GOODWOOD SHIP MANAGEMENT RECEIVES THE GREEN ERA AWARD 2015

Captain A.R. Sabnis received the award for "perfection, quality and ideal performance" at the Green Era Award Ceremony & Green Economy Forum 15th Anniversary celebrations in Berlin on 23 March 2015.

The forum was established to learn best practices and success strategies from top notch sustainable business leaders from around the globe. It brings together business across all sectors of the green economy, from waste management to renewable energy to green buildings.

The Global Green Award recognises true global sustainable exemplars including governmental institutions, green building councils, environmental agencies and green companies that have been innovative and creative in pursuing the sustainable imperative.

Captain Sabnis presented with the Green Award by Charbel S. Tabet, President, Association Otherways Management and Consulting (France)

NEWSLETTER CONTENTS

JUNE 2015 EDITION

CADET TRAINING WITHIN GOODWOOD SHIP MANAGEMENT PTE LTD

The worldwide recession, which started in 2008, is still continuing. Shipping, being a service industry cannot remain untouched and therefore the most feared recession has set in, in the shipping industry.

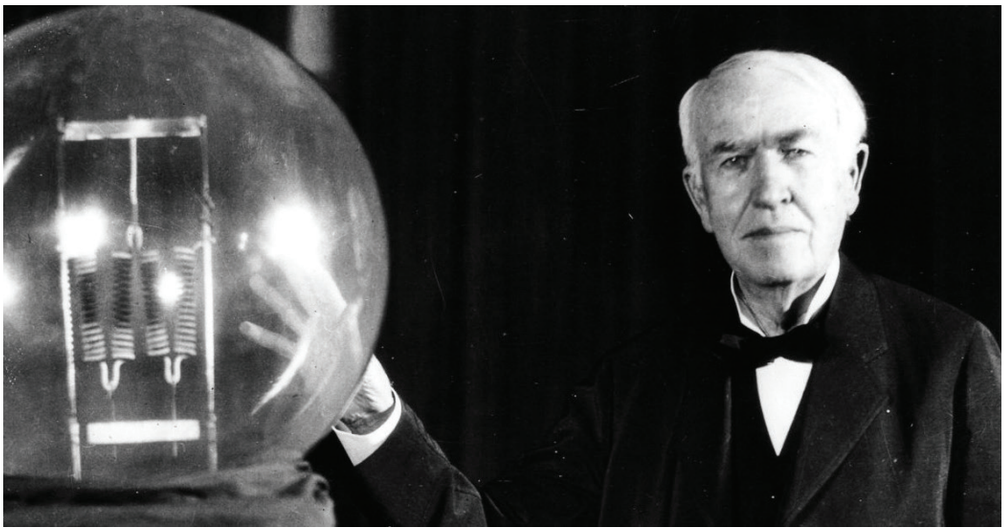
I have been sailing with Goodwood since it started in 2008. Since then I have been training and guiding cadets on ships during my tenures onboard and today I feel very proud to say that some of my cadets are already sailing as third Officers and 2nd Officers and are doing quite well in their capacity.

As said above today's time is not very good from the seafarer's point of view as there is a huge flooding of cadets, junior officers in the market and the jobs are lesser. Eventually this situation will effect on the senior level as well or should I say it has already started showing. Due to such recession there is a huge competition amongst the young lads. Adversity always brings opportunities and this is true for shipping as well. Seafarers can make use of this time for upgrading their skills, certification and specialization. This will give better edge to their career in future.

I keep motivating the cadets on the same note. I have realized that what is lacking today among the young guys is direction and determination.

Direction

I find that cadets and juniors now -a-days are completely disoriented. They have to be shown the right direction to go about setting their goals and eventually fulfilling the same. Proper planning and self-organization is lacking today. I believe this is because of lack of motivation and hence lack of inspiration.



Genius is 1% inspiration and 99% perspiration." – Thomas Edison

Determination

People have drawn their own comfort zone and don't want to explore outside this area. Every individual has become used to an easy life and hence don't want to take risks or pressure to perform and progress. Hence the determination factor is totally lacking. But what they don't understand is that this kind of life will eventually create big havocs in their own career and life in future. The foresight somehow is totally missing. The gravity of the situation and its effects on future life (professional and personal) is not being understood.

