well as shims if any, location where they are installed etc.

While shifting the motor from the affected area, due safety procedures to be followed, until the motor is finally kept in the workshop.

(b) Dismantle the entire parts of the motor. Thereafter a thorough check should be made of all its components such as:
(i) deposits or cut marks on bearing housings,
(ii) condition of bearings after removing them,
(iii) condition of sleeves or bushes if any,
(iv) condition of Rotor shaft in the free portions other than the rotor core,
(v) conditions of Stator windings & Stator core,
(vi) dirtiness of the Yoke,
(vii) condition of the Rotor core etc.

(c) Clean the stator, rotor and all other above mentioned components with pressurized fresh water 2 or 3 times until all visible deposits including salt particles are removed.

(d) Thereafter cleaning of all the parts should be carried out with suitable anti-greasants like Armaclean, to remove oily & other hard sticky deposits. This can be repeated 2 or 3 times until no deposits are visible.

(e) Dry all the parts. Dry the stator & rotor using low voltage current injection sets or by heating lamps. This removes the moisture present. The timing of heating process depends upon the next point mentioned below.

(f) Check for the Electrical Insulation Resistance (IR value) of stator & rotor windings, which shall be more than 1MΩ for Low Voltage Motors & (kV+1) MΩ for High Voltage Motors. If not achieved, then continue heating process as mentioned above.

(g) If the IR value does not improve even after Stator & Rotor are completely dry, carry out the re-insulation of the weak windings using insulating varnish, in 1 or 2 stages. Bake it (drying of insulation varnish) thereafter until the value reaches more than the permissible limits as mentioned at point (f) above.

(h) Check the condition of bearings after drying by visual inspection. Carry out proper lubrication ensure to normal operating condition. If not don't ever hesitate to replace them

(i) Check the condition of the bearing housing after drying. Carry out machining or grinding or polishing to rectify the damages. Please do note that the major cause of failure is because the bearing does not sit 'Tight' in the bearing housing. Do not put shims or caulk the housing as is usually done. If there is a clearance ensure the housing is machined and then a spool piece is inserted so that bearing sits 'Tight' in the housing.

(j) Same process as above may be carried out to the Rotor shaft also.

(k) Finally carry out painting, if found shabby.

(l) Assemble back the motor according to its prescribed procedure as per the manufacturer's guidelines. Check for its mechanical freeness by rotating by hand, which confirms the uniform air gap between Stator & Rotor as per the requirement

(m) Finally, after ensuring proper fitment, test for No-load and Load conditions and hand over for operations. ■

Damaged Stator & Rotor

Vital Signs to Detect Sustenance of Safety Culture On Board

Biju Baben
Marine Engineering Faculty
SIMS, Lonavala

Most notable evidences of life in a physical body is detected by pulse, heartbeat, body temperature, etc. In other words by checking these vital signs, we are assured that the life is sustaining. In the last issue's article (Safety & the Extant) we had seen that as a living thing safety has to be maintained in order to avoid emergency conditions that can lead to adverse results or even be fatal. In this article, we shall analyze the factors that contribute to "Health" of the safety and its visible attributes. By looking at these vital signs one can ascertain and be assured that safety culture remains well & thriving.

Following evidences denote the right environment for sustaining safety culture on board your ship:

Observance of safety measures by identification of probable risks involved in actions: Maintaining the three points contact, while going up and down the stairs, wearing appropriate PPE in correct manner, using safety belt while working aloft, employing safety guards while working with rotating parts of machineries, using face shields while welding, cordoning off the areas, where manholes may have been open and work is progressing, etc.

Cleanliness and hygiene of work place: Keeping the components and machinery spaces tidy provides an early warning of any leaks & at the same time it reveals the effort or state of alertness to preserve safety of working area.

Arrangement of tools and spares in orderly fashion: This shows the preparedness and avoids chances of any delay in response or using wrong tools

Warning notices and safety posters: These posters create a conducive environment to provide continuous boost and psychological inspiration for carrying out operations safely.

Operating instructions placed near the machineries: This avoids confusion or misunderstanding by providing the right procedures and which can also build confidence in one who operates. This eliminates the chances of taking short-cuts.

Emergency procedures and display of Emergency plan: Reduces the chance of delayed action during emergency and enhances the ability to quickly revert to the safe conditions without significant adverse effects. Emergency drills record verifies and ascertains the skills of conducting the Emergency response.

A robust maintenance system like condition based or predictive monitoring is in place: This includes the periodical checking of the status of the working components, helps to keep the machinery healthy and hence safe. Installation of sensors, alarms & protections devices and their correct functioning: Early warning is very much essential for maintaining safety, which initiates necessary action to rectify the problems.

Avoidance of cheap components as replacement: Sudden failure or breakdown of a component even before any such warning is to be prevented.

Installation of standby systems and adequate auxiliaries: Providing support systems like moisture control devices, vibration dampers, etc. help to create right ambience to withstand sudden failures.

Efficient Securing arrangement of machineries: Power driven machineries need strong support for proper load transferring and alignment.

Usage of correct grade and quality working fluids: Using cheap or wrong quality working fluids can damage machinery life and hence affect safety.

Lockout/ tag out procedure in place: This procedure ensures robust isolation of any system being repaired and at the same time establishes efficient communication to avoid any confusion

Safe working load tags in place for all lifting equipment: Another evidence of a healthy practice which avoids wild guess or casual approach, before lifting heavy weights.

Colour coding of various pipelines and labels for valves: Typifies the attitudes in a well-established safety culture, to avoid any chances of wrong usage of valves and facing its consequences.

Fluorescent zebra marking or reflective tapes on protruding objects: This is a proactive action to prevent slip/trip and fall & level of care for workers

Effective internal communication system is in place: Alternate ways of internal communication are essential to report and for taking actions against any unsafe condition.

Training or learning process is in place: Finally, this shows the long term commitment towards sustaining the safety culture on board.

We can't be casual about our working behaviours and safety culture and in turn claim for success without inviting any mishaps. You need to be an active contributor to this endeavor for keeping the safety "ALIVE" by always checking and strengthening its vital signs.

Shell 'Ship Quality Assurance' and Safety Program for Partners

Captain Marius van Westerhuis, Manager Maritime Assurance Asia Pacific, Shell International Eastern Trading Company (SIETCO) delivered a speech during the November's Senior Officers' seminar covering two topics. He spoke at length about the SHELL's safety initiatives 'STEP CHANGE FOR SAFETY' and the journey towards GOAL ZERO. Launching this safety initiative has improved Shell's Safety Statistics of its chartered fleet over the last 4 years.

Capt. Marius explained about the three pillars of the program which are:

1. Visible and felt leadership (ship visits by CEO/ Senior management),
2. Lessons From Incidents (LFI) and Reflective learning.
3. The program is based on the Resilience module and has been launched by SHELL. It was highlighted that SHELL shall randomly verify the implementation of the program on ships operated by its partners.

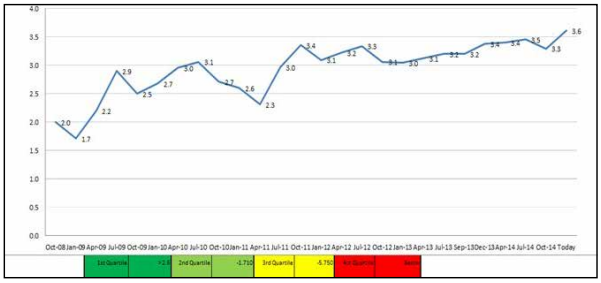
IIn the second session, Capt. Marius explained about the SHELL marine assurance process. The software used by SHELL for the marine assurance process is called GMAS (Group Maritime Assurance System). This in-house system contains a database on all marine vendors that Shell utilizes for its businesses, including vessels, operators and terminals. All vendors are evaluated and cleared by the marine assurance team prior to receiving their permit to conduct business with Shell. The GMAS gets an automated feed of information from various sources which includes Seaweb, Lloyd's Casualty reporting, and OCIMF website etc.

The GMAS uses following data to arrive at a score for every vessel and its operator.

1. SIRE Inspection Reports
2. Approval status of the vessel (Fleet profile)
3. Incidents reports and Lloyds Casualty reports.
4. Port State Control Inspection reports and detentions
5. Terminal Reports
6. Officers' matrix compliance
7. Operator's management review score
8. HSE Score

A fleet profile is drawn up basis the approval status of the ships in the fleet. The clearance team issues approval status of a vessel basis SIRE performance, PSC inspection and incident profile of the ship. The vessel status is issued as one of the following: Eligible, Probation (P), Caution, Caution Imminent Unsuitable (CIU), Unsuitable, Requiring Inspection (RI), and Structural assessment not done (Q).

	Vessels	Score		Final score
Eligible	85	4	93.41%	340
P	0	2	0.00%	0
Caution	4	-2	4.40%	-8
CIU	0	-8	0.00%	0
Unsuitable	0	-8	0.00%	0
RI	0	-2	0.00%	0
Q	2	-2	2.20%	-4
			Sum	328
Total vessels	91	Ranking	Sum/No of vessels	328 / 91
			Final score	3.604



Each category is allocated a score starting with an eligible ship at +4. The ships found in other categories are penalized by assigning negative scores, as per table given in the example on the right.

Further to the fleet profile, certain other criteria are taken into account to draw up the total score

- **Fleet Profile** *(on a range of -8 to +4)*
- **Management Review Scoring** *(on a range of 1-8)*
- **Safety Culture detected during MR Process** *(on a range of 1-4)*
- **Crew Matrix Compliance** *(on a range of 0.5-2.0)*
- **Scoring of SIRE Reports** *(on a range of 1-8)*
- **Total Score** *(Numerical sum of above scores)*

Basis the total score, an overall ranking of the company is drawn up which places the company in one of the four quartile in world ranking. Shell engages in time charter business only with operators in the top quartile.

