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HOW TO IMPLEMENT SAFETY IMPROVEMENT

The paper deals with ten steps in the quality and safety improvement programme. The first step, concerning the policy statement of a shipping company, consist of defining the management performance standard and integrating the statement inside the company policy. The second step consist of briefing management staff on the programme concept and intent, obtaining their commitment to the programme and mobilising the personnel on the company policy. The third step consist of appointing a quality and safety improvement committee defining the mission and the responsibilities of the committee, selecting the members of the committee and establishing the practical organisational structure to reach the objectives of the programme. The fourth step includes the evaluation of the performance measurement by identifying areas on board ships and in the office that need improvement, measuring the actual situation and reporting the results in term of progress. The fifth step consist of providing to each employee an appropriate method and tools to improve their performance by defining a simple problem solving method identifying the appropriate tools box and teaching, through practical exercises, how to use the tools to fix a problem. The sixth step consist of identifying the problem areas by identifying the possible roots of the problem, providing the means to inform the management for taking action, on the recognised problem. The seventh step deals with the objectives and consist of defining the opportunities in term of objectives for the company, preparing appropriate action plans to eliminate non-conformities or to improve existing practices. The eight step consist of providing a systematic method of permanently resolving problems on a timely basis by implementing corrective actions. The ninth step consist of measuring major error costs in the company analysing the actual situation and identifying areas of potential saving for new quality and safety improvement. The tenth step consist of providing employees with a recognition by defining means to recognise significant results and awarding personnel to stimulate new participation in the safety and quality improvement programme. And to conclude the author points out to the wrong attitudes of the management to have always doubts about the employees that they are not ready to be engaged in setting up programmes and promoting the company in the field. In fact, the most serious obstacle is that the management is not approachable and too rigid, at the time when all efforts are to be mobilised to make the company competitive on the global market.

INTRODUCTION

Having a limited space, like any other contributors to this special edition on the ISM Code, I decided to have only a short introduction concerning a remark on the impact of the ISM certification.

"It means nothing tangible except more paper work"

This statement does not encourage companies and seamen to improve safety at sea. How can we see and measure the result of the ISM certification in a so short period of time ? We should not devalue the ISM certification, with such a statement. We must believe that the improvement will come year after year in the continuous way of progress.

ISM certification is not an award that we receive once in our life, it is a permanent challenge that we must win day after day.

Concerning the paper work, yes it is an administrative burden if we do not have the proper tools to manage a documented system. Today, the solution exists and is available on the market for a reasonable price (1) (2) Information Technology will reduce this burden and improve communication, indexing of documents and storage and retrieval of information in shipping.

A quality and safety improvement programme

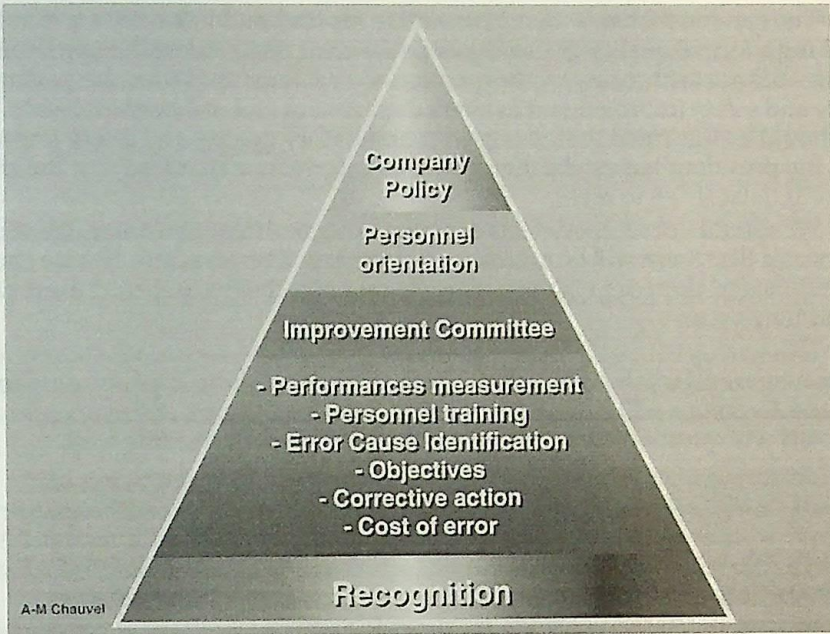
The quality and safety improvement programme outlined may be tailored to the individual needs of any company. In fact, it will return substantial sums of money normally consumed by accidents defects and errors.