I take this opportunity to motivate our cadets and junior officers to build their strong foundations today so that they can lead a very healthy and prosperous professional and personal life.

The celebrated inventor Thomas Edison is well known for his statement, " Genius is 1% Inspiration and 99% perspiration." While I believe that hard work is essential to a life of real success and fulfillment I think that being filled with a deep sense of inspiration and commitment to making a difference in the world is an even more important attribute. All of the great geniuses of the world were inspired and driven by their desires to enrich the lives of others. When you study their lives you will discover that this desire became almost an obsession for most of them. It consumed them and occupied every cell of their minds.

How inspired are you in your own Life? If your level of inspiration is lower than you know it, you need to start working on the same so that you can be self-driven to set and accomplish your own goals in Life. With a healthy dose of inspiration you will quickly raise your life to a whole new plane of living.

What you can do for the same:

1. Read self-help books.
2. When you are on leave you should attend public lectures by someone who you admire or spend time in reading the Biography of one of our heroes.
3. Start spending time with people who are passionate with what they are doing in life and dedicated in making the best out of Life.

Self-Organization is extremely important. In the initial stages of my career I sailed with one Master who was extremely self organized. He used to always motivate the people onboard to be organized by setting an example himself. What I gained from him was that by being organized onboard in your work, training and routine you will end up giving a far better output and efficiency in your work. This will improve your quality of Life onboard and you will be able to concentrate more and progress towards your goals at a better pace. A time will come eventually when you will be driven by a positive attitude and being organized will become a routine part of your life. It will become an obsession.

Generally when I motivate my cadets to be organized I find that they try their best but eventually loose their track where I again have to push them and give them a boost. It is always good to have some person pushing you to make you aware of the flaws but this is not the case all the time. Many times you have to be your own judge. You have to do your own assessment and find your own flaws. Determination must be a part of life and should be made the way of life. Remember "It takes 21 days to develop a new habit." Yet many people give up on creating a positive life change after only the first few days when they experience the stress and pain that is always associated with replacing old behaviors with new ones. New habits are much like new pair of shoes, for the first few days they will feel uncomfortable but if you break them in for about three weeks they will fit like a second skin. "You must try this out it really does work!

As humans, we are genetically programmed to resist change and maintain a state of equilibrium. But just as a rocket uses more fuel during the first few minutes after lift-off than it does later once you get passed those 21 days you will find that staying on course with a new habit will be far easier that you imagined. Ensure that your habits move you forward rather than hold you back!

How should you plan your routine onboard?

I always tell my cadets to keep the following approach towards each and every thing onboard:

Always ask the Following questions and find the answers

1) What?

2) Why?

3) How?

Let me give you an example:
Let's refer to an Explosive meter

What is this equipment?
Why do we have this equipment?
How does this equipment work?

A ship, its machinery and its equipment is a vast subject and hence there will always be something new you will come across in all ranks. This will happen more as cadet and on junior level. When you come across such unknown material onboard you have 2 choices either just let it go or find out about the same. People many times choose the first option but what they don't realize is that the same material is eventually going to come in picture in the future and then cause the person to regret not learning about the same in past. The person who will choose the second option will always prosper professionally.

There is another very important thing that I like to share with my juniors:

"Life is a Passage and Passage Planning is a must". You must apply the 4 salient features in your professional Passage Planning viz: Appraisal, Planning, Execution and Monitoring". Imagine navigating a ship with no passage plan. It you don't have your proper courses on the chart navigation will become extremely difficult and things will become uncomfortable and hay wire.

So each individual should make his own appraisal, plan his passage and set his goals. Then execute the tasks and measure and monitor one's own performance. This is the key to immense success and happy life.

In the today's context 18 months of cadetship is a very short time and to learn and gain knowledge to become a good efficient operator one must be on his toes at all times. Training and assessment must be a continuous process / way of Life. Always remember our job is an operational job and there is no scope for any error as the consequences of even small errors are huge.