Operators Name	Rank	Score	Culture (K) (Score 1-4)	Quartile (Score 1-8)
	1	26.00	4	8
	2	24.00	3	7
	3	23.00	3	8
	4	22.45	3	7
	5	22.40	4	8
	6	22.20	3	8
	7	21.94	4	7
	8	21.65	2	8
	9	21.00	3	6
	10	21.00	3	6
	11	21.00	3	6
	12	21.00	3	6
	13	20.81	3	4
	14	20.69	4	7
	15	20.67	3	6
EXECUTIVE SHIP MANAGEMENT PTE LTD	16	20.29	3	7
	17	20.00	2	4
	18	20.00	3	6
	19	19.74	3	7
	20	19.07	3	7

Shell does time charter business with operators in the top quartile

Importance of Air Handling Units on Ships

Mr. Abhiram Wakankar
Marine Engineering Faculty
SIMS, Lonavala

The word "welfare" mentioned onboard, has various immediate impressions of tasty and nourishing meal, well stocked library or large collection of movies, at the most. However conducive environment for health, quality resting period, hygiene and optimum living conditions is required to be thought in the same context of welfare. Higher number of cases involving incidents/near misses, frequent medical issues involving bouts of cough and cold, may also point in the same direction and is essential in considering as "welfare" on board.

It may seem surprising, but a common underlying cause may turn out to be the health of Air Handling Unit (AHU) of accommodation air conditioning system for such issues.

As widely known, AHU is a large box made out of sheet metal. Various system components such as Evaporator, Humidifier and heater sections, as well as blowers are housed in it.

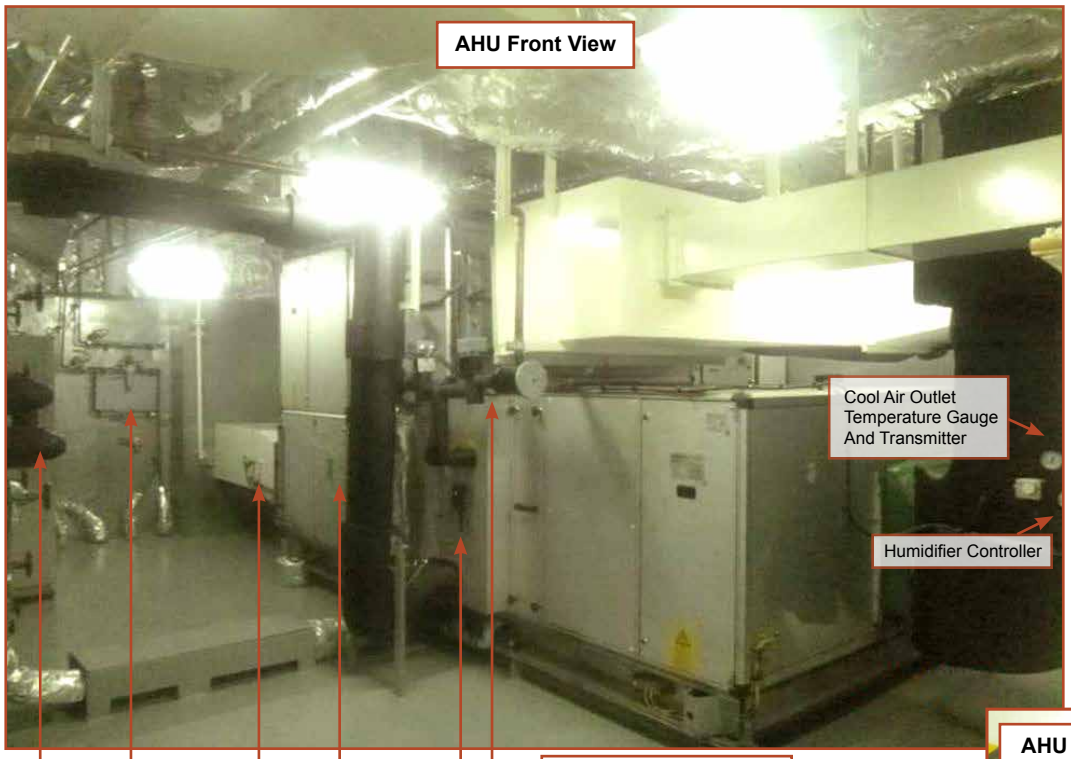
From hygiene point of view, internal cleanliness of AHU is of utmost importance. As air conditioning is for human comfort, bacteria can also multiply in this environment, if allowed to thrive.

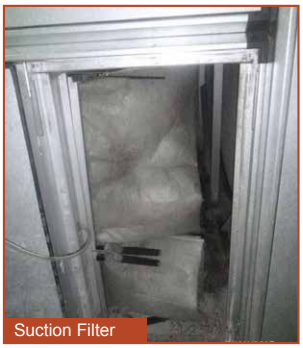
Large amount of condensate (water) is continuously produced especially in tropical areas. Fully or partially clogged condensate drain trays will lead to build up of algae associated with harmful bacterial colonies. This will lead to personnel on board contracting cough/cold/fever, etc. Lower levels of environmental hygiene would lead to lower performance of the crew.
In this view, regular inspection of internals of AHU is very important. It is imperative to have filters clean and drains clear.

A simple water filled U tube manometer can be easily fitted to monitor degree of fouling of air filter elements. Vessel should have one complete set of filter elements as a ready spare for replacement at all times.

Considering quality resting period, especially in summer climates, issue of high accommodation temperatures props up. This is in spite of adherence to routine maintenance schedule. It can be because of insufficient cooling or insufficient quantity of conditioned air reaching the desired spaces.

As mentioned earlier, AHU made out of thin sheet metal, is quite weak in strength which leads to leakages from or into AHU. Internal inspection again proves to be helpful in early detection of onset of rust and further treatment. Cases of complete collapse of entire bottom of AHU are not random or isolated. This often is a





result of sheet metal wastage due to rust from inside as well as outside.

Rust from outside is often due to clogged evaporator drain causing condensed water seeping through and wetting of insulation.

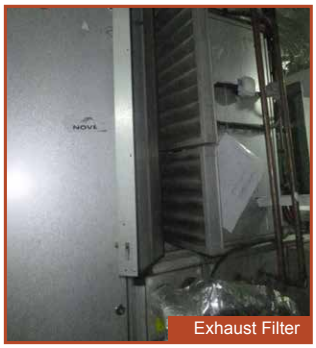
Another reason of reduction in quantity of conditioned air delivery is leaky flexible duct connections. These connections are in the form of tough fabric connecting blower outlet duct connecting with AHU structure. These are prone to aging and can get torn causing air leaks. Timely inspection proves beneficial in minimizing these leaks.

Finally, needless to say that low quality resting period can lead to increased levels of tiredness, fatigue and may result into untoward incidents. ■

Water mist catcher


Evaporator Coil


Rotary wheel type heat exchanger


Exhaust Filter


Exhaust Blower

Continued from Page 5

lockers will be empty so it is the best time to de-muck, drain and paint with bitumastic paint, if needed. The bitter end connection is also checked at this time.

- Dry dock is the best time to inspect the sea valves on a ship. If a sea valve and the distance piece are holed, water may enter into the hull and could cause a major casualty such as sinking of the ship. As per International Load line Regulations sea inlets and overboard discharges below the waterline are to be examined and valves and cocks together with their fastenings to the hull are to be dismantled and examined. Dismantling may be dispensed with at the discretion of the Surveyor, provided they were dismantled and examined at the last Docking Survey. All openings to the sea including sanitary and overboard discharges in the machinery spaces and pump room with valves and cocks are to be examined internally and externally. The fastening of valves and cocks to the hull are also to be examined.

Extended dry-docking (EDD) interval can be a possibility once in 7.5 years on containerships and certain dry cargo vessels. CM-PS notation (Continuous monitoring for propeller shaft) was introduced in class rules from 1st January 2013.

On board a vessel, the conditions must be suitable for the dry-docking. The ship must have an initial positive metacentric height (GM) and be upright. Trim could be by stern of up to 100 cms. It is imperative to keep the ballast in tanks, either full or empty (not slack) before entry into a dry dock. As far as practicable the tank condition before entry into and leaving a dry dock should be the same. This is to prevent any free surface from causing loss of GM during the “Critical Period” in a dry docking. A “Critical Period” during a dry docking is the time when the ship first takes to the keel blocks till the entire keel is finally resting on the blocks. This occurs because the underwater volume continuously diminishes as the water in the dock is being pumped out and consequently there is a loss of buoyancy. The upthrust force can be calculated by the formula P = Change in trim x MCTC / LCF, where MCTC is moment to change trim by a cm and LCF is the distance of Centre of Floatation from after perpendicular of the ship. The loss of GM can then be calculated by GM= Initial GM –GG1, where GG1 = P x KG / W-P, where KG is height of the centre of gravity of the ship from keel and W is the displacement of the ship.

On board a ship safety measures should be enhanced during a ship’s dry docking as there could be several additional hazards. During the ship’s stay in the Yard either for repairs or during construction, the safety of the ship and its personnel is to a large extent dependent upon the shipyard’s own Safety Management System. The situation is aggravated by the fact that during the repair period a number of the ship’s systems may be out of operation. The ship and personnel aboard may thus be exposed to unexpected and unfamiliar risks and hazards. It is also recommended that during the shipyard selection process, ship managers should undertake an audit of the shipyards, which includes their HSE Management Systems and available data on HSE performance. Daily meetings between shipboard and yard HSE team are mandatory and works involving hot work, enclosed space entry and working over side should be meticulously planned after taking all recommended safety precautions applicable.

