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Dear colleagues and members of our NRC Team,

Each new year offers us not only a change in the calendar, but also the opportunity to renew and grow. In the past year, we have achieved many successes with your trust and support. However, every success is a start for new responsibilities and greater goals.

We are entering 2025 with innovations and a strong vision that will take us one step further. Our goal is to add value to our sector and society while offering you the best.

The new year will be a period when we will feel the power of achieving together even more deeply. We will continue on our way with better services, stronger collaborations and more sustainable solutions. Because we know that we grow as we share success and become stronger as we gain trust.

We wish 2025 to be a year full of health, happiness and success for all of us. Let's shape the opportunities of the future together by drawing strength from the experiences of the past!

Feyyaz Ridvan KABA

President

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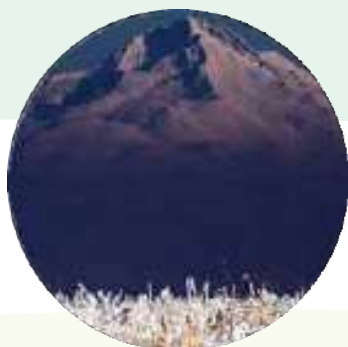
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Yesterday, Today, Tomorrow in Artificial Intelligence



Artificial intelligence (AI) is a branch of technology that aims to integrate human-like intelligence capabilities into computer systems.

Artificial intelligence, which has developed rapidly in recent years, has a profound impact on many areas of our lives and has revolutionized many industries.

The roots of artificial intelligence go back to the 1950s. Alan Turing, known for his pioneering work that put the idea of artificial intelligence on a scientific basis, questioned the ability of machines to think with the "Turing Test". This was an important turning point in the development of artificial intelligence. Over time, the increase in studies in the field of artificial intelligence, various algorithms and models have been developed, thus further diversifying AI applications.

Today, artificial intelligence has become a part not only of science fiction movies, but also of our daily lives. It is actively used in many fields, from healthcare to automotive, financial services to entertainment. However, the ethical and security concerns raised by AI are also becoming increasingly important.

Looking to the future, many questions arise about how far artificial intelligence can develop and what its effects on society will be. How artificial intelligence can transform human life, how it will affect labor dynamics and how it will solve ethical problems.

The history of artificial intelligence dates back to the mid-20th century, a time when the foundations of computer science were laid. The first steps in the field of artificial intelligence were shaped by scientists' desire to give machines human-like thinking and learning abilities.

The foundations of artificial intelligence were laid in the 1950s with the work of Alan Turing. In his article "Computing Machinery and Intelligence", Turing questioned whether machines could have the ability to think and introduced the Turing Test. This test refers to the inability to distinguish a human conversation with a machine from a conversation with another human. The Turing Test has become one of the cornerstones of artificial intelligence research.

In the 1960s, the first artificial intelligence programs began to be developed. At MIT, John McCarthy, Marvin Minsky and others conducted the first important research projects in the field of artificial intelligence.

They carried out the first important research projects. Programs such as "Logic Theorist" and "General Problem Solver" attracted attention as the first AI applications capable of solving logical problems. During this period, the symbolic AI approach focused on the ability of algorithms to make logical inferences.

The 1970s and 1980s saw some major breakthroughs in the field of artificial intelligence. Artificial intelligence has reached a wider range of applications with the development of expert systems. These systems began to be used in decision-making processes by modeling the knowledge and experience of human experts in specific fields.

However, the expected advances in artificial intelligence did not materialize, to a period of stagnation towards the end of the 1970s, dubbed the "AI winter". Declining research funding and unmet public expectations led to a slowdown in AI research.

Towards the end of the 1990s, there was a resurgence in the field of artificial intelligence. The increase in the amount of data, the rise in computer processing power and the development of new algorithms made artificial intelligence applications more effective. In 1997, Deep Blue, developed by IBM, defeated world chess champion Garry Kasparov and showed the world the capabilities of artificial intelligence.

During this period, machine learning and methods came to the fore. Support vector machines, decision trees and other techniques became important tools in artificial intelligence research.

The historical development of artificial intelligence is a reflection of scientific thought and technological progress. From early basic research modern machine learning applications, this transformation in artificial intelligence has reshaped humanity's relationship with technology. This accumulation from the past forms the basis of today's AI applications and sheds light on future developments.

Today, artificial intelligence has revolutionary applications in many sectors. Thanks to advanced techniques such as machine learning, deep learning and natural language processing, AI systems make human life easier and increase productivity.