Training onboard must be in a balanced way. Progress must be all round and progress graph must always show an upward trend. Today must be better that yesterday and tomorrow must be better than today.

Determination and Dedication is the Key to Success.

Presented by Capt. Rohan Sabnis at Manet, Pune, during National seminar on Global Shipping 2015.

CROSS SENSITIVITY IN GAS METERS

In a perfect world, a toxic gas sensor only would react to the gas it is targeted to monitor, which means other toxic gases should not cause an inaccurate response.

A carbon monoxide sensor only would detect carbon monoxide and a hydrogen sulfide sensor only would detect hydrogen sulfide. Unfortunately, technology has not yet made this a reality and while most sensors are quite specific, cross sensitivity does occur.

Cross sensitivity is a sensor's reaction to an interfering gas. Exposing a sensor to a gas that is not the target gas can cause an undesirable response, either positive or negative.

With a positive cross sensitivity, the user can get the impression that more of a target gas is present than actually is present and vice versa.

All gas detection sensors/technologies have the potential to respond to gases other than the target gas, but some less so than others.

Typically, sensors can be classified as:

1 **Selective (single gas)** If they will only respond to one gas. This is almost impossible, as most sensors will also see other gases under some circumstances.

2 **Non- selective (multi gas)** This type of sensors responds to a number of gases, normally gases of the same group or family.

Different types of sensor behave differently:

CATALYTIC	ELECTROCHEMICAL
Catalytic sensors are non-selective sensors, as they will respond to all combustible gases. This is used to advantage as most suppliers have established charts of cross interference or response levels of different gases relative to Methane and so Methane can be generally employed for calibration purposes.	Electrochemical sensor are generally very selective to the target gases and so do not suffer from cross interference once the correct sensor is selected.
INFRARED	**SEMICONDUCTOR**
Infrared sensors when first introduced were specific to a single gas and therefore not suitable for applications involving monitoring more than one gas. They were very selective and accurate – reading down to one part per million. Infrared was typically used where a high level of accuracy and specificity is required. However the specificity became a disadvantage in machinery rooms as phase out resulted in mixed gas installations needing a different model for each gas, which was a very expensive solution. Models were developed based on broad infrared wavelength monitoring that could detect a mixture of gases. This however reduced the specificity and accuracy.	Semiconductor sensors are non-specific sensors and will respond to most volatile organic compounds. By using filters they can be made more selective to particular compounds e.g. refrigerants. Responding to a group of compounds such as refrigerants is an advantage in mixed gas applications as a separate sensor for each gas is not required. They can be used to detect a large range of gases including all the CFC, HCFC, HFC refrigerants, ammonia and hydrocarbons.

In the sample chart below, the sensor type is along the 'X' axis and the sample gas is along the 'Y' axis. To help you better understand how to read this chart, we will use Hydrogen Sulphide as an example.

Most gas detection manufacturers publish toxic gas sensor cross sensitivity charts. These charts can help the user understand and anticipate cross-sensitive conditions with their gas monitors and empower them to react accordingly.

SENSOR CROSS INTERFERENCE TABLE

GAS	SENSORS											
	Carbon Monoxide	Hydrogen Sulfide	Sulfur Dioxide	Nitrogen Dioxide	Chlorine	Chlorine Dioxide	Hydrogen Cyanide	Hydrogen Chloride	Phosphine	Nitrio Oxide	Hydrogen	Ammonia
Carbon Monoxide	100	1	1	0	0	0	0	0	0	0	20	0
Hydrogen Sulfide	5	100	1	-40	-3	-25	10	300	25	10	20	25
Sulfur Dioxide	0	5	100	0	0	0	-	40	-	0	0	40
Nitrogen Dioxide	-5	-25	-165	100	45	-	-70	-	-	30	0	-10
Chlorine	-10	-20	-25	10	100	60	-20	6	-20	0	0	-50
Chlorine Dioxide	-	-	-	-	20	100	-	-	-	-	-	-
Hydrogen Cyanide	15	10	50	1	0	0	100	35	1	0	30	5
Hydrogen Chloride	3	0	5	0	2	0	0	100	0	15	0	0
Phosphine	-	-	-	-	-	-100	425	300	100	-	-	-
Nitrio Oxide	25	1	1	5	-	-	-5	-	-	100	30	0
Hydrogen	22	0.06	0.5	0	0	0	0	0	0	0	100	0
Ammonia	0	0	0	0	0	0	0	0	0	0	0	100