Communications between all interfaces in a dry dock are essential for a smooth and incident free dry docking operation. Schedules should be carefully planned and monitored. No room for any ambiguity exists as this can be detrimental to the safety of the personnel. All efforts to be made to make the stay of the ship’s staffs comfortable in dry dock. At the same time the safety of the personnel of the yard or their contractors should be paramount and well understood by shipboard personnel.

A dry docking experience for a ship is akin to a person going to a spa for a thorough body check and rejuvenation. Spa is a means to cure a person’s disease and cleanse skin ailments through bathing and the drinking of medicinal waters. Ship too undergoes proper checks, such as hull thickness measurements, inspection and overhaul of machineries and steel and equipment repair work followed by painting so that she can be operated without breakdowns and off hires till her next planned dry dock. ■

Principles For Success As Leader

A workshop on NLP (Neuro Linguistic Programming) principles for success as leader was conducted by Dr. David Lincoln during the ESM Senior Officer's Seminar on 24th Nov 2016. Below are the excerpts from the session.

Leadership is about establishing effective communication with people. The meaning of effective communication is inherent in the response you get from your communication. To effectively lead, one should be able to observe and understand others. NLP assists in developing the skills of Leadership by focusing on the techniques that help us to observe people, understand their thoughts and requirement, develop rapports with them and then achieve the desired outcomes in our communication and interaction with them.

Observing people – Sensory Acuity and Calibration

For observation, we need to develop sensory acuity, which is the ability to notice physical changes in a person; it enables us to monitor with much greater accuracy what people are experiencing. It helps to observe how a person is responding to an idea you may be presenting. The physical features, which significantly change and can be observed with training are skin colour, skin tones, breathing, lower lip size, eyes' focus, pupils' dilation, muscle tension and body movements.

Calibration is the skill of learning to read non-verbal responses. It is an essential tool to determine someone's present state of mind. The result of a leader's communication to others, is to a large degree, dependent on his ability to calibrate to the other person's behavioral preferences and emotional state at that time. Calibration is simply about noticing what's going on with other people.

Developing sensory acuity and practicing calibration helps in building a rapport with others. Rapport building with your subjects is achieved through physiology, voice modulation and use of suitable words. By being able to develop rapport with others, a leader is able to obtain their willingness to co-operate and create an emotional bond based on mutual liking, trust and a sense that they understand and share each other's concern. The techniques involved in rapport building are mirroring and matching, pacing and leading, psycho-geography, etc. to name a few…

Cause and Effect

A leader has to learn to live on the 'cause' side and not on the 'effect' side. By living on the 'effect' side, that is always contemplating responses to situations, a person tends to play a victim with 'can't help it' approach. While living on the cause side of events, he possesses initiative towards desired outcome, irrespective of however negative the situations might be. A leader needs to learn to live on the 'cause' side always.

Perception is projection

A leader needs to be able to perceive the outcomes desired and the effects that those outcomes will have. What you cannot perceive in mental images, you cannot project that in reality nor can you convince others to achieve those outcomes. Like, the children are curious and ask lots of questions because they cannot perceive lots of things. A leader should be able to clearly perceive his vision and then only he can project it to the other team members.

Presuppositions

A leader must acknowledge certain presuppositions, which are true and always present unless there is very good reason to think otherwise. It is with the understanding of these presuppositions only, that a leader can effectively influence others, to achieve the desired outcome. Some of the NLP presuppositions are as below.

- Everyone has a unique model of the world.
- Respect your client's model of the world.
- Behind every behaviour is a positive intention.
- People are not their behaviour. The meaning of their behaviour is dependent on the context it is exhibited in.
- People always make the best choices available to them.
- The person with the most flexibility in their behaviour will have greater influence over others.
- Resistance in another person is a lack of rapport with him.
- The meaning of a communication is inherent in the response you get.

NLP believes that what you like about a person, is you and what you dislike about a person, is you. What you see is, who you are. Hence to be a successful leader, a person needs to remain anchored in positivity in relations, anchored in desire for excellence, anchored in innovative thinking. The skills of remaining anchored in these states can be systematically developed with practice. ■

Personnel Transfer in Offshore Operations

Cdr. Susruto Das
Nautical Faculty
SIMS, Mumbai

Offshore operations have a number of very specific operations. One of these is the transfer of personnel to vessels and offshore structures from ashore as well as between vessels and other offshore structures. While majority of the transfers take place via helicopters, accounting for about 9 million passenger transfers per annum, marine transfer operations are estimated to account for over 5 million passenger transfers per annum.

Transfers between vessels and other offshore structures include movements of personnel at crew change and shift change between vessels, offshore structures, barges and crew boats. Within the offshore industry (particularly in the offshore renewable energy industry), there has been an increase in the requirement for the transfer of personnel to offshore vessels and structures. Personnel transfers in the offshore renewable energy industry primarily involve transfer to and from vessels of 10m to 30m in length (called crew boats), operating independently from a mother vessel or from a port.

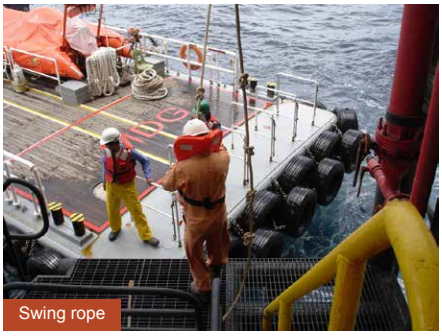
We discuss here mainly the transfer of personnel between vessels and other offshore structures.

The primary methods of personnel transfer are: -

1. Swing ropes
2. Personnel transfer carriers (Billy Pugh or the collapsible net, rigid basket, and the rigid capsule)
3. Gangways and accommodation ladder transfer
4. Bridges
5. Heave compensated hydraulic gangways
6. Surfers or Boat landings

Swing ropes

A swing rope is commonly used to transfer personnel from boats to the landing area of the platform. Using a swing rope can be demanding, especially in moderate to heavy sea conditions. This involves the crew boat pushing against the boat landing while the personnel swing across to the platform using a rope. This method is fraught with grave risks and has led to a number of severe accidents, and is thus not a recommended method of personnel transfer.



Swing rope

Personnel Transfer Carriers

Personnel Transfer carriers require use of the installation crane and may often be the only feasible means of transferring personnel at sea, especially in adverse weather.

(a) **Billy Pugh.** This collapsible net is the oldest personnel transfer design, wherein the personnel being transferred hold on to the outside of the lifted structure. The crane wire is to be under constant tension, else the net collapses. This structure, despite the risks associated with it, is very commonly used.

(b) **Rigid basket.** This is an unsecured basket wherein the personnel stand within a rigid internal or external framework with impact protection from a cushioned base.

(c) **Rigid Capsule.** This is a secured capsule with a stainless steel frame wherein the passengers sit. It has buoyancy for self-righting and floating.

Gangways and Accommodation Ladder Transfer

Gangways and accommodation ladders are principally used between a vessel and the jetty, and occasionally from one vessel or offshore structure to another.

Bridges

Some large vessels such as heavy-lift cranes, pipe lay barges, accommodation vessels or MODUs have a long bridge (around 50m or so) to effect personnel transfer. These may be fixed on one side and have rollers on the other end. Some of these bridges may be hydraulically controlled and can be lifted into place and supported by a crane or have their own dedicated support mechanism.

Heave Compensated Gangways

These gangways are fitted with hydraulic active heave compensation which adjusts the gangway length and/ or horizontal/

Continued on Page 18

Billy Pugh being lowered onto the vessel

SIMS Lonavala Commemorates Graduation of DNS-21

Mr. Viswanathan, Advisor to SIMS and an honorary member of the SIMS, Governing Council receiving a guard of honor at the parade ground

Samundra Institute of Maritime Studies (SIMS), Lonavala, celebrated the accomplishments of 40 new graduates from the DNS-21 (Diploma in Nautical Science) batch at its last graduation ceremony for 2016 on December 23. Gracing the event as chief guest was Mr. S. Viswanathan, Adviser of SIMS.

Mr. S.M.Iyer, Resident Director, ESM Mumbai, several faculty, family members and friends of the graduates were present to celebrate this milestone event.

Mr. S. Viswanathan, who was also a former lecturer and principal of SIMS, Lonavala, spoke about the utmost importance of practicing safety in all areas of sailing career. He reiterated that just theoretical learning will not provide the full dimension of training but rather learning through various means of simulator training, blended learning and hands-on training. Subsequently, Cadets on board often need to put in the hard work of practicing what they have learnt in the institute. He concluded that SIMS Lonavala is successful in bridging this gap in moulding better future for the trainee cadets and wished the graduates success in their future endeavours.

After the guard of honour and ceremonial march past, the valedictory function was held in the Auditorium. Citations and awards were presented to the following outstanding students who demonstrated exemplary performance during the one year programme.