Artificial intelligence plays an important role in healthcare in many areas such as diagnosis, treatment recommendations and patient management.

Thanks to image processing techniques, algorithms have been developed to detect abnormalities on X-ray, MRI and CT scans. For example, the artificial intelligence model developed by Google has achieved similar accuracy rates to human experts in identifying eye diseases.

Besides, AI-based applications can create personalized treatment plans by analyzing patient data, making healthcare services more effective. In addition, they offer advantages such as better use of resources and shorter processing times in healthcare management.

Artificial intelligence in the automotive industry has gained great momentum with the development of autonomous vehicle technologies. Equipped with sensors and cameras, vehicles able to perceive their surroundings, analyze road conditions and move safely. Companies such as Tesla, Waymo (Google), Cruise (GM), Uber ATG, Baidu Apollo are working on driverless vehicles by developing this technology. The vehicles of these companies mainly provide level 3, level 4 and level 5 autonomous driving support.

In addition, AI aims to reduce traffic accidents and improve the driving experience through advanced driver assistance systems (ADAS) in vehicles. Automakers are also developing various solutions to improve the performance and optimize the energy efficiency of vehicles using artificial intelligence.

In the financial sector, artificial intelligence is widely used in areas such as risk management, fraud detection and customer service. By analyzing big data, machine learning algorithms can instantly detect fraud attempts and take preventive measures.

Moreover, robo-advisory services support financial decision-making processes by providing investors with personalized investment recommendations. AI-based analysis tools are an important aid in identifying market trends and developing investment strategies.

In the retail industry, artificial intelligence is used to enhance customer experience and optimize sales. Recommendation systems are based on users' past shopping data, offering products tailored to their interests, and enhancing their shopping experience.

Platforms such as Amazon and Netflix are using artificial intelligence effectively in this area to increase customer satisfaction.

Artificial intelligence solutions also come into play in inventory management, demand forecasting and logistics processes, contributing to more efficient and profitable operation of businesses.

Natural language processing (NLP) is another important application area of artificial intelligence. OpenAI's Chat-GPT, Google's Bard and other major language models have made significant progress in the field of natural language processing (NLP). These models outperform earlier versions in language understanding, text generation and conversation. Applications such as voice assistants, text analytics and sentiment analysis have changed the way people interact with computing. Digital assistants such as Apple's Siri, Amazon's Alexa and Google Assistant are frequently used in daily life and help users perform various tasks by answering their questions.



Systems like DALL-E and Midjourney stand out for their ability to generate visual content from textual descriptions. Such work is reshaping the processes of design, art and content creation.

In addition, in the field of customer service, chatbots answer users' questions and provide support. These systems provide 24/7 service, increasing customer satisfaction and reducing costs for businesses.

In the field of education, artificial intelligence systems that offer personalized learning experiences are used to provide content and support tailored to the needs of students.

With the increase in artificial intelligence applications, ethical and security concerns have also come to the fore. Issues such as data privacy, algorithmic bias and the misuse of artificial intelligence create significant controversy in the development of this technology. If the transparency and reliability of AI systems are not ensured, the impact of these technologies on society may be negative.

Modern artificial intelligence applications are transforming every aspect of life. Its impact in sectors such as healthcare, automotive, finance, retail and many more shows how important a tool this technology has become. However, the ethical dimensions and security concerns of AI should not be ignored.

The future of AI technologies is both exciting and complex.

In the future, AI could make revolutionary advances in a variety of fields.

Autonomous vehicles, drones and robots are among the most remarkable application areas of artificial intelligence. With their ability to act on their own in complex environments, these systems can lead to significant changes in sectors such as transportation, logistics and agriculture.

Artificial intelligence has the potential to transform education. Systems that offer customized educational materials and recommendations based on students' learning styles can make the learning process more effective.

Artificial intelligence can also city management. Smart solutions in areas such as traffic management, energy consumption and waste management can contribute to making cities more efficient and sustainable.

The future of AI is redefining the interaction between human and machine. The way humans collaborate with AI could change the structure of the workforce. In the future, how humans will leverage AI in areas such as creative thinking, problem solving and social skills will be a key issue.

The interaction of AI with humans may require more empathy and communication in educational and work environments. This process may increase the importance of emotional intelligence while enabling humans to work more efficiently with AI.



The proliferation of artificial intelligence will significantly affect workforce dynamics. The automation of some jobs lead to significant changes in the workforce. While this may lead to an increase in unemployment or the disappearance of some professions, it will also pave the way for the emergence of new fields of work.