Table Notes:

1. The table above reflects the percentage response provided by the sensor listed across the top of the chart when exposed to a known concentration of the target gas listed on the left hand column. "-" means no data available.
2. The specified cross interference numbers apply to new sensors only and may vary from sensor to sensor.
3. The numbers are measured under environment of 20ºC, 50% RH and 1 atm.
4. This table is given as a reference only and is subject to change.

If our target gas is Hydrogen Sulphide and we have 50 ppm of Sulphur Dioxide gas present, we can use the chart to determine the cross sensitivity of a Sulphur Dioxide gas exposure on a Hydrogen Sulphide gas sensor.

In this case, it is five percent, which means if we have 50 ppm Sulphur Dioxide present, we can multiply 50 x 0.05 (05 percent) and estimate our cross-sensitive response to appear as 2.5 ppm Hydrogen Sulphide when in fact we have only Sulphur Dioxide present. Of course, we could have a combination of gases that ultimately will raise the complexity of the situation.

Confined spaces are dangerous places to work and those who enter must make decisions that will ensure their safety and the safety of those around them. Having a better understanding of the gases that are present, how to sample for them and how they will react can mean the difference between a safe or unsafe condition.

In summary any sensor can experience cross sensitivity. This can be used to advantage when wishing to detect groups of compounds or using cross sensitivity for calibration. It is important to know the application in order to eliminate the errors when measuring the same.

Operations Department

LEARNING FROM INCIDENTS

Auxiliary Engine Turbocharger and Lube Oil Filter Collapse

The Facts of the Case:

The vessel, under voyage charter of Shell, arrived at the port of Singapore on 9th Feb 2015 at 0730 hours and tendered NOR 0848 hours. Vessel bunkered 20 MT of LSMGO and 400 MT of HFO on 9th Feb 2015.

Vessel berthed at Shell Pandan terminal at 16th Feb 2015 / 0030 hours for loading cargo of DEG. On 18th Feb 2015 / 1400 hour vessel unberthed and anchored at 1530 hours at Algas anchorage.

On 19th Feb 2015 vessel berthed at Oil tanking terminal berth 12 at 0630 hours. Vessel completed loading of 17,899.625 MT of M.E.G. cargo and unberthed on 21st Feb 2015 at 0935 hours, and anchored at Algas anchorage at 1030 hours.

Vessel completed the repairs on Aux Engine No 1 turbocharger and proceeded on voyage to Zhangjiang on 25th Feb at 0100 hrs LT.

A/E No 1 T/C Breakdown - Log of Events

On 15th Feb 2015 when vessel was proceeding for berthing at 2230 hours, duty engineer prepared to start A.E. 1. As per starting procedure, when the engine was turned with indicator cocks open, LO was found coming out of indicator cocks from all cylinder heads. It was also noted that priming LO pump pressure was just about 0.1 bar against normal pressure of 1.0 bar.

During various checks to identify the lub oil leak and drop of pressure, the engine was blown through air several times. Upon draining the exhaust manifold the continuous oil flow was found. It was suspected that the turbocharger LO sealing has been damaged and same oil is coming to cylinder heads via the exhaust manifold. Finally in order to confirm the location of oil leak, the T/C LO inlet and outlet pipes were blanked and priming LO pump was run. The LO pressure was found maintaining normal i.e. 1.0 bar. Thus it was confirmed that the oil was leaking from Turbocharger sealing of A.E. 1

The turbocharger was landed ashore on 18th Feb 2015 for repairs. As the failure had occurred during the Chinese New Year holidays, no shore service was available in Singapore. Considering the extent of damage it was decided to replace the complete T/C. Order was placed with makers IHI Japan for a complete new T/C which arrived Singapore on 22nd Feb 2015 at 0800 hrs following the clearance of consignment it was connected to vessel at 1800 hours on the same day.