The return will be directly proportional to the participation of the senior staff. And, the degree of success will be directly proportional to the degree the general manager participates.

Investment can be minimal ; the returns can be large. Savings during the first couple of years will drop straight to the bottom line, as they will be primarily the result of improved performance of staff.

The 10 steps in this programme are (figure 1) :

- policy statement,
- personnel orientation,
- quality and safety improvement committee,
- performances measurement,
- personnel training,
- error causes identification,
- objectives,
- corrective and preventive action,
- cost of error,
- recognition.



1. POLICY STATEMENT

Objective : Make clear where the president / chairman stands on quality and safety. This first step consists of :

- defining the management performance standard,
- integrating the statement inside the company policy.

Money may be wasted on defects and errors. Improper attitude, lack of attention, and insufficient knowledge are the prime ingredients. Management strives to control these situations. Often, however, we become too busy with "managing the business" to give sufficient attention to these elements that cause mistakes. Reduction of error begins with an unshakeable management standard.

This standard should be included in the company policy. Everyone must understand that this is not simply a document to be placed in a book for executives; they must understand that it is a mandatory goal, and that anything less than systematic improvement toward that goal will be questioned.

2. PERSONNEL ORIENTATION

Objective : Inform all personnel about the management standard for performance.

Everyone must understand that this standard must be applied at all levels of company and in every area of the company business. This second step consists of :

- briefing management staff on the programme concept and intent,
- obtaining their commitment to the programme,
- mobilising the personnel on the company policy.

The general manager should assemble his staff and inform them that he is launching a formal quality and safety improvement programme. The programme is in accordance with company corporate requirements that there be systematic quality and safety improvement in every department and on board each ship. The staff should be informed that, along with mandatory quality and safety improvement, the president has established a single performance standard that the entire company must strive to meet.

We should not accept defects or errors as normal in our business. We should understand that there will be mistakes, that there will be reversals. But we should also understand that we must immediately muster activities to correct these situations as they occur.

The quality and safety improvement programme begins, therefore, with each manager and master making it very clear that there is no dual standard in the company. Everyone will strive toward error-free performance, and every management staff will question all performance that falls short of this standard.

3. IMPROVEMENT COMMITTEE

Objective : Develop and guide the quality and safety improvement effort to resolve systems problems adversely affecting the company performances.

Since every department has the potential of making mistakes, each should participate in quality and safety improvement. The general manager should appoint a quality and safety improvement committee large enough to encompass the major operating departments, but small enough to be effective. This third step consists of :

- defining the mission and the responsibilities of the committee,
- selecting the members of the committee,
- establishing the practical organisational structure to reach the objectives of the programme.

The quality and safety improvement committee should meet as the situation dictates.

The committee should not get involved in the treatment of non-conformities. Rather, it should concentrate on correcting the system which allowed the accident and defect to occur. While the committee has the responsibility for developing and implementing the quality and safety improvement programme, it is stressed that the individual departments are responsible for developing their own detailed plans to ensure systematic improvements.

The establishment of the Committee, and the implementation of a Quality Improvement Programme, does not generally represent an additional expense. It is usually only formalising and centralising what is presently happening in one form or another. Often it results in the elimination of duplicate or less-effective effort.

Members of the committee must have the authority to commit the respective departments to the improvement decisions of the committee.

A chairperson should be selected who will be more deeply involved in the total improvement effort, and who will have sufficient management clout to keep

the entire programme on schedule. The chairperson should be someone who is constantly agitating for quality and safety improvement.

The elementary process for realisation of the programme is as follows :

- define the objectives,
- achieve the objectives,
- measure the results,
- recognise people.

4. PERFORMANCES MEASUREMENT

Objective : Provide timely information of current and potential non-conformities in a manner that permits objective evaluation and corrective action.

The quality and safety manager should obtain data from each measured area and present levels in trend format.

The non-conformity committee could list points at the operational level where they believe it would be beneficial to know performance in terms of risk levels. All ship audits, deficiencies and performance indicators should be reviewed against the list for reduction, expansion or modification.

Operational departments are always measured and analysed. Service departments should also be measured. These include planning, commercial contracts, inventory control, stores, maintenance, purchasing, bunkers and so on. These departments all have the potential for making mistakes.