Education systems will need to be restructured in line with the requirements of the artificial intelligence era. The workforce must be provided with access to continuous training and development opportunities to adapt to technological changes.

The future of artificial intelligence is also intertwined with ethical and social issues. Issues such as data privacy, cognitive bias, discrimination and liability questions about the impact of these technologies on society. Ensuring transparency and accountability in the design and implementation of AI systems can help overcome these issues.

Moreover, ethical debates on the role of AI in people's lives may lead to a reshaping of social norms and values. This could affect societies' relationship with AI and the acceptance of this technology.

Artificial intelligence presents both opportunities and challenges for the future. With the potential to drive innovation, increase efficiency and improve quality of life, this technology also raises serious concerns about human health, privacy and security.

In order for societies to cope with these challenges, it is critical to set ethical standards for the development and adoption of AI applications.

The future of artificial intelligence is an area where social, economic and ethical dynamics will be shaped in interaction with technological advances. In this process, in order to make the most of the potential of artificial intelligence, all segments of society will need to understand this technology and contribute to the adaptation process. Taking advantage of the opportunities offered by artificial intelligence is vital for the future of humanity.

Artificial intelligence is one of the most important technological developments in human history. From past to present, from its first steps until its modern applications, artificial intelligence has created revolutionary changes in many fields. Its impact in various sectors such as health, automotive, finance, retail, etc. shows how this technology is transforming our daily lives.

Looking to the future, the potential of artificial intelligence is vast. Developments in areas such as autonomous systems, personalized education and smart cities have the potential to make life easier and more efficient. However, in addition to these opportunities, changes in labor dynamics, ethical issues and security concerns should also be taken into account.

The future of AI will be shaped by the redefinition of human and machine interaction. The ability of humans to collaborate with AI by utilizing their creative and emotional intelligence will play a critical role in this process. Education systems should be restructured in line with this new reality and individuals' continuous learning abilities should be developed.

Ethical and social dimensions should not be ignored. Transparency, fairness and accountability of AI applications will enhance the positive impact of these technologies on society. Dealing with issues such as data privacy, algorithmic bias and discrimination should be an important part of AI research and applications.

In conclusion, it is the responsibility of the whole society to seize the opportunities offered by artificial intelligence and with the challenges we face. This technology must be used consciously and ethically as a tool to shape the future of humankind. The future depends on how AI paves the way for humanity, so understanding and adapting to this technology should be a common goal for all of us.



ROPES (Cordage)

Rope, or cordage, is a braided material made of vegetable, synthetic fibers, or wire, typically with a diameter greater than 2.5 cm (approximately 1 inch).

Since the earliest times, rope has been an integral part of man's sailing. The first ropes in history were made of flax and hemp. Because the making of these ropes was very difficult and laborious, they were very valuable. With the development of technology over time, much lighter and much more durable ropes could be manufactured. Technological advances have led to many different types of ropes and a different rope for every purpose.

Ropes are the most commonly used materials on a boat. The points to be considered when using these materials are where they will be used on the boat and for what purpose. The material, quality, length, and diameter of the rope to be purchased vary depending on how it is used.

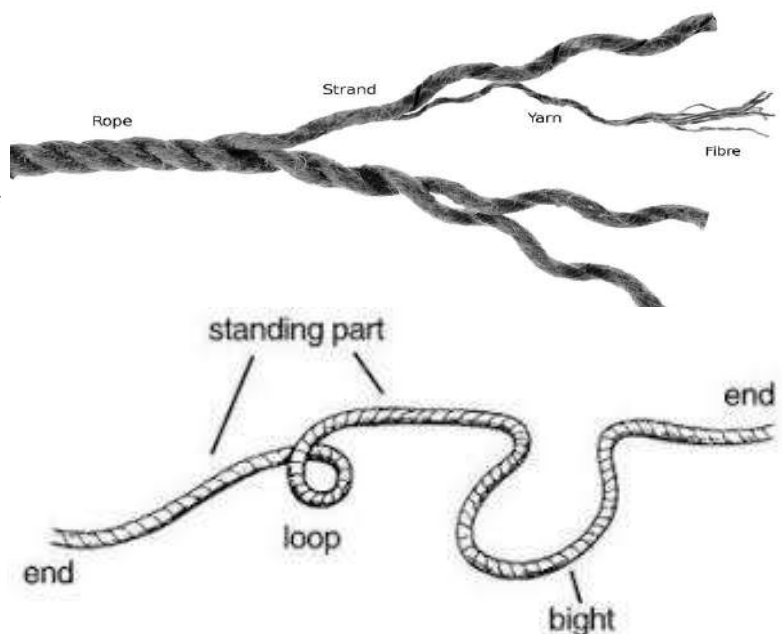
Ropes are divided into three main types according to the material they are made of:

1. Vegetable fiber ropes
2. Synthetic fiber ropes
3. Wire ropes

Elements Composing the Rope (Cordage)

FIBER/FIBRE: The thinnest part of the material from which the rope is made.