DNS-21 PRIZE LIST
Best in Mathematics: Md. Kamran
Best in Applied Science: Mukul Gaur
Best in Stability And Construction: Md. Kamran
Best in Navigation & Chart Work: Md. Kamran
Best in Bridge Equipment Wk & Meteorology: Abhinav Raj
Best in Cargo Work, Seamanship & SWP: Mukul Gaur
Best in English, MH & HF: Mukul Gaur
Best in Marpol & BME: Aakash Saxena
Best in Maritime Comm & Emergencies: Govind Kumar
Best in HSSE: Lakshit Saxena
Best in Hands On Training: Mukul Gaur
1st Runner Up in Academics: Mukul Gaur
Best in Academics: Md. Kamran
Best Sportsman: Nitesh Kumar Singh
Best Orator: Tushar Banga
Best Cadet Captain: Mukul Gaur
Most Popular Cadet: Prem Kumar
Best Cadet: Tushar Banga

Best in Academics: Md. Kamran

Most Popular Cadet: Prem Kumar

Best in Bridge Equipment Wk & Meteorology: Abhinav Raj

(From left to right) Cdt. Lakshit Saxena, Cdt. Kamran, Cdt. Mukul Gaur, Mr. Jims Andrews, Col. Sharath Laskar (HR & Admission Manager)


1st Runner Up in Academics: Mukul Gaur


Best Orator: Tushar Banga


Best Sportsman: Nitesh Kumar Singh


Best in Marpol & BME: Akash Saxena


Best in HSSE: Lakshit Saxena


Best in Maritime Comm & Emergencies: Govind Kumar

Mr. S. Viswanathan retires as Principal, SIMS, Lonavala

After an illustrious career spanning over 12 years, Mr. Viswanathan retired as Principal on 31st October 2016. Mr. Jims Andrews has taken over as Vice Principal of SIMS Lonavala while Mr. Maneesh Jha has been promoted as Principal of SIMS Mumbai.

Mr. S. Viswanathan, had joined SIMS Mumbai as a faculty member in February 2004. He was involved with various training courses, such as numerous DG Shipping and MPA approved Tanker Courses, Operation and Maintenance of Framo Pump, Boiler Combustion and Control, Main Engine Manoeuvring Systems and Engine Room Simulator, among many others for the seafarers serving on the ships, till 31st March 2010. Mr. Viswanathan took over as Principal of SIMS Lonavala from 1st April 2010 from then outgoing Principal Professor Swamy.

Mr. Viswanathan will continue on as an Advisor to SIMS and an honorary member of the SIMS, Governing Council. ■


Chief Guest Mr. Viswanathan (1st Row, 5th from Left), SIMS, Lonavala faculty members and the graduating DNS-21 cadets

Latest Seminars Focused on Striving for Operational Excellence

Five seminars on the theme of "Ship-Shore Collaboration to Lead ESM to New Growth" ended with a resounding success with active participation from the senior and junior sailing officers and ratings, representatives of senior management of ESM and SIMS as well as experts from national and international reputes.

The seminars were held from 21st to 28th November 2016 at various venues that included the idyllic campus of SIMS, Lonavala and hotel venues in Chennai, Kochi and Mumbai.

Meticulously planned and organised with care, the seminars touched upon various issues pertaining to the Maritime Industry such as navigational safety, vessel inspections, keeping the machineries onboard in top shape and leadership roles amongst others. Team-building workshop sessions in-between the presentations kept the participants involved and interested throughout.

The seminars also provided the perfect platform for its attendees to share their sailing experience and the challenges they face onboard. Some of the seafarers who spoke include, 4th Engineer Prajwal Salian, 2nd officer Suraj Dubey, 2nd Engineer Kailas Nath, Chief Officer Shejin John Thomas and Chief officer Achuthan Menon.

As a newly introduced segment, the ratings seminar even welcomed retired seafarers to share their experience. One of the speakers, Mr. Girish. R. Tandel who retired as a motorman gave a synopsis of his time with ESM. He added that every seafarer should give their one hundred percent effort onboard so that each individual and the organisation can achieve its target as a family.

Capt. Arun Sundaram, Director Operations, ESM Singapore, initiated the first day's proceedings at the senior officers' seminar with an overview of the shipping industry and the challenges it's facing today; such as the oversupply of vessels and economic crunch in various countries. Despite these challenges, he stressed that our organization is sailing without losing focus of its safety standards, environmental protection and operational excellence. He pressed that the analysis of former performances over last few years on both onboard and ashore, has led us to identify the main challenges like navigational safety, machinery failures and proactive and positive ship to shore communication.

Ms. Sikha Singh, Director, HR and Crew, ESM Singapore, introducing Executive Group and the different companies within.

Capt. Thomas Varghese held a session on safe and efficient cargo operations.

Mr. Guarav Dwivedi spoke covered a few key factors for expense optimization.

Capt. Arun Sundaram, Director Operations, ESM Singapore, gave an overview of the shipping industry and the challenges it's facing today on the first day.

Officers sharing their onboard experiences during the seminar

Similarly, sharing her views at three of the Junior Seminars, Ms. Sikha Singh, Director, HR and Crew, ESM Singapore, said that the presence of mind and hence the awareness is very much required to perform the challenging onboard jobs. She reminded the seafarers that they are part of Executive Group, which has gone beyond Executive Ship Management. Listing the names of the different companies within the Executive Group, she continued her speech on the journey of ESM from managing one ship to the present standing of progress and growth. She assured the officers that the efforts with full heart and focus sustaining competency will be rewarded without fail.

One of the guest speakers, Capt. Marius van Westerhuis, Manager, Maritime Assurance, Shell, stressed that safety is not just a priority but is a fundamental reflection of our performance and poor safety is nothing more than a lack of leadership. He focused on the role of Shell in ship quality assurance - minimizing the risk of harm to people and environment, reputational damage and financial claims. Speaking to the senior sailing fraternity, he classified the assurance process in terms of potential risk, observed risk and final risk and elaborated these concepts with various examples to provide a holistic view of the process to the audience.

Likewise, Capt. Anuj Velankar, Senior Loss Prevention Advisor at Thomas Miller, UK P&I Club, introduced the responsibilities of P&I club and covered the areas of P&I insurance at both the senior and junior seminars. A master mariner with extensive sailing experience onboard oil tankers and other vessels, he also elaborated more on the various risk coverages, such as people related claims as well as claims such as cargo related, vessel related, and operations related.

Representing United Arab Chemical Carriers,

Capt. Julius Rodrigues, Head of commercial operations and Capt. Svensen, Head of fleet, spoke about the difference between efficiency and effectiveness as they compared it to "doing things right or Doing the right things" from which they elaborated on tackling challenges responsibly.

Dr. David J Lincoln, Founder and President, Neuro Linguistic Programming Association, India, conducted a session on "Taking ownership for the desired results onboard". He started the session with the basic brain principles like cause and effect and our perception is our projection, in which, he urged the audience to be at the cause of life. He specified that what we recognize outside ourselves is what we are inside. He expressed life activities like love, spiritual fulfilment, money, learning are proportionate to a wheel and one should balance it through appropriate measures. He reminded that we can't change another person, rather we can change ourselves.

Capt. Kersi Khambatta, an external auditor for ESM vessels, gave his views as an auditor. Having focused on onboard accidents, he said that the solutions laid within the safe management system and with the officers who was at work. He urged the officers to train their team to get feedback, develop sense of ownership and assume responsibility. He added, this will help develop effective monitoring, timely interventions and putting in place corrective actions.

In-house speaker, Capt. Vijay Cherukuri, Quality Assurance Manager, ESM, Singapore, gave a presentation on the safety performances and navigational challenges. With the aid of case studies, he brought to light how equipment failure after inadequate routine maintenance and human factor were the prime reasons behind the accidents. Capt. Vijay Cherukuri also held an interactive session with the audience – a platform for the audience to share their queries with issues on board and in handling critical situations.

Capt. Marius van Westerhuis, Manager, Maritime Assurance, Shell (right) receiving a token of appreciation from Mr. S.P. Singh, Managing Director, ESM, Singapore.

Capt. Anuj Velankar, Senior Loss Prevention Advisor at Thomas Miller, UK P&I Club, introduced the responsibilities of P&I club

Representing United Arab Chemical Carriers, Capt. Svensen, Head of Fleet spoke about the difference between efficiency and effectiveness.

Split session for Officers and Engineers were held at the campus classrooms.

Capt. Julius Rodrigues, Head of Commercial Operations, UACC shared his view alongside Capt. Svensen.

Keeping in line with owners concerns, Mr Guarav Dwivedi, Assistant Technical Director, ESM, Singapore raised the need of cost optimization and discussed the various measures. Tracking stock, correct inventory, reducing wastages, avoid breakdowns, incidents and accidents by preventive, pro-active and productive work culture were emerged as few key factors for expense optimization.

He brought to light how the mechanical and machinery failures that has often occurred onboard were mostly due to negligence in his split session for engineers. He quickly went through the month wise incidents and discussed major issues with the manoeuvring system, cylinder cover jacket cracking and that were fuel related. Mr. Dwivedi also covered 'Good Housekeeping – Importance of maintaining high standards' during the junior officers' seminar. Whereas, Mr. Jitendra Kumar presented the topic of Machinery and LSA / FFA Deficiencies – Latest trends and Challenges.

Capt. Thomas Varghese, Manager, Vetting and Operations, ESM, Singapore, conducted a session on safe and efficient cargo operations for the navigating officers during the senior officers' seminar. Sharing case studies of the latest major navigation incidents and mitigating measures, he reiterated on having proper tool box meetings, guidance and senior supervision, updating the PMS system. He stressed the need to think logically and to never hesitate in seeking assistance from office to resolve any problem no matter how trivial it may be along with timely & correct feedbacks. Similarly, Capt. Akash Saxena, Superintendent in charge of Quality in ESM Chennai, also shared two case studies involving navigation incidents that had resulted in collisions at the Junior Officers' Seminar.

Sharing their expertise at the junior and rating seminars were also Capt. Bhavin Gohil and Capt. Vikram Kakar on PSC Inspection, Capt. V.R. Krishnan, Faculty, SIMS, Lonavala on Personal Injuries, Safety & Hygiene – Safety culture, Cleanliness and PPE, Capt Utpal Chiplunkar on manning issues and its new requirements and Capt. Prazy cleared the air on timely relief, internal promotions and explained the criteria for promotions.