Class NK surveyor was arranged on 22nd Feb 2015 at 2300 hrs. Running test was carried out after renewal of the turbocharger with no LO leakages to its exhaust gas side observed but the LO pressure dropped back to abnormally low during the running test.

The Tech Manager and Superintendent along with maker's Daihatsu service engineer conducted investigation as the LO low pressure problem persisted even after renewing the turbochargers.

Daihatsu service engineer inspected all the vessel maintenance records related to Aux engines. After viewing the maintenance history he checked the aux engine No 1. Crank case and bearings, checked the oil flow through the bearings using the LO priming pump, opened up and adjusted the LO pressure control valves.

The LO filter was inspected closely and found that there was sign of LO filter collapsing. This filter was renewed with new spare on 10th Feb 2015. The vessel was supplied with 2 spare filters at Singapore on 9th Feb 2015. The other new spare filter was fitted on Aux eng No 1 and all running test were carried out. Since then the Aux eng No 1 is running satisfactorily and so we concluded early failure of lub oil filter. The Class NK surveyor was arranged on 24th Feb and witnessed normal functioning of Aux engine.

Since the newly supplied filter showed sign of collapsing in short interval of operation it was decided to order 3 more pcs of new filters to keep as spare on board before the vessel's departure.

A/E No 1 T/C

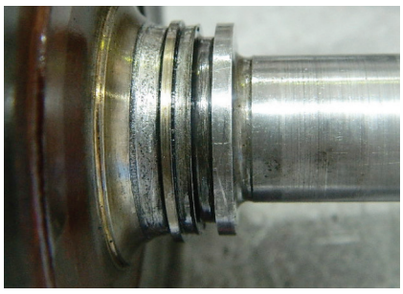
At the time of failure Aux eng 1 T/C had run total of 19986 hours since delivery. Vessel has been following maintenance schedules as per maker's manual.

Turbocharger was inspected regularly at 250 hours, 400 hours, and 1200 hours interval. There was no abnormality noticed during these inspections.

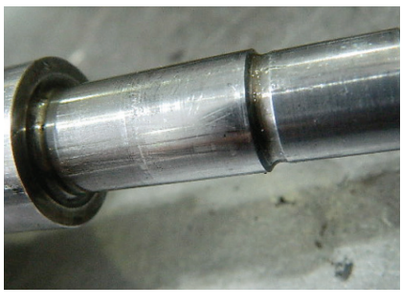
A.E. 1 turbocharger 8000 hour major overhauls were carried out as per makers manual and all parts were replaced as recommended. Following are the two major overhaul dates and running hours till date since vessel delivery.

On 26th April 2012 T/C was overhauled – Total running hours 8433 hrs.

On 22nd March 2014 T/C was overhauled – Total running hours 15863 hrs. The damage has occurred after 4123 run hours of major overhaul.

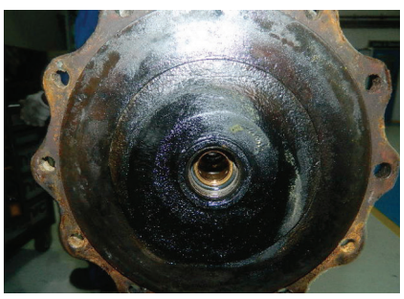


Rotor Shaft Groove worn out



Scoring mark on rotor shaft

Oil leak on Exhaust side casing



Root Causes

The reasons for turbocharger failures were systematically investigated along with maker's Diahatsu and following information gathered.

The aux engines have been running on low loads very frequently when two generators are used for maneuvering, or during port operations, which causes a lot of deposits due to poor combustion. These carbon deposits of unburnt fuel in way of sealing area cause overheating of the shaft, and sticking of the piston sealing ring. These sealing rings once get stuck causes excessive wear of the shaft sealing ring groove. Once the sealing ring and groove are worn out the oil seal leaked.

1. The new LO filter element fitted after installation of new turbocharger failed within above 100 hours of operation. The engine is equipped with Filtrex type filter. This filter continuously rotates and gets cleaned by oil backwash while the engine is in operation. After inspecting the element it was noticed that the wire mesh had started collapsing, resulting in reduction of lube oil flow and causing pressure drop.
2. It is further concluded that this particular batch of filters had manufacturing defect resulting in premature failure.