Their errors impact substantially on profit, and since everyone can improve, the white collar areas should not be ignored. This fourth step consists of :

- identifying area on board ships and in the office that need improvement,
- measuring the actual situation,
- reporting the results in term of progress, according to a schedule.

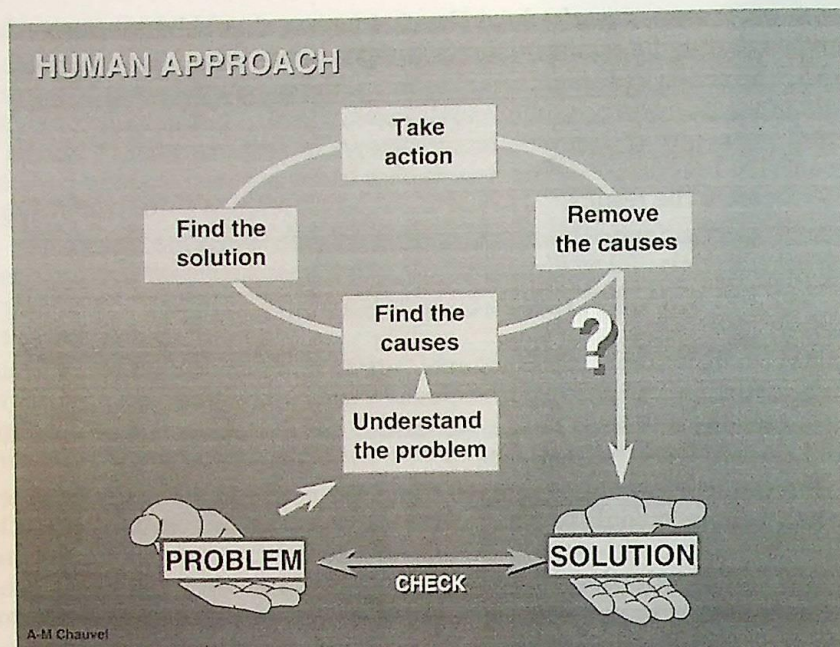
The use of a few strategically placed, easily understood charts will contribute much to the performance, awareness, and improvement of operations and management alike. These charts should be placed where both personnel and management will see them. They should be sent to all ships.

The charts should always identify the area being measured. This public display of performance measurement results provides a psychological impetus toward improvement, as well as a practical corrective action tool. There should always be a way of showing the gap between the actual and the objective can be closed.

5. PERSONNE TRAINING

Objective: Provide to each employee an appropriate method and tools to improve their performance and to participate in action team.

The aim of the personnel orientation was to inform all personnel about the management standard and to explain them why it is important to implement a quality and safety improvement programme in the company. The adhesion of the personnel to the programme is one other critical element for the success of the programme. This fifth step consist of:



- defining a simple problem solving method (Figure 2),
- identifying the appropriate tools box,
- teaching, through practical exercises, how to use the tools to fix a problem.

Method

It is out of the question to treat any problem with indifference : the cost is too high. First, we have to try and grasp the problem, in order to identify it. And this requires not only curiosity, but also a reliable method, if there is to be any hope of getting the result right.

The problem must be approached with due deliberation, in order to find out and define the causes, and propose a realistic solution, before taking action to eliminate the problem once and for all.

To be comprehensive, the method must provide for the outcome of such action to be followed up, in order to ensure that the problem is finally settled.

Toolbox

Many tools are available for solving a problem. It is only by using them that one learn their practical usefulness, So, identify those most suitable for you and choose the ones that make up the group's toolbox.

A tool should not be rejected out of hand just because it seems either too complicated or too elementary. Every one of them has its advantages and drawbacks. Some can even help release a situation when the group seems to be in a dead-end.

All the tools will be of the greatest help in moving a problem towards its final solution. However, never forget that common sense must take priority.

Action team

Using tools in an unmethodical way is like building with a blindfold on.

Method becomes necessary when two people or more are working together on the same project ; and is essential for any group with a common goal.

Tools are only means to an end, and the method is no more than a guide to conduct. The result depends not only on member's individual abilities. It is based on the conviction of the team, its determination, its cohesion, but also on acceptance of the proposed solution by those who will be most directly affected by its consequences.

6. ERROR CAUSES IDENTIFICATION

Objective: Provide personnel with a vehicle for communicating errors and problem situations to senior management for action.

One of the most difficult situations that employees face is management-employee communication. This programme will provide an unique vehicle for communication. It will ask employees to identify problem areas without having to supply a solution to the problem. This sixth step consists of :

- identifying the possible roots of the problem,
- providing the means to inform the management for taking action on the recognise a problem.

