SJÖFARTENS ARBETSMILJÖNÄMND

SAN NEWS

News about work environment and safety in shipping **3/08**

THEME: SYSTEMATIC WORK ENVIRONMENT ACTIVITIES

Safer work environment onboard with routine SAM

At Stena Nautica, systematic work environment management (SAM) is in full swing. A large number of risk assessments have been made and several deficiencies have already been made good.

Stena Nautica, whose crew started SAM before the shipping company could get there.

– There are no problems at all with this work as soon as you get started, says Captain Jan Hellroth.

Rain-laden skies lie over the harbour in Grenå. Foaming waves roll over the long, desolate strip of beach a little further away and there are only a few passengers. Twenty or so of the ferry's chiefs and officers have been on a course for systematic work environment management on the passage from Varberg and are now taking a break for arrival and lunch. For several members of the crew, the course is mostly repetition. They have been working actively with SAM since last autumn and have started to understand the principles and become familiar with the rules and regulations.

Lennart Andersson (photo), bosun and principle safety officer, is one of the group with sound knowledge of the Work Environment Act. He is in charge of SAM among the deck personnel and they have carried out between one and two risk assessments per week.

– We discuss the risks involved in a task and what can be done to reduce them. We then write down our conclusions. We started with the most common tasks: the things we do daily or several times a week.

Risks are assessed in accordance with a number and colour-coding system that a technical manager at the shipping company has developed. Green requires no action to be taken; yellow means action at a later stage; everything in the red column must be rectified immediately. All relevant viewpoints and conclusions are documented.

– The colour coding makes the results clear and is a rather good system to work with. Serious risks can sometimes be put right fairly easily.

A few hours' work

Lennart Andersson gets up from the dark grey leather sofa by the starboard wing of the bridge and walks to the valves. He points down to the forecastle where two seamen are involved in mooring work.

– Can you see that black steel hoop above the capstan? It prevents the hawser from jumping off and landing in the wrong position. That is one thing that we

Chief engineer Ronny Larsson to the right, and second ship's engineer Arne Sjöstedt to the left, show the colour-code system they use in making risk assessments.

noticed during a risk assessment and then rectified. It did not take more than a few hours to weld that together.

– We are going to construct a partition wall by the capstan over there to protect people from injury if a hawser should snap, he continues. A hawser could easily sever a person's legs if they are standing in the way.

The fact that an area has been assessed for risks and documented does not necessarily mean that the work is over. Sometimes new information turns up which involves changes and updating. Lennart Andersson saw an example of that as recently at the morning meeting of the safety committee. They were discussing the problem of night shift personnel sometimes being disturbed when the deck crew start work with needle scalers in the morning.

– I had not considered that anybody might be woken up when we were removing rust, but we must add it to the risk assessment. The most difficult thing in risk assessments is including all possible aspects and perspectives of an issue, he says.

Some good reasons for SAM

There are many reasons for having systematic work environment management onboard. Here are some that the Swedish Work Environment Authority emphasises:

- It results in risks at work being detected and remedied in time.
- It prevents employees being affected by accidents, illness, stress or other negative consequences of work.
- It ensures good conditions at work, which may reduce absence levels.
- It improves well-being and engagement in work.
- It reduces disruptions and drops in quality.
- It results in better order in the whole company and smoothes operations.
- It contributes to good finances in the company.
- It gives a good impression and the company can more easily retain and recruit personnel.

Better attitude after change in laws

Lennart Andersson has worked at Stena Line for 20 years and has been involved with work environment issues for a long time. He notices a great difference after the Work Environment Act came into force for ships in 2003.

– Now that shipping companies are forced to follow laws and regulations, things have become a lot better and work environment issues are getting a better hearing now, in a completely different way. You notice there is a greater interest in work environment onboard ships.

The machine section has also made great headway in risk assessments. Ronny Larsson is the technical officer. He moves to the computer in the control room and opens risk assessment documents. He counts up to a total of 49 areas rectified.

– When we started we had between five and six areas per week to assess for risks, but now things have calmed down a little. In the machine room there is an almost infinite number of risks, and it is not reasonable for us to assess absolutely everything, he says.