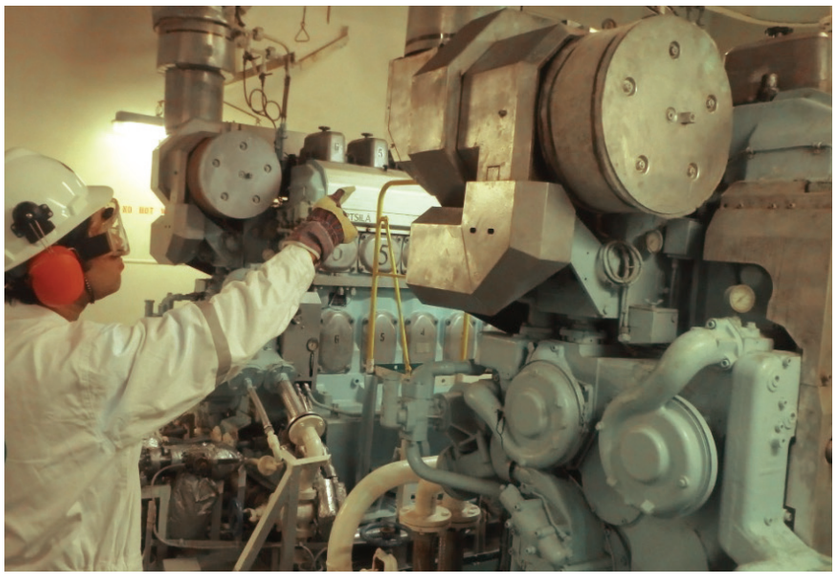
Corrective action:

1. The defective turbocharger was replaced with complete new turbocharger unit on 22nd Feb 2015.
2. In view of new filter showing sign of collapsing, additional filter elements were immediately ordered. These were hand carried by Daihatsu engr from Osaka and delivered to the vessel at Singapore on 24th Feb 2015. The vessel was supplied with additional 3 set of filters before proceeding for voyage.

Preventive action:

1. It has been decided to add Turbine rotor assembly as critical spare and vessel will be supplied with spare Turbine rotor assembly.
2. All engineers have been briefed the function of this filter element and ensure that differential pressure across filters is never allowed to increase than 0.5 bar.
3. This incident report is being circulated to all vessels equipped with Daihatsu Aux engines as information sharing exercise.

Technical Department



FIVE WAYS TO STRENGTHEN YOUR LIVER

We devote plenty of time and energy to spring cleaning our homes, but what about our bodies? As you rid your home of clutter and dust this year, consider cleansing your body of toxins, too.

Every day we encounter high levels of chemicals—from the food we eat. Our bodies remove some chemicals through its natural waste system, but because we live in such a toxin-laden world, this system can get bogged down.

Your liver is arguably one of the most important organs in your body's natural detoxification system. To prevent our fat tissues and cells from absorbing them, the liver turns fat-soluble toxins into water-soluble toxins, from which point our bodies can easily flush them. This is just one small role that liver plays in our body, however; the liver has more than 500 functions, from metabolizing fat to regulating hormones, and if it spends too much time working to remove toxins, your health can falter.

To support your liver and aid your body's natural detoxification process, follow these tips:

1 Don't overburden your liver

Your liver works hard enough without having to process things like alcohol and over-the-counter painkillers, which are unnecessarily hard on this vital organ. In fact, taking regular, small doses of painkillers is the leading cause of drug-induced liver disease and failure.

2 Take liver-support supplements

Turmeric, milk thistle and dandelion are all known to be helpful at cleansing and protecting the liver.

3 Eat cruciferous vegetables

Broccoli, cabbage and other cruciferous vegetables are recommended foods when doing a liver detox. Be sure to eat at least one serving a day.

4 Drink plenty of lemon water.

In yesteryears, at the morning work break we all drank lime juice. But that practice seems to have died down and now all have switched to drinking tea or coffee. Water is important to the natural detox system; it's one of the methods by which our bodies remove toxins. The citric acid in lemon juice encourages the liver to produce bile, which is another vehicle that our bodies use to excrete toxins.