SIMS Sports Day

The annual sports day of the Institute was held on 29th October'16. Held within the institute's compound, the events welcomed active participation from both cadets and faculties alike.

Participants were competing in the sports of track, swimming and cricket.

The cross country race was won by cadet Varun Rawat of Kaveri house with a timing of 21 minutes. After the marathon, a special walking race for faculties above the age of forty years old was held in which Mr P.V. Dinesan won comfortably. In the ladies walking race, Mrs. Meenal Ingulkar took the first prize. The marathon race for the staff was equally intensive where in Mr. Somnath took the first place, after trailing Lt. Col Laskar for lengthy periods of the race. However, towards the end, he made a last minute pitch and broke into a sprint catching Lt.Col by surprise and reaching the post before him.

In the swimming events, there was neck to neck racing in all the events. Inter house relay was won by the Kaveri house.

In the athletic events mention has to be made of cadet Prajwal of the Tapti House who left crowd way behind with his long strides in the sprint event, Inter house(4x 100) relay was won by the Tapti house.

Bagging the most attention was Cricket, which was played by the members of the staff. Teams were led by Mr. Vishal Dandagi and Nilesh Malvatkar.

Team A won the toss and elected to bat Scoring 139 runs in 15 overs. Team B scored 81 runs all out in 13.3 overs giving the win to Team A who won by 58 runs.

On the whole it was a good experience and a feel good factor was conveyed since all took the victories and losses in their stride. The following events with results are as mentioned.

Cadets

CROSS COUNTRY (6.5) KM

1.	Varun Rawat	Kaveri
2.	Amrinder Singh	Ganga
3.	Anish.K	Ganga

SPRINT 60 M

1.	C Abytom	Godavri
2.	Vivek Nagi	Ganga
3.	Shubham Rawat	Tapti

SPRINT 100 M

1.	Prajwal.D	Tapti
2.	C.Abytom	Godavri
3.	Vivek Negi	Ganga

RELAY (4 X 100)M

1. Tapti
2. Ganga
3. Kaveri

SWIMMING

FREE STYLE 25 M

1.	Aditya Saini	Ganga
2.	Satyam Tiwari	Tapti
3.	Harsh	Godavri

BACK STROKE 25 M

1.	Sumit Sigroha	Godavri
2.	Mahesh	Ganga
3.	Shiranand	Kaveri

BREAST STROKE 25 M (HOUSE)

1.	Vedant	Tapti
2.	Roshan Shethi	Kaveri
3.	Abhipray Gupta	Ganga

BUTTERFLY 25 M

1.	Avinash	Ganga
2.	Spandan Jadhav	Kaveri
3.	Dipesh Sharma	Tapti

FREE STYLE 50M

1.	Aditya Saini	Ganga
2.	Somdeo Joshi	Kaveri
3.	Dipesh Sharma	Godavri

FREE STYLE 100M

1.	Avinash	Ganga
2.	Vedant	Tapti
3.	Spandan Jadhav	Kaveri

RELAY INTER HOUSE (4 X 25)

1. Kaveri
2. Tapti
3. Godavri

Staff

WALKING ABOVE 40YRS

1. P.V Dinesan
2. Mahesh Thatte
3. L.S.Rajput

MARATHON (1.5) KM

1. Somnath Langde
2. Lt. Col S. Laskar
3. Ashish Pawar

SPRINT (MALE) 100 M

1. Ashish Pawar
2. Pramod Dhumal
3. Ranjith Khadakwal

Participants from the different houses getting ready for the 1.5km marathon run

SPRINT (FEMALE) 100 M

1. Maya Yadav
2. Pooja Giri
3. Komal Bidkar

SPRINT (FEMALE) 60 M

1. Maya Yadav
2. Meenal Ingulkar & Komal Bidkar
3. Pooja Giri

WALKING (FEMALE)

1. Meenal Ingulkar
2. Pooja Giri & shashiPriya
3. Komal Bidkar

SWIMMING

SPRINT FREE STYLE 25 M

1. Laxman M Kakde
2. Uday Madke
3. Jitendra Ram

THE BEST OVERALL TEAM Tapti
BEST ATHLETE Prajwal D
BEST SWIMMER Avinash

Winner of Freestyle Swimming 25m - Sports Instructor Mr. Laxman Kakade (right)

Lifting the Trophy. (From left to right) Mr. Anand Koni, Mr. Biju Baben, Mr. Vishal Dandagi, Mr. Jims Andrews, Mr. Mahesh Patil, Mr. Laxman Kakade, Mr. Mahesh Thatte, Mr. Swapnil Jadhav

Cadets competing in one of the seven swimming events

Best overall team: Tapti House

Team led by Mr. Vishal Dandagi made 139 runs in 15 overs to win the competition

Continued from Page 12

vertical angles to compensate for the vessels' movement. These are becoming widespread in the offshore renewable energy industry

An Ampelmann dynamically stabilized gangway in use

Surfers or Boat Landings.

These are specially designed attachments to crew boats, larger vessels and offshore structures. These may take the form of a purpose built device on the bow of a crew boat ('male' section), designed to fit into a receptacle frame of structure on a larger vessel of offshore structure ('female' section).

Technological advances in terms of transfer access devices are being used to increase safety and availability of transfers in adverse weather conditions.

These use mechanical methods to grip the boat landing and/ or provide a dynamically stabilized access to the ladder which allow transfers in higher wave conditions than has previously been possible.

Transfer at Boat landing using stabilized ladder and grip.

Prior to any personnel transfer, the approved company procedures should be followed, which would invariably identify the necessary controls like the permit to work, risk assessment and toolbox talks. The weather and sea state limitations would also be required to be met as also the roles and responsibilities of the personnel involved which is defined during the briefings conducted prior to such operations.

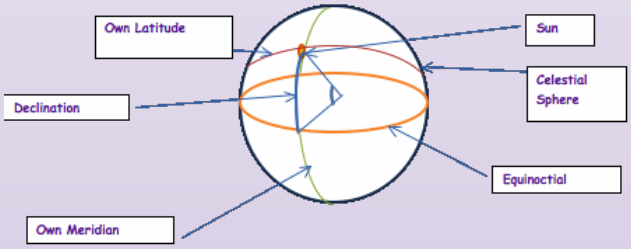
No Shadow Day

Given my interest in exploring the marvellous phenomenon of the Nature, I undertook a small project to find the moment at which our shadow hides away from us.

Deck Cadet Anandu T. Sajan
Ex SIMS Cadet
DNS-16

Sun on my zenith

Let us have a brief look on the basic theory behind the earth's revolution around its own axis over a day's time (when speaking celestially). The definition of noon as we say is apparently when the sun is at the zenith (meaning overhead), but this is not the case in every day observation. The long shadows of objects at sunrise start becoming smaller and smaller as the day progresses until the shadow is smallest at meridian passage (own longitude) of the sun and simultaneously grows longer to sunset. Due to Sun's declination (tilt) it will always present a shadow even at noon!



In fact for a position on earth ''no shadow'' can be experienced twice a year only for latitudes between 23.5 deg North and 23.5 deg South. For those living between the latitudes 23.5 deg. south (the tropic of Capricorn) and 23.5 deg. north (the tropic of Cancer) can experience the sun right at Zenith - once between Winter solstice (21st/22nd December) and Summer solstice (20th/21st June) and then between Summer solstice and Winter solstice. In India, this apparent motion of the Sun due to Earth orbiting around Sun over one year, is clearly identified. The northward travel of the Sun is called Uttarayan and the southward is called Dakshinayan. The Tropic of Cancer passes through countries like Bahamas, Mexico, Mauritania, Mali, Western Sahara, Algeria, Niger, Libya, Egypt, Saudi Arabia, India, China, Abu Dhabi, Oman, Bangladesh, Burma and Taiwan. Tropic Of Capricorn passes through Chile, Argentina, Paraguay, Brazil, Botswana, Madagascar and Australia.

So, for you to get a ''no shadow'' day, you will have to wait until the latitude of your place equals the declination of the Sun and when Sun passes the meridian (longitude) of that location exactly, the sunrays will be perpendicular on this latitude i.e the shadow of a vertical object falls right underneath. At this instant, the Sun's altitude will be the maximum i.e. 90 deg. This means that the Sun is exactly overhead and in turn resulting in no shadow!

Observations

On the day of 27th Feb 2016 my vessel British Integrity was anchored at Suape, Brazil. It was a slight cloudy day with a few patches of Altocumulus clouds floating.

Position was 08 22.3 S & 034 54.1 W. From the Nautical Almanac Sun's Meridian passage time was calculated applying Longitude in Time (LIT) (W).

LMT MERPASS		12h 12m 00s
LIT (W)	+	02h 19m 36s
GMT MERPASS		14h 31m 36s
SMT MERPASS		11h 31m 36s

Merpass time = 14h 31m 36s (UTC).

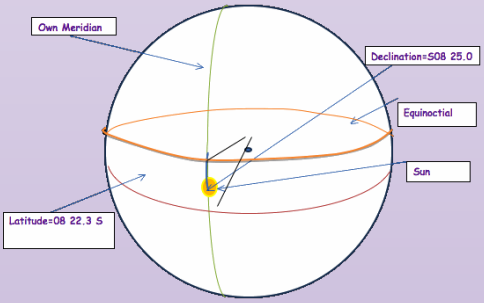
I had kept a rectangular metal piece on the bridge deck a few hours before my observation. After an hour I observed its shadow decreasing in size. Pictures were also captured at frequent intervals for reference.