Ronny Larsson explains that in the machine section they started by documenting the most obvious risks. Discussions showed that most of the crew were already well aware of the dangers in their work, but he believes that documentation plays an important role anyhow.

– There is not much new here for the older crewmembers, but this information will be very useful for new employees, he says.

During the return crossing the SAM course continues and it draws to a close two hours before their arrival at Varberg. Many of the participants are then in a rush to complete their normal duties.

Jan-Erik Erixon is sitting in front of the computer in his office on the passenger deck. He started his work as assistant service manager in the shop, restaurant and hotel department just over six months ago and so far has not managed to systematise the work environment activities.

– I have never worked with this before - it is completely new to me. I have looked over the shoulders of those working in operations but I have not really got started. The course today was excellent though, and I understand much better what I am supposed to do now.

He says that the biggest obstacle for him has been lack of time. As a new employee, other things have come first.

– There are only 24 hours in each day and it is difficult to find enough time for everything. But now I am going to give priority to this.

Committed safety officer

Captain Jan Hellroth sits down with a cup of coffee in the officers' mess after lunch. He is satisfied with the crew's work and thinks that there is more structure in the work environment area since SAM was introduced.

– We have always discussed risks but we have never written them down before, he explains.

Stena Line is among the shipping companies that have made greatest progress with the introduction of SAM on their ships and they are investing a lot in improving conditions onboard. At Nautica, they did not wait for guidelines from the shore-based administration but set about the work independently.

– The Swedish Maritime Administration said that we could start work ourselves. We went on a one-day course and then we started, and things went surprisingly smoothly. The fact that the work has gone so well is to a large extent due to our safety officer being so committed. We give priority to safety onboard here, and the work environment is very much about safety, says Jan Hellroth.

Linda Sundgren

Passenger traffic in the lead – slower headway for smaller ships

The quality varies and the work has reached different levels, but five years after the Work Environment Act was passed most crews have started work with systematic work environment management (SAM).

Shipping companies with large resources and onshore ship management are in the lead. Risk assessments have been made and action plans drawn up for ferry traffic, tanker ships and other large vessels. SAM has become an integrated part of safety work and functions relatively well.

– I wouldn't say that we have achieved our goal yet, and the quality of systems varies. But all Sola ships have implemented SAM, says Jan Borgman, chief inspector at the Maritime Safety Inspectorate in Göteborg.

More incorporate SAM in ISM

Those shipping companies that already follow the ISM code recognise systematic work environment management. Risk assessments and deviations are listed in similar ways in both systems, and many have also chosen to incorporate SAM in the ISM system.

– For us it makes no difference if the systems are merged or if there is a separate SAM file. But considering how much work many people have already done with the ISM system, it is a shame not to use it, says Gunnar Zahlée, chief inspector at the Maritime Safety Inspectorate in Malmö.

The part of the fleet that has made greatest headway with SAM is passenger vessels. They not only have large onshore organisations to help them, but also the advantage of having their ships relatively accessible.

Jan Borgman, chief inspector at the Marine Safety Inspectorate in Göteborg.

– Passenger ferries are state of the art. They also have great pressure from their passengers, who demand a high level of safety, says Jan Borgman.

Freight shipping companies and fishing fleets lagging behind

Things are a little worse at smaller freight shipping companies and in fishing fleets. A lot of measures remain to be taken in these categories.

– On some smaller ships personnel do not really see the benefits of this type of system. Things are moving slowly there, admits Gunnar Zahlée.

A common preconception among those who have not yet started SAM is that it is complicated and difficult. But Gunnar Zahlée claims that it is not particularly baffling.

– I usually say, do what you have always done but now just write it down as well.

Some people are put off by the paperwork which is an inevitable part of SAM, a feeling that Jan Borgman has some understanding for.

– I don't really imagine there is anybody against having a better work environment and fewer accidents and injuries. But the paperwork puts many people off. They are already drowning in papers and along comes one more thing.

When SAM is fully operational, staff in Malmö and Göteborg believe that it will definitely improve the work environment.

– I think that this will make people more observant of their work and maybe a little more careful. But above all it is good for new employees, who can easily gain an oversight of work onboard, says Gunnar Zahlée.