This part of the programme is different from a suggestion programme in which the employee is required to know the problem and also to suggest a solution. The error cause identification (ECI) is successful on the basis that an employee need only recognise a problem. Management is responsible for finding the solution.

Asking employees to describe problems that cause errors is strong evidence that management is committed to the entire quality improvement effort. If management then acts on these barriers to defect-free performance, the employees will do their part.

Experience shows that over 90% of the items submitted can be acted upon, and fully 75% can be done at the first level of supervision. Frequently, first-level supervision is left to do the best they can in producing defect-free services in spite of serious obstacles left in their way by the senior staff. This programme is designed to provide a place on management's agenda for operating problems which cause significant waste, along with the routine meetings and reports, customers and telephone calls which so rapidly consume management time.

The error cause identification step should operate under the direction and the guidance of the quality and safety improvement committee.

7. OBJECTIVES

Objective: Engage all personnel in a continuous quality and safety programme to improve the global performance of the company.

Each year the general manager review the strategic company plan and fix objectives for the commercial and the operational sectors. It is good management practices to pave the road for the future.

The objectives of the quality and safety improvement programme are different. They are based on non-conformances observe during the daily operation and which need corrective actions to meet the policy statement concerning the improvement of the company performance. This seventh step consists of :

- defining the opportunities in term of objectives for the company,
- preparing appropriate action plans to eliminate non-conformities or to improve existing practices.

The content of the quality and safety improvement programme should be based essentially on management priorities. Each department of the company should identify area where they can contribute to the expected progress. At this level of the organisation action team should be created with the participation of the line supervisor and personnel.

The result of these activities must permit individuals to propose specific objectives for themselves and their groups.

The specific objectives proposed by each action team must be review by the manager in charge of the concerned department. The proposed objectives must be compatible with the management priorities.

All the objectives approved by the Committee constitute the annual improvement plan of the company.

The objective must measurable, realistic and under the direct responsibility of the department who proposed it.

It must describe in the following terms :

- the reason of the objective
- potential saving for the company
- how the result can be measure
- the intended action plan to reach the objective
- an estimation of the cost investment to solve the identified problem.

8. CORRECTIVE ACTION

Objective : Provide a systematic method of permanently resolving problems on a timely basis.

Corrective action is the "payoff" step ! It closes the loop of the quality and safety improvement programme and clearly fulfils a responsibility of contributing to the profits of a company. This is most successful when it operates on the well-known "Pareto" principle which states that the most important should be attacked first. Problems must be identified, classified as to importance, and formally resolved. This eight step consists of :

- implementing the corrective action,
- auditing the process to validate the efficiency of the corrective action.
- short regular meetings should be held on board ships and in office to examine the problems detected and to prevent recurrence.

- monthly, or special meetings should be held by the general manager and his staff to review the problems with overdue resolutions.
- when an undesirable condition is noticed, a verbal corrective action request should be issued.
- when verbal corrective action requests are not complied with, a discrepant condition notice should be issued which indicates that verbal attempts at obtaining corrective action have been ineffective and a formal notice is necessary.
- a corrective action notice is sent to the department manager or ship when all else has failed to generate corrective action.
- the receipt of a corrective action notice should be a serious matter. Appropriate reprimand to those failing to heed earlier requests to correct discrepant conditions is in order. Any individual collecting a series of corrective action notices should be brought to the attention of senior management for appropriate remedial action.

9. COST OF ERROR

Objective: Quantify the cost of error and the cost of activities necessary to prevent, appraise and remedy error as a means of reducing the total cost.

While there is no simple definition of the costs of error, but many general definitions, the following specific definition is established for the purpose of understanding the wide scope of activities which may be chargeable to quality costs.

“The cost of error is the difference between the actual cost of making and selling services and the reduced cost, if there was no possibility of failure of the services or errors of the people from the contract signature to the delivery of the product. This ninth step consists of :

- measuring major error costs in the company,
- analysing the actual situation,
- identifying area of potential saving for new quality and safety improvement.

The cost of error is the only practical measurement of quality and safety. It has long been said, “if you can’t measure something, you can’t control it”. The most practical and meaningful measurement is still plain old-fashioned button line money.

However, in principle, restricting error costs in this manner is parochial. It should be construed as any costs relating to mistakes, defects and failures made by anyone in the company which hamper its operation. Now we have taken account of errors from the ships into the offices where the more far-reaching and costly errors occur.