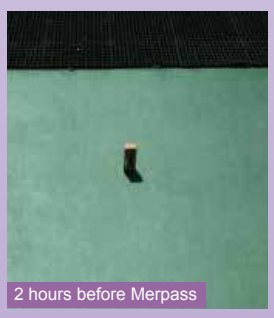
Declination of this position for the above time from the almanac was S 08 25.0, and the latitude of location was 08 22.3 S. Neglecting the small difference theoretically the latitude and declination is almost the same and the condition for my observation was satisfied. There comes the phenomenon of no shadow into play.

I visually observed that the shadow of the object was becoming shorter and at the instant of the above calculated Merpass time the shadow had completely vanished.

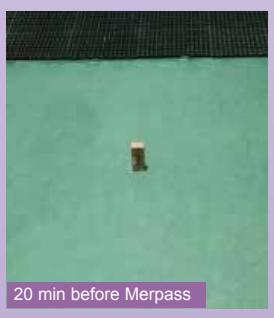
At that instant of time the Sun had reached its maximum altitude and was having the same declination as the latitude of my position.

The phenomenon of ''No shadow day'' was thereby practically observed. It was a simple but astonishing observation which required nothing but patience and basic knowledge about celestial bodies. ■

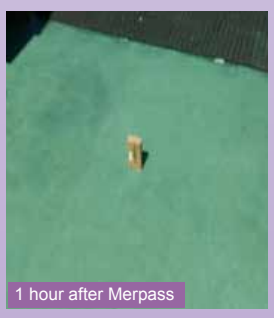



2 hours before Merpass


1 hour before Merpass


20 min before Merpass


At 11h 31m LT (Merpass Time). No Shadow


1 hour after Merpass

Promotions Onboard ESM-Managed Fleet During Fourth Quarter


JO SARAN SASIKUMAR
DNS 11


JO ABHISHEK SRIVASTAVA
DNS 13


JO SURINDER SINGH
DNS 11


JO MOHAMMAD SAFWAN
DNS 11


JO KULDEEP KUMAR
DNS 11


JO AMANPREET SINGH BAINS
DNS 13


JO SWAPNIL NIMASE
DNS 13


JO DEBOJIT BAIDYA
DNS 13


JO AMANPREET SINGH
DNS 11


JO ROHIT KUMAR NARULA
DNS 11


JO GURTEJ SINGH AULAKH
DNS 13


JO MANPREET SINGH DEAHR
DNS 13


JO HARJOT SINGH BLASSI
DNS 11


JE JOSEPH BENLEE REBEIRO
GME 15


JE SANDEEP SADANAND PATIL
GME 16


JE ARUN VISHWAMBHARAN
GME 16


JE KANAGASAPABATHY
GME 16


JE AKASH RAJKUMAR BANSOD
GME 16


JE RIPDAMAN SINGH KHURANA
GME 16


JE PIYUSH DHARMIK
GME 16


JE NITIN KUMAR
GME 15


JE SUMIT DUBEY
GME 16


JE GIRISH SHARMA
GME 15


JE DHEERAJ KUMAR
GME 16


JE SATISH MARUTI GARALE
GME 14


JE ASHRIN SHANON VAS
GME 16


JE ANKUR SHARMA
GME 15


JE GAURAV KUMAR DALAL
B. Tech 001


JE DILLS JOSE MEMADATHIL
GME 16


JE EMIL JOSEPH
GME 14


JE NOEL SANDEEP SAVIO MENDONCA
GME 14


JE ARUNLAL MAYICHERI KANDY
GME 15


JE KIRAN MOULI JOREEGALA
GME 15


JE KRISHNAPRASAD THEKKANATH
GME 15


JE ARNAV VIPANKUMAR GOYAL
B. Tech 001


JE ANUJ VALSAN CHERUKKOTH KUNIYIL
GME 15


JE NILESH SHRIKANT PARAB
GME 16


JE DEVENDER MITTAL
B. Tech 001


3O KARTEEK KUMAR BOOTHI
DNS 14


3O VISHAL DHIMAN
DNS 13


3O VARUN VINOD
DNS 11


3O DILSHERAZ SINGH
DNS 13


3O VIKRAM MANHAS
DNS 12


4E ABHIJITH VIJAYAN
GME 15


4E KALAIMANI KARUNANIDHI
GME 13

Whisper of Soul

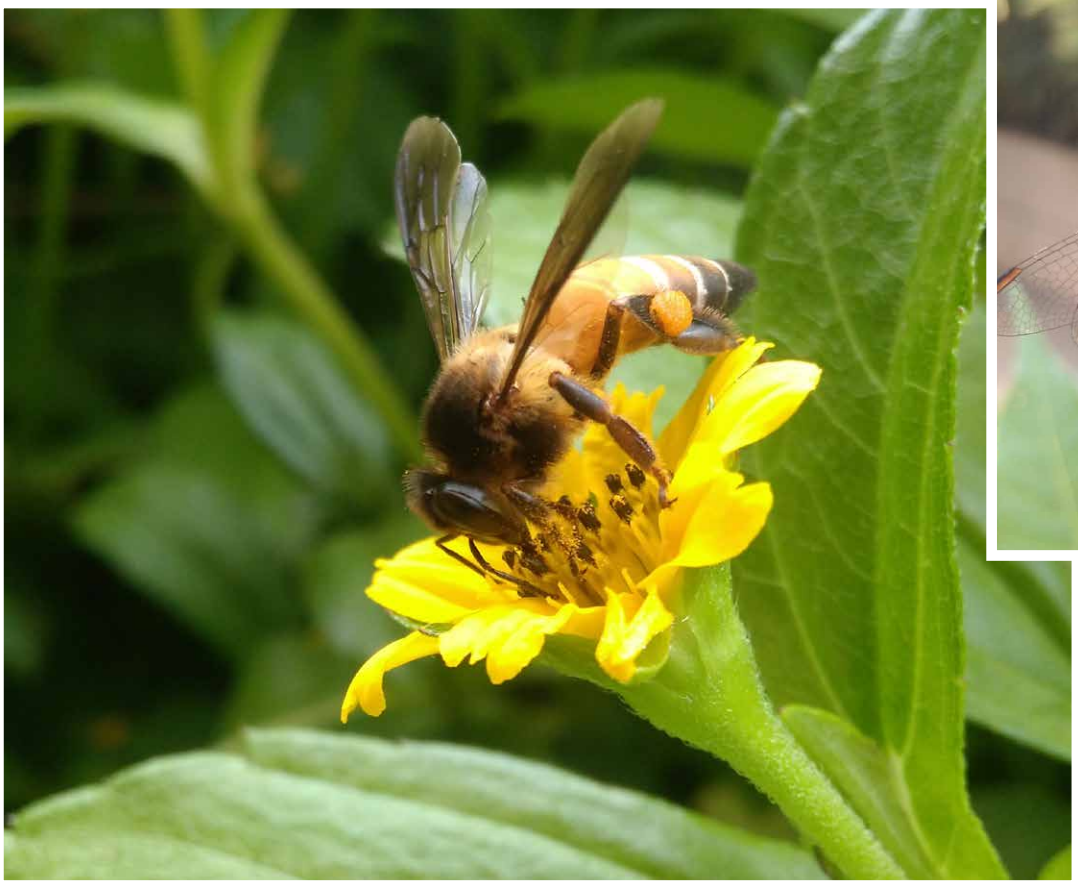
A million hearts beating around, yet it's solitude that you taste,
Despair makes its own sweet time; the smiles evanesced in clouds of haste.
A little grave the strife now seems, but some day you will win,
All you need is a thrust till then, to defeat the wail within.

The oblivion has set her free from the mighty chains of morrow,
If only you knew before, sometime you would wish to borrow,
"Memories make you walk along", is all tales and lies,
A leaf from a tree is fallen once, as a mere bookmark it dies.
The tree is indeed of stronger roots, it has a world to serve,
Firm and tall, it has to stand, with lush green branches curved.
Deceiver is the night, you better know, there's bound to be sunshine!

Life is more than fire and ice, very soon all will be fine.

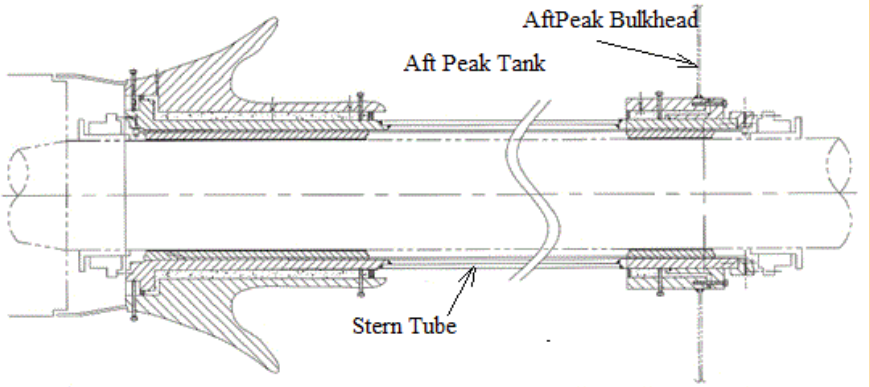
Listen to your own beat for once, louder than alien refuge,
For it's been waiting for you to read, untold mysteries in deluge.
The vulnerability will sublime away with the tears of blood in pain,
But someday you will wear a smile, when you find yourself again.