Linda Sundgren

Common deficiencies

Jörgen Hansson works at the Marine Safety Inspectorate in Malmö and is responsible for work environments onboard. Here are the most common deficiencies in terms of SAM that he notices when he inspects ships:

- Product information sheets for chemicals missing.
- It is not noted when a risk must be rectified, or who is responsible for doing so.
- The galley is forgotten. In many cases the work environment in the machine room and on deck is described in detail, whereas the kitchen has been missed.
- Risk assessments are far too detailed.

Risk-assessed task? Photo: Jörgen Språng, Nordic photography competition for seamen.

Good work environment requires constant updating

Risk assessments have been made, action plans drawn up and any deficiencies rectified. Then it is time to relax and put the SAM file on the shelf, surely?

– No, that is not the way things work. Work environment information must be constantly updated and when changes are made onboard it may be relevant to carry out new risk assessments. SAM must become part of daily routines, explains Mikael H Andersson, work environment officer at the Swedish Maritime Administration.

A SAM system that has already been incorporated can be kept up to date through different measures. Checklists, reporting of near accidents and interviews with employees are methods of obtaining viewpoints from personnel. SAM should be a permanent item on the agenda in safety committee meetings.

– Nor should a company forget to inform new employees about SAM, says Mikael H Andersson.

Linda Sundgren

~ EDITOR HAS THE FLOOR ~

Work environment generally good but much work remains

On about 60% of the ships that I inspected in 2007 and the first half of 2008, including new and old ships, machine parts were still being hand-washed in diesel in the machine room. Fuel valves were being pressure-tested using diesel, and on many ships there were no extractor fans in these environments. All this despite the fact we are now in 2008! There have been machines for washing motor parts on the market for many years, such as the Vivek type, as well as ecological pressure-testing liquids such as Unitor.

Over the years I have also been worried about the poor work environment on ferries, and in this case I am referring mainly to the catering personnel. On most of the ferries I have inspected, large packages are used for wine, milk, carbonated drinks, flour and so on, and one package often contains 20 litres or more.

The problem is that it is generally women who have to lift these packages onboard and workstations on a ferry are often built according to overall ship design. This means that they are often located in less than ergonomic places. As a result, people working in such workstations risk having problems with their necks and shoulders, and consequently are off sick for long periods.

Fall protection is something which is often overlooked when constructing ships, as well as working positions. Sometimes even new ships look similar to those built in the 19th century (wooden scaffolding) and I have found any number of waist straps on ships, despite these being prohibited many years ago.

No, work environment on ships leaves a lot to be desired. But as I usually say, every step forward is at least not a step backwards.

Karl-Arne Johansson, Seko Sjöfolk

~ TIPS FROM SAN ~

SAM builds up networks for work environment

Work environment is an area of constant change. New regulations and recommendations come at irregular intervals and demand both engagement and knowledge if they are to be handled in a satisfactory way.

We at SAN believe there is a need to discuss these issues with colleagues at other shipping companies, and for this reason we have decided to build up a network for employees at shipping company offices. More than 30 people have already registered and a first meeting will be arranged in late autumn 2008.

Would you also like to be involved? In which case, send an e-mail to Eva Ohlsson at eva.ohlsson@transportgruppen.se. State your name, job, shipping company, e-mail address and telephone number.

~ OUTLOOK ~

Difficult to enforce demands on re-flagged ships

Before the Swedish Maritime Administration can approve re-flagging, the work environment onboard must be checked. The ship has already been approved by another administration, but to sail under the blue and yellow flag of Sweden it must fulfil Swedish demands, which in many cases are stricter than other countries' rules and regulations.

Tomas Åström works with inspections for flagging and newly built ships at the Swedish Maritime Administration. He says that in general there is a relatively good work environment standard on foreign ships.

– Swedish shipping companies often re-flag their own ships that have previously sailed under a foreign flag, and the work environment is usually rather good on these ships. But if the ships come from countries outside Europe the situation is a little worse in many cases.

One piece of design that the authority often comes down on is ladders. Sometimes they are too steep. Sometimes the width of the rungs or the distance between rungs does not comply with Swedish standards. At the same time this type of deficiency is almost impossible to rectify.

