



Guiding Spirit to Shipping Industry

Sagar Sandesh

Maritime Tabloid English Bi-Weekly E-Paper

In association with R L Institute of Nautical Sciences, Madurai, Tamil Nadu. | RNI No. TNENG/2012/41759 | Thursday, April 01, 2021 | Voyage 10 Wave 14

PAGE - 4

World's First
Zero-Emission
Wind and
Hydrogen.....



PAGE - 5

Norwegians set
out to launch
ammonia-
fuelled.....



PAGE - 8

Investigations
have started
into the cause of
the



PAGE - 12

Stranded
at Sea,
Coronavirus
Takes a Toll.....

Transitioning to Safety -II

Dr (Capt) Suresh Bhardwaj



Dr (Capt) Suresh Bhardwaj

In the last article **Upping to Safety -II, Need of the hour in shipping industry**, the nuances of transitioning to Safety II was promised.

Transitioning to Safety-II

Look for What Goes Right

A key message is: look at what goes right as well as what goes wrong, and learn from what works as well as from what fails. Indeed, do not wait for something bad to happen but try to understand what actually takes place in situations where nothing out of the ordinary seems to happen. Things do not go well because people simply follow the procedures and work as imagined. Things go well because people make sensible adjustments according to the demands of the situation. Finding out what these adjustments are and trying to learn from them is at least as important as finding the causes of adverse outcomes.

It is necessary to understand how such everyday activities go well—how they succeed—in order to understand how they might fail. From a Safety-II view, they do not fail because of some kind of error or malfunction, but because of unexpected combinations of everyday performance variability.

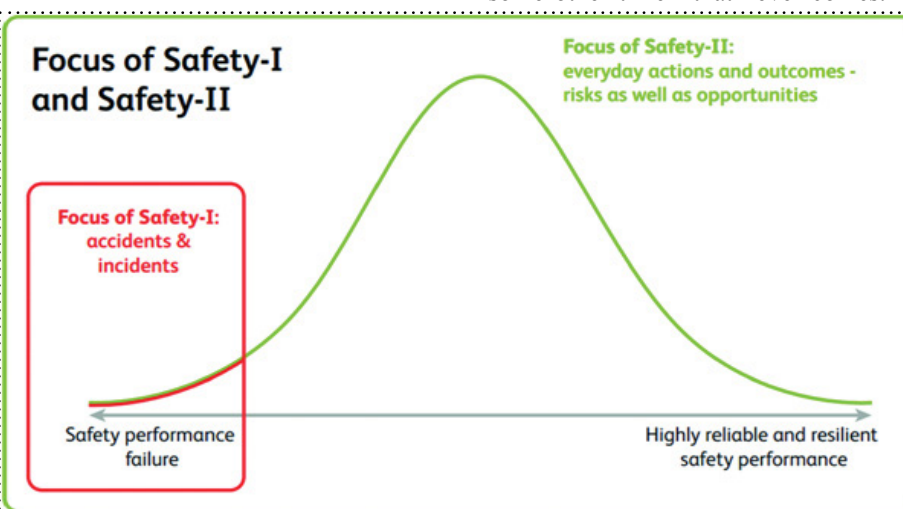


Figure 1: Focus of Safety - I and Safety - II

Safety-II focuses on events in the middle of the distribution. These are 'difficult' to see, but only because we habitually ignore them in our daily activities. The 'logic' seems to be that if something works, then why spend more time on it? But the fact of the matter is that they usually do not work in the way that we assume, and that Work-As-Done may be significantly different from Work-As-Imagined. The events in the middle

can be understood and explained in terms of the mutual performance adjustments that provide the basis for everyday work. Because they are frequent, because they are small scale, and because we can understand why and how they happen, they are easy to monitor and manage. Interventions are focused and limited in scope (because the subject matter is uncomplicated), and it is therefore also easier—although not necessarily straightforward—to anticipate what both the main and the side effects may be.

Focus on Frequent Events

A second message is: look for what happens regularly and focus on events based on their frequency rather than their severity. Many small improvements of everyday performance may count more than a large improvement of exceptional performance. The investigation of incidents is often limited by time and resources. There is therefore a tendency to look at incidents that have serious consequences and leave the rest for some other time—that never comes. The

And since small but frequent events are easier to understand and easier to manage, it makes better sense to look to those than to rare events with severe outcomes.