Poem by:
Cdt. Shantanu
GME-21
SIMS Lonavala



Photos by:
Cdt. Jithin P. Sathyan
GME-21
SIMS Lonavala

Photo by:
Cdt. Ramachandra Boopathi
GME-21
SIMS Lonavala



Stern tube cooling water Tank – Importance of Monitoring

S. VIswanathan
Ex- Principal
SIMS, Lonavala

Merchant ships are fitted with stern tube and bearings for the propeller shaft. The stern tube facilitates penetration of the hull and connection of the propeller shaft to intermediate shaft. Stern tube is located between the after peak tank bulkhead and stern frame and is surrounded by after peak tank. After peak tank is ballasted when required for stability and maintaining required trim of the vessel. In addition, the sea water carried in the bottom potion of the after peak tank assists in cooling the stern tube and bearings. This may be the only method of cooling or may be in addition to the cooling system provided.

Arrangement of after peak tank: After peak is part of the stern structure. The boundaries of the tank are formed by the stern frame, after peak bulkhead and keel. To prevent complete emptying of the tank, two suction lines are provided either with the bottom suction line blanked off or the suction line positioned at a height from the bottom of the tank to the ballast pump. This arrangement allows maintaining a minimum quantity of ballast water for cooling the stern tube. A drain plug is provided at the bottom of the tank on the engine room side to facilitate draining the tank completely, if required.

Monitoring: Since the cooling water tank serves to cool the stern tube, it is imperative that the level in the tank is monitored regularly. The tank may need to be drained off in dry dock for inspection of the external surface of the stern tube or the after peak tank itself. After completing the task, it is to be ensured the tank is filled at least to the minimum level.

Incidents have happened in the past when the tank had been left empty unintentionally, resulting in the damage to the stern tube bearings and liners of the tail shaft, during subsequent sailing after dry docking routine. It will be worthwhile to monitor and record the water level in the after peak tank on daily basis in engine log book. Oil lubricated stern tube bearings are also provided with "Bearing High Temperature" alarm. It is important the temperature alarm is tested frequently to confirm the correct functioning of the alarm system.

Conclusion: Most of the machinery failure can be dealt by the ship's staffs with the aid of spares, tools and training. A few critical failures which cannot be dealt by shipboard staff due to constraints is the stern tube bearing failure, where the ship has to be brought to dry dock for repairs. With this in mind, ship's staff must take all precautions to avoid such an occurrence on their ship.

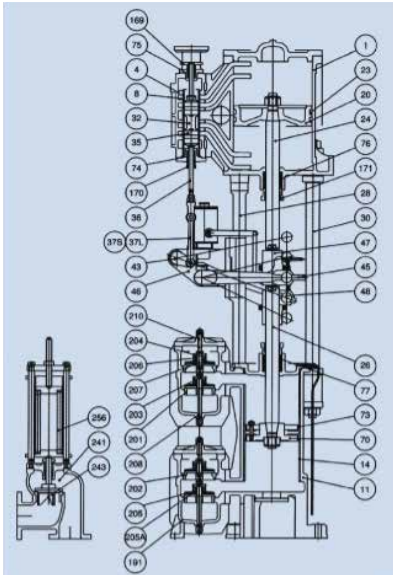
Impact of an Inefficient Stripper Pump

* We invite responses from our learned readers as to the causes and lessons learnt through this case study. Please send your responses to samundraspirit@samundra.com.

Oil tankers are usually provided with Cargo stripping pumps to complete the unloading operation in port. Once the bulk discharge is completed, the reciprocating stripper pump is utilized to strip the cargo tanks to reduce the ROB (Remaining on board).

This case recounts an experience of a Second engineer on a crude oil carrier, where the stripping pump efficiency was seriously affected. The extent of the damage was such that it took the vessel longer than normal time to strip the tanks and lines. This affected the turnaround time of the vessel.

The vessel of 40,000 tonnes deadweight was shuttling between the offshore platform and an Eastern port nearby. The vessel was fitted with 3 steam driven cargo pumps and two reciprocating stripper pumps in the pump room for cargo handling. Cargo work was planned and executed by Chief Officer with the assistance from other deck officers and crew. The vessel was designed to complete bulk cargo discharge in 24 hrs and another two hours for stripping the tanks and lines.



Three months after the entire crew was changed, it was noticed that the stripping time started increasing with every voyage and reached a duration of 12 hours! It was reported that stripper pump was being run at the maximum stroke rate. Chief Officer reported the matter to Chief engineer and requested to check the stripper pumps.

When the stripper pump valve chest were opened, Second engineer noticed almost all the valves in the valve chest (6 sets of suction and discharge valves were fitted for each stripper pump valve chest) were stuck in partially open position due to rags stuck between the valves and valve seats. This had caused the loss in pumping efficiency by the fluid leaking back. The valve chest was cleaned off the rags and the pump assembled and tried out to satisfactory performance. This prompted the engineers to open the second stripper pump valve chest and same issues were noticed. It was also set right.

Responses to previous issue case study - Black Out triggered by Incompatible bunker fuel: Issue 35 (October 2016)

Thank you readers for the feedbacks and responses on the previous case study. Here's a compilation of the answers received:

Q1. What precautions are taken before bunker fuel is received on board?

a. The Chief Engineer should calculate and check which bunker/ fuel oil tanks are to be filled after he receives confirmation from the Operators/ Charterers about the amount of fuel to be received.
b. It might be required to empty some tanks and transfer the oil from one tank to other. This is required so as to prevent mixing of previous and new bunkers and prevent incompatibility issues between the previous oil and the new oil.
c. A meeting should be held between the crew members that will take part in bunkering operation and the whole process regarding tanks to be filled, sequence of filling, contingency plan, etc. should be discussed.
d. Bunkering checklist should be filled up and no items should be missed out.

After making fast the bunker barge with ship, Chief Engineer should check the supplier's valid license issued by certifying authorities. Chief engineer should check that following documents are present on board the barge:-

1) Bunker requisition form:- This will indicate the quantity and quality of bunker that the supplier has to supply. This will indicate bunkered oil's viscosity, density, water content, flash point, etc.

2) Tank measurement/ calculation form:- This form is to record the gauging and cargo temperature readings as witnessed by Chief Engineer.

3) Non cargo tank declaration form:- It is the declaration by Chief Officer of the measurements and content of non-cargo tanks and spaces before bunkering. The Chief Engineer should be allowed to verify the declaration.

4) Chief Engineer should always check that the specification of bunker to be supplied is as per ISO 8217 latest edition.

Apart from other requirements two new things have been added in both distillate and residual fuels, which are

a) Acid number limits included:-
For distillate fuel- 0.5 mg KOH/ gm
For residual fuel - 2.5 mg KOH/gm
b) Hydrogen sulphide:-
From 1st JULY 2012 the limit is 2mg/ Kg

.

Q2. What actions are taken if the bunker fuel is not as per specification?

To ascertain the quality of bunkers, it is necessary to take the samples in the prescribed manner. The sample should be divided into 4 or 5 sub-samples. Out of these,

Extent of damage/delay:
The vessel was taking longer time to strip the tanks and lines thereby increasing the port stay and reducing the turnaround. This affected the vessel's performance commercially for a few voyages until the root cause was established and action was taken. ■

From the details provided and your knowledge about the operation and maintenance of stripper pumps, please provide answers to the following regarding this case study:

1. **What could be the source of rags in stripper pump valve chest?**
2. **What provision is made to prevent debris reaching the valve chest of stripper pump?**
3. **What is the duty of Senior management staff of the vessel when entire crew is changed?**

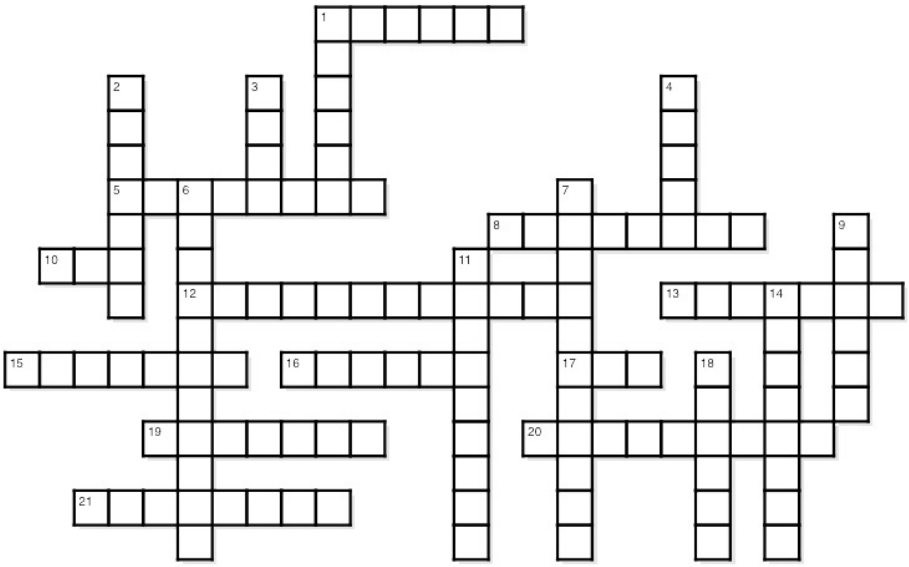
S.Viswanathan, Ex-Principal
SIMS, Lonavala

one should be sent to laboratory for analysis by the ship. The supplier has the duty to provide ship with MARPOL sample and the seal number of this must be recorded in the BDN (Bunker Delivery Note), along with seal numbers of other samples. If the ship's sample analysis report shows bunker to be of a lower quality or not as per specification, ship's staff should tender a protest regarding quality.