– We cannot demand that they wave a magic wand and change the angle of ladders, widen gangways or increase the height of ceilings. In cases such as this it may be possible to allow dispensation, says Mikael H Andersson, work environment official at the Swedish Maritime Administration. Even newly built ships may have deficiencies in the work environment, but the authority is stricter in its inspections for new ships and the chances of obtaining dispensation are far smaller.

– If a company is building a new ship it should be able to get everything right from the start. We receive drawings one year before construction starts and we can discover and point out any shortcomings in good time, says Tomas Åström.

He explains that there is quite a large difference in the quality of the work environment, depending on where the ship is built. Europe, for example, is ahead of Asia in this respect.

– Shipyards that do not come up to our standards are not happy when they have to adapt their production for our sake. But in reality it is the shipping company that is the decisive factor since it places the order and puts demands on the shipyard.

Linda Sundgren

"We cannot demand that they wave a magic wand and change the angle of ladders, widen gangways or increase the height of ceilings."

The Swedish Maritime Administration continuously publishes information that may be of interest to the shipping industry. Below is a selection from the latest reports. Complete articles may be read on the Administration's website: www.sjofartsverket.se – the Swedish Maritime Administration.

Dangerous start of inert gas generator

The chief mate was going to start an inert gas generator when making preparations for arrival. The generator room was located close to a room where some of the crew were asleep. To avoid waking any of them, the chief mate closed the door. However, he had forgotten to open the ventilation hatch and realised that there was a partial vacuum when his ears started hurting. He stopped the generator at the same time as he was finding it difficult to breathe.

When he tried to get out, he was unable to open the door as a result of the under-pressure and was forced to call to the bridge for assistance. After this near-accident a breaker was installed that prevents the generator from starting when the ventilation hatch is closed.

Fire in machine room

When a small passenger ship was going to moor at a pier the main engine stalled. The ship steered towards the beach next to the pier to make the grounding softer. It slid up the beach and back into the water without causing any real damage. A fire was then discovered in the machine room. After an alarm was sent to the Swedish Sea Rescue Society, the crew was able to extinguish the fire.

It was later stated that the fire had only affected the air filter and that the engine could otherwise function as usual. Further investigation showed that the engine had possibly stopped when it was reversed, since the forward power had still been high. The inertia had then forced to the engine to rotate and work against closed valves and the hot, compressed air had escaped into the air filter, which was probably contaminated with oil. This was what caused the fire to break out.

This incident shows that there is good reason to review standards for air filters. A number of incidents of a similar nature also indicate that there are reasons to avoid sudden engine manoeuvres at high speeds.

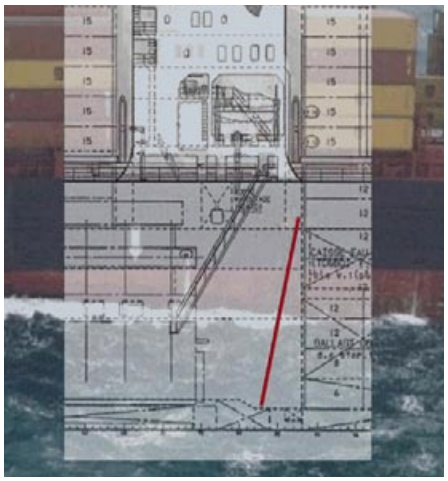
Iu reg. no. 080201-08-21176

Container ship split in two

A large container ship was heading west in the English Channel through a storm. The speed was not reduced since the ship was judged to be strong enough to take the high seas. Soon after the ship had collided with several large waves a loud cracking sound was heard. Several bilge alarms in the machine room went off. The engineer on duty discovered that the main cooling water pipe from the seawater pump had completely sheared and that water was flooding in. He closed the connecting valves and managed to stop the inflow of water. On the way back to the control room the water tank top fore of the main engine seemed to open up and "a wave of oily water" came rushing up. The engineer quickly returned to the control room. The chief technician came down and discovered what appeared to be cracks in the top of the tank. He also noticed a large crack on the starboard side, close to the sea chest. The machine room was evacuated.

From the bridge, the captain saw that the side of the ship was bulging out under the wings of the bridge and that there were cracks in the hull on both sides under the water line. It was decided to abandon ship.