Remain Sensitive to the Possibility of Failure

A third message is: although Safety-II focuses on things that go right, it is still necessary to keep in mind that things can also go wrong and to 'remain sensitive to the possibility of failure'. But the 'possible failure' is not just that something may malfunction as in a Safety-I view, but also that the intended outcomes may not be obtained, i.e., that we fail to ensure that things go right. Making sure that things go right requires an ongoing concern for whatever works well, not only to ensure that it continues to do so but also to counteract tendencies to employ a confirmation bias or to focus on the most optimistic outlook or outcomes. In order to remain sensible to the possibility of failure, it is necessary to create and maintain an overall comprehensive view of work—both in the near term and in the long term. This can anticipate and thereby prevent the compounding of small problems or failures by pointing to small adjustments that can dampen potentially harmful combinations of performance variability. Many adverse outcomes stem from the opportunistic aggregation of short-cuts in combination with inadequate process supervision or hazard identification. Being sensible to what happens, to the ways in which it can succeed as well as the ways in which it can fail, is therefore important for the practice of Safety-II.

Be Thorough as well as Efficient

A fourth message is: do not privilege efficiency over thoroughness—or at least, not unduly. If most or all the time is used trying to make ends meet, there will be little or no time to consolidate experiences or understand Work-As-Done. It must be legitimate within the organisational culture to allocate resources—especially time—to reflect, to share experiences, and to learn. If that is not the case, then how can anything ever improve?

Turn to page -2 >>

Transitioning to From Page - 1

Efficiency in the present cannot be achieved without thoroughness in the past. And in the same way, efficiency in the future cannot be achieved without thoroughness in the present, i.e., without planning and preparations. While being thorough may be seen as a loss of productivity (efficiency) in the present, it is a necessary condition for efficiency in the future. In order to survive in the long run it is therefore essential to strike some kind of balance.

Investing in Safety, the Gains from Safety

A fifth and final message is: making things go right is an investment in safety and productivity. Spending more time to learn, think, and communicate is usually seen as a cost. Indeed, safety itself is seen as a cost. This reflects the Safety-I view, where an investment in safety is an investment in preventing something from happening. We know the costs, just as when we buy insurance.

But we do not know what we are spared, since this is both uncertain and unknown in size. In the risk business, the common adage is 'if you think safety is expensive, try an accident'. And if we calculate the cost of a major accident, almost any investment in safety is cost-effective. However, since we cannot prove that the safety precautions actually are or were the reason why an accident did not happen, and since we cannot say when an accident is likely to happen, the calculation is biased in favour of reducing the investment. (This is something that is typically seen in hard times.)

In Safety-I, safety investments are seen as costs, or are non-productive. Thus if an investment is made and there are no accidents, it is seen as an unnecessary cost. If there are accidents, it is seen as a justified investment. If no investments are made and there are no accidents, it is seen as a justified saving. While if accidents occur, this is seen as bad luck or bad judgement.

In Safety-II, an investment

in safety is seen as an investment in productivity, because the definition—and purpose—of Safety-II is to make as many things go right as possible. Thus if an investment is made and there are no accidents, everyday performance will still be improved. If there are accidents, the investment will again be seen as justified. If no investments are made and there are no accidents, performance may remain acceptable but will not improve. While if accidents occur, it is seen as bad judgement.

Conclusion

Safety-II is a different way of looking at safety, hence also a different way of applying many of the familiar methods and techniques. In addition to that it will also require methods on its own, to look at things that go right, to analyse how things work, and to manage performance variability rather than just constraining it.

Since the socio-technical systems on which shipping industry depends continue to become more and more complicated, it seems clear that

staying with a Safety-I approach will be inadequate in the long run and in the short run as well. Taking a Safety-II approach should therefore not be a difficult choice to make.

Yet the way ahead lies not in a replacement of Safety-I by Safety-II, but rather in a combination of the two ways of thinking.

Introducing a different understanding of today's world and of the systems we work in and depend upon may require something akin to a paradigm shift. The safety community has developed a consensus on how things work and how safety can be ensured, but the increase of knowledge has levelled off, and the wicked problem of adverse events has continued.

We must face the fact that the world cannot be explained by cause-effect models. Incidents and accidents do not only happen in a linear manner, but include emergent phenomena stemming from the complexity of the overall system. Asking for "why and because" does not suffice

to explain the system in use and does not lead to an improvement in safety. As a consequence of the paradigm change, safety experts and safety managers need to leave their 'comfort zone' and explore new opportunities.