A wider definition should be : “The error cost of a company is the difference between the actual operating cost of a company and the operating cost if there were no failures in its services and systems, no mistakes by its staff, and no possibility of failure or mistakes”.

10. RECOGNITION

Objective: Provide employees with recognition for those who participate.

Employees who continually strive for quality and safety improvement or who are instrumental in effecting significant cost savings should be recognised for their contribution. This serves as a reward to the contributor and as evidence that superior effort is encouraged and appreciated by the company.

Recognition is a fundamental need of everyone. Studies show that people place recognition for their efforts among the aspect of employment they value most. The most effective type of recognition is one that is lasting and increases esteem among associates. A cash award is welcome, but generally soon forgotten. This tenth step consists of :

- defining means to recognise significant results but also for participation,
- awarding personnel to stimulate new participation in the quality and safety improvement programme.

As previously stated, it is important to emphasise that this recognition should, generally, not be in the form of money, prizes, or trinkets. Except in unusual circumstances, the employee is simply doing better what was hired to do anyway. Of course, if someone saves the company a large sum of money, a financial reward might be in order. It should not be considered a routine measure, however.

The type of recognition can be different from one company to the other. There is no strict rule.

For improved stimulation, the recognition awards should be sparse but meaningful.

11. CONCLUSION

When travelling, I meet employers who tend to say "We would like to set up a programme, but our employees are not ready".

In fact this is not the problem, the employees are ready to follow the management's example, if close enough to those engaged in the day-to-day business of promoting the company in the field.

The most serious obstacle is that the management is not approachable, and the management ego of "we are the thinkers and they are the doers".

This attitude is wrong at a time when we have to mobilise all efforts to be competitive on a global market.

So, are you ready to be a leader and to believe in your people ?

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Sažetak

KAKO POBOLJŠATI SIGURNOST

U svom radu autor razrađuje program usavršavanja kvalitete i sigurnosti u deset stupnjeva (faza, odnosno koraka). Na prvom stupnju, koji predstavlja izlaganje politike broderskog društva, treba odrediti standarde u provođenju upravljanja te integrirati sigurnosnu komponentu unutar politike društva. Na drugom se stupnju daju smjernice osoblju informiranjem o konceptu i svrsi programa te motiviranjem osoblja na provođenje programa. Kao treći stupanj autor predviđa osnivanje odbora za poboljšanje sigurnosti, gdje ponajprije treba odrediti njegovu zadaću i odgovornost, pomno odabrati njegove članove te izgraditi organizacijsku strukturu za postizanje ciljeva programa. Na četvrtom stupnju provodi se procjena provedbe u obliku utvrđivanja područja, kako na brodu tako i na kopnu u sjedištu tvrtke, koja treba poboljšati, zatim se procjenjuje stvarno stanje i na kraju se analiziraju rezultati. Peti stupanj obuhvaća stručno osposobljavanje osoblja, no prije same poduke u obliku vježbi za korištenje sredstava za rješavanje problema, autor predviđa utvrđivanje jednostavne metode i pogodnih sredstava za rješavanje problema. Sljedeći je stupanj posvećen ustanovljavanju uzroka grešaka tj. pronalaska mogućih korijena problema koji se javljaju, i osiguranja sredstava koja će omogućiti informiranje uprave tvrtke sa svrhom rješavanja uočenih problema. Sedmi stupanj bavi se ciljevima, tj. utvrđivanjem povoljnih prilika za ostvarenje ciljeva te pripremom pogodnog plana djelovanja za uklanjanje neusklađenosti odnosno za poboljšanje postojeće prakse, a na osmom se stupnju koncipira složen sustav korektivnih djelovanja. Na devetom stupnju procjenjuju se troškovi pogrešaka i utvrđuju se područja mogućih ušteda pri usavršavanju kvalitete i sigurnosti. Na posljednjem, desetom, stupnju programa predviđa se utvrđivanje načina priznavanja koji bi motivirao osoblje na još veći doprinos. U zaključku autor upozorava na učestale pogrešne stavove u upravama tvrtki, kojima se izražava sumnja u spremnost osoblja da prihvati i provodi takve programe, te primjećuje da je najozbiljnija prepreka upravo nedostupnost i rigidnost upravnih struktura u tvrtkama, koje bi se trebale transformirati težeći da postanu konkurentne na globalnom tržištu.