A crack is clearly visible on the port side of hull directly under the wing of the bridge. Photo: Marine Nationale.



The red line shows where the crack arose. Photo: MAIB

All of the crew managed to get into the covered lifeboat on the port side. The crew of 26 were dressed in survival suits and had drinking water with them in bottles. The painter could not be loosened since it was so crowded and it had to be cut off from the outside with a knife by the chief engineer.

Even though the lifeboat was designed for 32 people, it was very cramped, hot and unpleasant for the 26 in it. The survival suits were cumbersome and the fixed gloves made it very difficult to use hands. In addition, everyone was seasick. In the end they cut the gloves off the suits. After that people could use their hands more easily and drink the water they had with them. After half an hour the crew was rescued by helicopter. The ship grounded and finally broke into two parts.

A number of factors caused the ship to crack. Some of them are briefly described below.

- The hull was not sufficiently strong at the level of the machine room.
- When the ship was built there were insufficient regulations for parts of the hull.
- Safety margins between the load capacity and the ship's strength were not sufficiently large.
- The speed of the ship was not reduced sufficiently in the relatively stormy weather.

Investigations of a very large number of similar ships showed that at least 20 had similar deficiencies that required measures to be taken. The investigation also criticises the pace of work in conjunction with cargo handling and the lack of correct information about the contents and weight of the containers. Not even the location of the containers corresponded to be loading plan.

MAIB 9/2008

From Insjö

(information on accidents, incidents and near misses at sea)

The investigation unit of the Swedish Maritime Safety Inspectorate would like to put in a reminder that the film "Thanks to the human factor" is available for those who want information or motivation to increase the reporting of incidents to improve safety and the work environment. The film is now available in English. It is 15 minutes long and can be ordered free of charge from the investigation unit at 011-19 10 00.

Insjö 2131

Christer Nordling hands out money for good work environment ideas

Work environment activities can sometimes be heavy going and frustrating. But not if your name is Christer Nordling. As Administrative Director of the Stockholm Mercantile Marine Foundation, he meets nothing but smiling faces.
– This is a really enjoyable job and I am very grateful to have it. I would also claim that we do a lot of beneficial work, not least in improving the work environment for our seamen.

Christer Nordling has the gratifying job of representing a foundation that donates large sums of money every year to shipping organisations to improve the work environment and safety. He is satisfied with the fact that more attention is now paid to conditions in machine rooms and control rooms, not least since the foundation is paying for a research post at Chalmers in exactly this area.

Christer Nordling
Age: 64
Address: Stocksund, north of Stockholm
Background: Naval officer in the Navy. Between 1998 and 2005 he managed the work of building up the Swedish Armed Forces' marine safety organisation. Between 2000 and 2005 he was also the service attaché in Copenhagen.
Current post: Administrative Director of the Swedish Mercantile Marine Foundation in Stockholm since 2006.
A good work environment is important because: our seamen must keep themselves healthy and feeling good so that they have the energy to continue working at sea for the whole of their professional life. The work environment is also important for shipping companies to be able to retain their personnel in the future and recruit new personnel.

– When ships are constructed, machine rooms and control rooms are given lower priority than the hold. That is perhaps understandable, but it does not work in the long term. If shipping companies want to retain their personnel and recruit more in the future, they must rethink their priorities.

Other areas in which the Administrative Director believes there is a lot of work to be done in emphasising the work environment is in the hotel and restaurant departments. The foundation has turned directly to the supplies unit and encouraged them to nominate innovative proposals for the annual awards ceremony, but the response has been cool.

– They have not made their presence known, perhaps because they are a little isolated from the rest of the crew. But I hope that they will be more active, since I am convinced that they have many good ideas.

From the navy

The interior of the Mercantile Marine Foundation buildings at Slussen in Stockholm bears witness to a long history of shipping. Christer Nordling himself has only been here for two years, after a career in the navy. He explains that the step from the navy to the mercantile marine was not that large, however. For the last seven years in the Defence Forces he was in charge of building up the military safety system, including the introduction of the ISM code, and he then had frequent contact with the Swedish Maritime Administration.