The new paradigm also means that the priorities of safety management must change. Instead of conducting investigations after the event or striving to reduce adverse outcomes, safety management should allocate some resources to look at the events that go right and try to learn from them. **Instead of learning from events based on their severity, people should try to learn from events based on their frequency. And instead of analysing single severe events in depth, people should explore the regularity of the many frequent events in breadth, to understand the patterns in system performance.** A good way to start would be to reduce the dependency on 'human error' as a near-universal cause of incidents and instead understand the necessity of performance variability.

French Navy arrives in Cochin Port for joint exercises

COCHIN
Sagar Sandesh News Bureau

The French Navy's amphibious assault helicopter carrier Tonnerre and escort frigate Surcouf has arrived at the Indian port of Kochi on March 30th

morning ahead of joint drills with the navies of Quad member countries. The two French ships will make the port call for three days till April 1.

Tonnerre and Surcouf on five-month long deployment



Indian Navy welcomes 2 French Navy ships at Kochi Port

Tonnerre and Surcouf are carrying out a five-month long deployment, which started in February and takes place throughout the Indo-Pacific region.

The port call will come ahead of joint exercises of French ships with Quad vessels. The France-led "La Pérouse" exercise will take place in April in the Bay of Bengal. This time, all the four Quad members - India, US, Australia and Japan - will take part in it. The first edition of this exercise took place in 2019.

It is for the first time India will be joining France-initiated La Pérouse exercises. The 2019 edition only had US, Australia, and Japan. The exercises have been named after La Pérouse, a French naval officer and explorer from in 18th century.

In late April, France will also have the bilateral 'Varuna' naval exercise with India, which will involve France's aircraft carrier again. The last edition of Varuna exercises took place along the Goa coast in May 2019. That was the 17th edition of this exercise. In 2020, French and Indian

Navies carried out their first joint patrol from the French island of La Réunion.

France has been engaging with Quad member countries in various formats

France has been engaging with Quad member countries in various formats. In January, the India-France-Australia trilateral senior officials' meeting took place. September saw the first foreign secretary-level trilateral dialogue between the three countries.

Sagar Sandesh
Maritime Tabloid English Bi-Weekly E-Paper

Mumbai Office

217, Secands Road, Unique Industrial Estate, off Veer Savarkar Marg,
Bombay Dyeing Compound, Prabhadevi, Mumbai - 400025
Ph: 022 - 24211583 / 24210193. Fax: 022 - 2421 2149

Chennai Office

No.6, Ground Floor, Nungambakkam First Lane (Opp. Regional Office, Indian Oil Corporation), Nungambakkam High Road, Chennai - 600 034
Ph: 044-42664408 / Mob: +91 72000 84866

Admin. Office

21 "LAKSHMI", Sathya Sai Nagar, Madurai-625 003. Ph: 0452 437 8300 / +91 72000 84864

EDITOR & PUBLISHER : **Dr R Lakshmipathy**
EXECUTIVE EDITOR : **Dr G.R. Balakrishnan**, M.A Phd.,
CONSULTING EDITOR : **Mr M Subramanian**, F.I.Mar.E., M.I.E.,

ADVISORY EDITORIAL BOARD

Mr. Ashok C. Advani,
Chief Engineer - Advisor (Mumbai) RLINS, Ex General Manager - Pacific International Lines.
Capt. S.S. Jairam,
Master Mariner, Ex Director- Sealand Management services Pvt Ltd. Ex Chairman - MASSA.
Captain S.M. Halbe,
Chief Executive Officer - MASSA; Fellow of Nautical Institute, London and CMMI, Ex MD- GEM.
Mr. Y. Nath, PFI.Mar.E., F.I.E.,
Chartered Engineer, President, Planmain Quality Consultants (India) Pvt. Ltd.

SAGAR SANDESH - Maritime Tabloid English Biweekly E-Paper

Published by Dr R Lakshmipathy (Owner) on behalf of
Professional Publications (P) Ltd, "Sriram", 27, Sathyasai Nagar, Madurai - 625 003.
Published at "Lakshmi", 21, Sathyasai Nagar, Madurai - 625 003, Tamilnadu.
RNI No. TNENG/2012/41759, Postal Registration No. TN/MA/140/2018-2020.
Licence No. TN/WPP-115/SR/2018-2020.