5 Get enough minerals.

Minerals are essential to the liver detoxification process, so make sure you're eating plenty of mineral-rich foods or taking a good mineral supplement (look for a liquid-based supplement with both macro and trace minerals). Important minerals for liver detoxification include calcium, magnesium, potassium, sodium, copper, iron, selenium, zinc, manganese and others.

Keeping your liver in top shape is essential to good health. Help your body, help your liver.

Contributed by Capt Deepak Goyal, MT GC Fuzhou
Source : various medical journals

LIGHTNING – PREDICTING THE UNPREDICTABLE

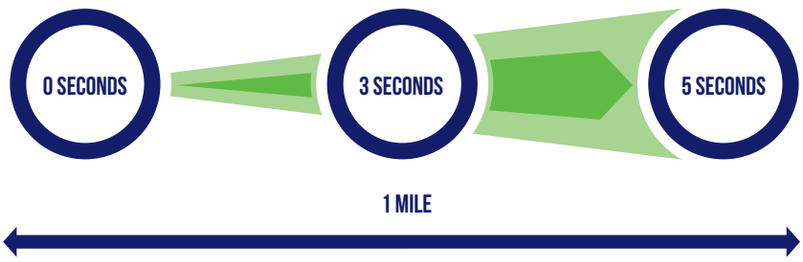
How to estimate lightning's distance.

The time between seeing lightning and hearing thunder is a rough guide to how far away the storm is. Normally, thunder can be heard up to 10 miles from the lightning that makes it.

Lightning heats the air around it to as much as 60,000 degrees, producing sound waves by the quick expansion of the heated air. Since light travels at 186,000 miles per second, you see the lightning the instant it flashes.

Calculating the distance to a lightning strike:

A flash of lightning brightens the sky and is followed seven seconds later by the ominous roar of thunder. How far away was the lightning strike?



Sound waves propagate through different materials at different speeds. In air, at a temperature of 70° F (22.2° C), sound travels at a speed of about 1,129 feet (344 meters) per second, roughly equivalent to one-fifth of a mile in one second, or one mile in five seconds (or one kilometer in about three seconds).

Counting the seconds between the strike and the arrival of the thunder, and dividing the number of seconds by five, gives a rough estimate of the distance to the strike in miles (dividing by three for a distance in kilometers).

While not an exact science, since humidity has slight effects on the speed of sound, actual temperature may be above or below 70° F, and the discharge of lightning is highly unpredictable, this calculation allows one to quickly estimate storm distance.

Therefore, if you want to find out how far you are from lightning, divide the number of seconds by five if you want the answer in miles. Divide by three for kilometers.

Let's say you counted 18 seconds. To find your distance from the lightning in miles, divide 18 by five to get 3.6 miles.

To find your distance from the lightning in kilometers, divide 18 by three to get six kilometers.

Successive lightning strikes are often two to three miles apart. If the first strike is three miles away, the next one could hit you.

Contributed by Capt Shailesh Shanbag , MT Acadia.

Source: Ronald Holle, National Severe Storms Laboratory and Encyclopædia Britannica, Inc.

Preparedness & implementation of precautionary measures:

When approaching a thunderstorm at sea, or while in port, if the distance determined as three miles or less…

- Cargo transfer to be stopped promptly and the terminal informed
- Mast riser valve to be shut
- All openings to cargo oil tanks to be secured closely
- All valves on the loading arms and manifold valves to be shut
- IG system to be in a state of readiness
- Deck crew to stand clear of the mast riser area

Goodwood Ship Management Pte Ltd

20 Science Park Road
#02-34/36 Teletech Park
Singapore 117674

Ph +65 6500 4040
Fax +65 6500 4050

Goodwood Marine Services Pvt Ltd (Manning office in India)

Unit 401, 4th Florrs,
Hubtown Solaris
N. S. Phadke Marg,
Andheri (East),
Mumbai - 400069
Maharashtra India

Ph +91 22 6720 0400
Fax +91 22 6720 0404

application@goodwoodship.com

Goodwood

www.goodwoodship.com.sg