– I worked with work environment and safety in the navy. You could say that I was Johan Franson in military uniform. And the Work Environment Act has been applied to the navy's ships much longer than the merchant navy's, so I am accustomed to working with it.

Great potential among personnel

When it comes to improving the work environment, he sees great potential in the personnel onboard. He is certain that they have a lot of knowledge about how to improve life at sea.

– When you both live and work onboard, you make improvements the whole time and change things that do not work as you would like them to. We can help to further develop ideas here or reward inventions that have already been made.

Tiger Claw is Christer Nordling's personal favourite among the contributions that were rewarded on the spring award day. It is an iron claw designed to be installed in the waste pipe from toilets to prevent blockages. Torkel Skarsgård, first ship's engineer, and Jan Tigerstrand, repairman on TT-Line's Huckleberry Finn, were behind the invention and received 50,000 kronor between them.

Safeguarding the legacy

The Swedish Mercantile Marine Foundation was established in 1972 and safeguards the legacy from many seamen's registration offices that for several hundreds of years were an important social institution for seamen and their families. A good yield has enabled generous benefits, at the same time as capital stock has continued to grow. According to Christer Nordling, there is currently around 370 million kronor in the foundation's strongbox, and this year about 15 million kronor of this sum will be awarded to "the benefit and gain of seamen". Schools, students, associations and individual seamen are among the recipients of these funds.

– In the past, the Foundation operated above all as a social safety net for seamen's widows and seamen in need, and we still distribute an annual compassionate allowance to 290 people around the world. But as the social safety net has improved, this has become a much smaller part of our operations.

Linda Sundgren

Footnote: More information about the Foundation's rewards and awards can be found at www.marinfond.se

SAN (Maritime Joint Work Environment Council) was established in 1956 and is a coordinating agency between employers and trade union organisations. SAN promotes improvements in the work environment and safety on Swedish ships and operates as a hub for work environment management in the shipping industry.
The Council provides financial support for various projects, organises conferences, awards work environment prizes and much more.
Read more about us at www.san-nytt.se

Safety culture and prize at the autumn SAN conference

In October it is once again time for the main SAN work environment conference. The theme for this year is safety culture and during the day a number of exciting lecturers will speak on the subject from their various perspectives. Take the opportunity to listen to them and meet other people in the industry who share your interest in seamen's work environment and safety.

The conference will be held on 22 October in "Läppstiftet" in Göteborg. Register by 7 October at the latest.

You can find the invitation, programme and registration form at the SAN website www.san-nytt.se or contact Eva Ohlsson at Sjöfartens Arbetsgivareförbund, 031-62 95 40 or eva.ohlsson@transportgruppen.se

You are most welcome!

Help us to choose this year's work environment prizewinner!

Work environment issues are increasingly in focus. In 2006 the Maritime Joint Work Environment Council decided to establish an annual SAN prize to reward good ideas and initiatives in the work environment area.

The prizewinner may be an individual, a shipping company or other maritime organisation that has carried out measures to promote work environment. The prize consists of a SAN flag in full size and 10,000 kronor, as well as the honour and glory. The prizegiving ceremony will take place at the autumn SAN conference.

The jury consists of members of SAN.

Proposals for candidates should be made by 7 October to:

Eva Ohlsson at eva.ohlsson@transportgruppen.se or Sjöfartens Arbetsmiljönämnd, Box 404, 401 26 Göteborg.

~ IN BRIEF ~

Changes in systematic work environment management

In all probability the demand for an annual written summary of poor health, accidents and serious near accidents will disappear on 1 November. The reason for this is that the Swedish Work Environment Authority wants to make procedures simpler for companies. The demand to investigate reasons for an employee falling into poor health or having an accident still remains, however.

More people satisfied at work

A large majority, 77%, of all people in gainful employment are satisfied with their work. That represents an increase of 3% in comparison with 2005. Almost the same number feel that their job is meaningful. However, more than half say that they have too much to do, and 7% were dissatisfied with their jobs.

The information is taken from SCB (the Central Bureau of Statistics) which every second year surveys Swedes' attitudes to their work on commission from the Work Environment Authority. The complete report may be read at www.av.se.

SAN NEWS

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