As per BIMCO (The Baltic and International Maritime Council) standard bunker clause, this complaint should be tendered within 30 days of delivery. After receiving the complaint, the supplier will send their sample to laboratory and will match its result with ship's one. Otherwise, both can choose an independent laboratory for testing the sample.

Q3. What tests can be conducted onboard to ascertain the quality of the fuel received?
The only way to ascertain the quality of the product actually received on board is through representative sampling and testing by specialized laboratories. ■

Crossword Puzzle



Across

1. Hold component of main engine in compression
5. Act as supporting base of engine
8. It stores the rotational energy
10. Preheating of JCW is done to reach _____ faster
12. Increase power output for same sized engines
13. _____ scavenging is used in main engine
15. Software for the PMS system
16. _____ provides seal between JCW space and scavenge space
17. Minimum number of starts in reversible engines as per SOLAS
19. Back flow of scavenge air in turbocharger
20. Seal used in Turbochargers
21. I take care of load variation in engine.

Down

1. _____ bearing transfers power to ship's hull
2. Bearing metal is known as _____
3. Main engine operates on _____ cycle
4. Turbocharging used in generator engines
6. Supply air to correct Cylinder {while starting main engine}
7. Type of lubrication in Crosshead
9. These aligns the engine shaft with rest of the shafts
11. Used in long reciprocating engines to eliminate side ways pressure on Piston
14. Corrosion taking place due to clearance between Bedplate and A-frame
18. These lubricates the cylinder liners

Cdt. Damanjit Singh &
Cdt. Satnam Singh
GME-20
SIMS, Lonavala

Answers

Across:
1. TIEROD 5. BEDPLATE 8. FLYWHEEL 10. SIT (SELF IGNITION TEMPERATURE) 12. TURBOCHARGER 13. UNIFLOW 15. PHOENIX 16. ORINGS 17. SIX 19. SURGING 20. LABYRINTH 21. GOVERNOR

Down:
1. THRUST 2. BABBITT 3. DUAL 4. PULSE 6. DISTRIBUTER 7. HYDROSTATIC 9. CHOKES 11. CROSSHEAD 14. FRETTING 18. QUILLS

Transformation into an Athlete at SIMS

Cdt. Siddharth Ram Binod Singh
GME-20
SIMS, Lovala

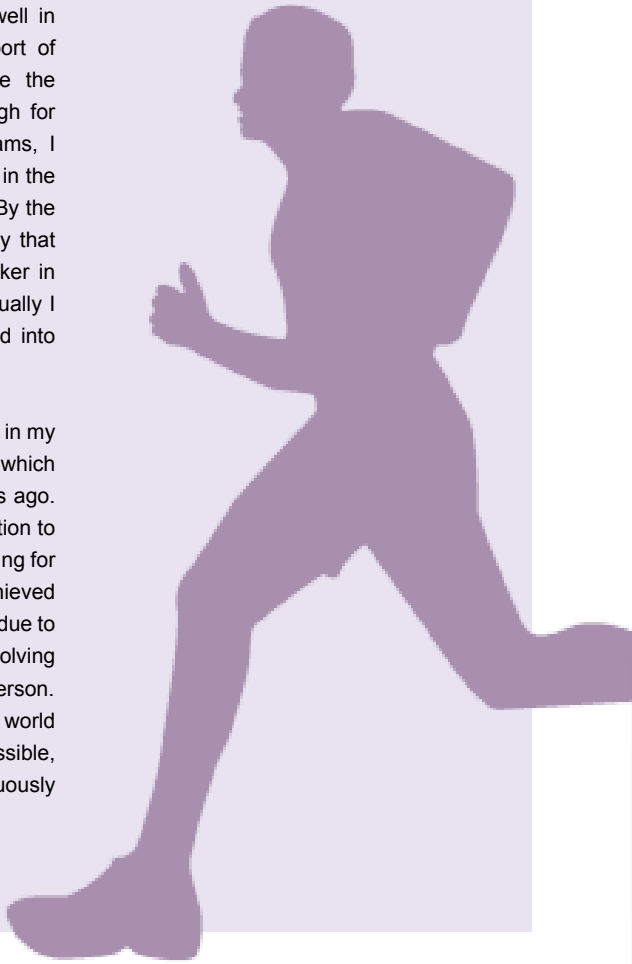
A few years ago I couldn't imagine myself running a few kilometres, swimming 25 metres, and cycling over 5 kilometres. However, after being associated with SIMS for over one and a half years, I have undergone a transformation that has been possible due to the support received as well as disciplinary lifestyle at SIMS.

When I was selected for the course I was an overweight person of 129 kgs, and was initially held back from admission on medical grounds of being unfit for cadetship and was advised to reduce weight below 100 kgs. From that day of setback, I took up the challenge and started the race to fitness with zest on 20th June 2015. By the time, I joined SIMS in September the same year, I lost 31 kgs and weighed 98 kgs. In fact, I believe the real journey to my fitness started after being inducted at SIMS.

We were following scheduled timings for everything - eating, sleeping, and studying, etc. We started the day with PT classes where the first drill was to complete one round of the campus before carrying out more exercises. These activities took a toll on the first day itself as I had never run 1.5 kms in a stretch before. However, very soon I started managing these activities with ease and soon enough took up the challenge to take part in a cross country race of 6 kms run (that is approximately 4 rounds of the campus) as well as swimming championship on the same day. I finished the race and won the 50m freestyle swimming event. The development in my fitness levels had been rewarded thanks to the efforts of wardens and the PT instructor.

In due course, I participated in various physical activities on campus and even fared well in studies, with the assistance and support of the dedicated faculty members. While the sessions during classes seemed enough for me to emerge successfully in the exams, I preferred to spend my free time training in the open and studying my lessons as well. By the end of GME course I could proudly say that due to all the efforts I was the 1st ranker in the batch as well as a fit person. Eventually I reduced further 10 kgs and transformed into an athletic physique.

Now I participate in many athletic events in my hometown including a half-marathon, which was beyond my imagination a few years ago. I felt proud to have completed it, in addition to cycling for 210 kms in a day, and swimming for more than 600 metres at a stretch. I achieved these because of the setback I received due to being overweight and subsequently resolving to transform myself into healthy better person. All I can say now is that nothing in this world is impossible. But to achieve the impossible, one has to strive hard and work continuously at improving yourself.



Run Lonavala 2016

Our young marathoners and faculty members

Our students made us proud in the INS Shivaji Lonavala Marathon Run. Nine cadets from our institute participated in the seven kilometers race in early morning of 27th November 2016.

After just 32 minutes, our speedy Cdt. Varun Rawat breast the tape followed by Cdt. Amrinder Singh, with a timing of 32m 47sec and 32min 48 sec respectively.

Two more cadets Cdt. Sidhant and Cdt. Prateek Mishra also made it into the merit list of first ten. They were well cheered by the local crowd.

All the participants were awarded a certificate of merit and medal for participation.

Visitors' Comments
Fourth Quarter, 2016

I am much Impressed with good Facility. Good people and good spirit of SIMS
Yukito Higaki
President of Imabari Shipbuilding & Shoei Kisen Kaisha

First of all I should say thanks for the warm hospitability and fantastic campus with great performance and high standard facilities; especially the ship engine room. Wishing all the best and success to the staffs and also cadets on their future career. Thanks a lot and very much impressed of what have been visited.
Capt. Kambiz Savadkouhi
Senior Expert/Seafarers Training Standards Ports and Maritime Organisation (PMO)
Islamic Republic of Iran

First of all I cannot help admiring such a complex made for training of marines. I have special thanks to principal and vice principal of this training institute for offering utmost training with the latest the instrument, equipment, laps, workshops to the new and young mariners. Wishing you all the best
Capt. N. Alipour
Head of Seafarers Standard of Training Directorate
Tehran – Iran

It was an excellent training centre. Engine room of ship was very good with machines in good condition. Training related to both Deck and Engine side found efficient. Thank you very much for excellent hospitality.
Saeid Mousavi
NITC Fleet Personnel
General Manager
Tehran – Iran

It has been an impressive experience visiting this extremely modern and futuristic maritime training institute of India. We look forward to partnering SIMS for our training needs. Thanks to the excellent staff and Principal Mr. Viswanathan for making our visit really memorable. Also many thanks for the excellent hospitality.
Ashok Menon
Senior Manager
Torm Shipping India Pte Ltd
Mumbai

Great Training Facility. Impressive methods to teach cadets the best of maritime and shipping. You have managed to set up a well-balanced education system between theory and practical. Well done and thanks for the hospitality
Capt. Marius Van Westerhuis
Manager Maritime Assurance Asia Pacific, Shipping & Maritime
Asia Pacific & Middle East.
Shell INTL Eastern Training Co. (SIETCO)
Singapore

Thank you very much for the wonderful tour and hospitality at centre. Facilities are really impressive and world class.
Mr. Sumit Trikha
Marine Resource Manager,
Northern Marine Powai
Mumbai

An Impressive and well-thought out campus with a smart turn out to its cadets
Mr. John Harding
Group Marine Resource Manager
Northern Marine Manning Services Ltd
Scotland

Congratulations for a great institute. Wishing all the best for the future. I thank you for the invite and hospitality.
Capt. Tore Svensen
Head of Fleet
UACC
Dubai, UAE

An excellent institute. Top Notch. Very Impressive. I wish I was starting my cadetship now. My best wishes to the entire staff for keeping up the standards. It was a pleasure to visit the facility.
Mr. Anurag Gupta
Marine Technical Advisor
Shell India Markets Pvt Ltd
Mumbai

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- Formidable shore based technical and marine team with more opportunities of career growth
- ESM is part of the Executive Group of Companies which comprises of six other Marine Services related Businesses, headquartered in Singapore.

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