Yarn: Several fibers twisted together.



Strand: The main element of the rope, formed by twisting the yarns together.

ROPE (Cordage): Formed by twisting the strands together in the opposite direction to the twisting direction of the yarns.

Parts of the Rope (Cordage)

END/TAIL: The termination of a rope.

STANDING PART: The fixed part of a rope in a tackle.

RUNNING PART: The free end of a rope that is being pulled or hauled.

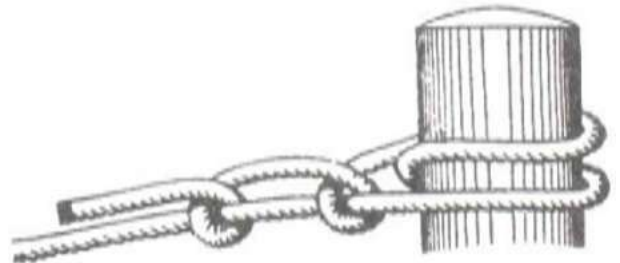
BIGHT: A loop formed by doubling the rope back on itself.

Sailing Knots

Anchor Hitch/ The fisherman's knot

Place of use:

The Anchor Hitch is a knot used for attaching a rope to a ring or similar termination. It is sometimes called an Anchor Bend originating from a time when "bend" was understood to mean "tie to", and not restricted to knots that join rope ends. It is the accepted knot for attaching anchors (or more usually anchor chains). While the knot can become jammed in some modern materials, it is usually easily untied after moderate loads; it can be made more resistant to jamming by taking an extra turn around the object



How to use:

The Anchor Hitch, also known as the Fisherman's Knot, is a bend (a knot for joining two lines) with a symmetrical structure consisting of two overhand knots, each tied around the standing part of the other

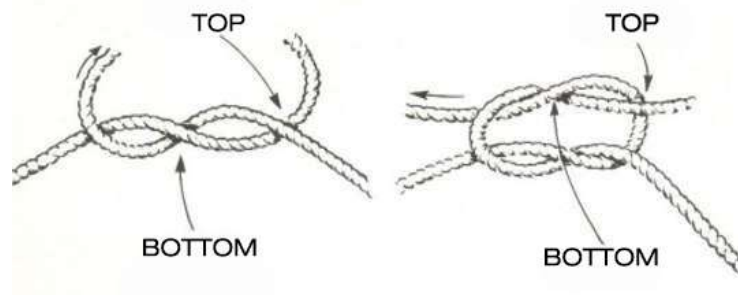
Square Knot / Reef Knot

Place of use:

It is a sailor's tie used to fasten the battens of the spinnaker to each other in order to batten the sails (to reduce the sail surface). It is not recommended to be used for attaching two ropes to each other as it is very prone to becoming untwisted.

How to use:

The reef knot, or square knot, is an ancient and simple binding knot used to secure a rope or line around an object. A square knot is composed of two overhand knots turned in opposite ways.



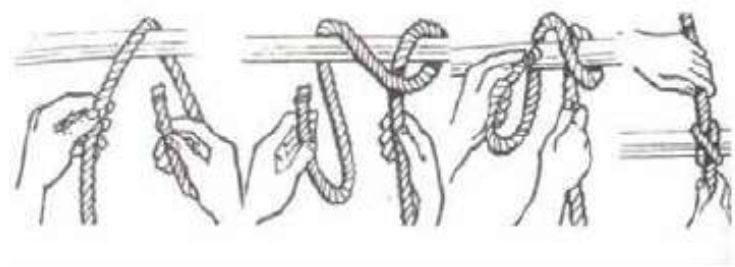
Pile Hitch

Place of use:

The Pile Hitch is a quick, secure knot used to tie a rope to a dock post, bollard, or any cylindrical object. It is frequently employed in maritime settings for mooring boats and ships, as it holds well under tension but can be easily untied and released when needed.

How to use:

The hitch is created by wrapping a doubled line around the object and pulling the loop over the top of the post or bollard, cinching it down on the standing end of the rope to secure the vessel. This hitch is easy to tie and can be done in the bight, without requiring access to either end of the rope.



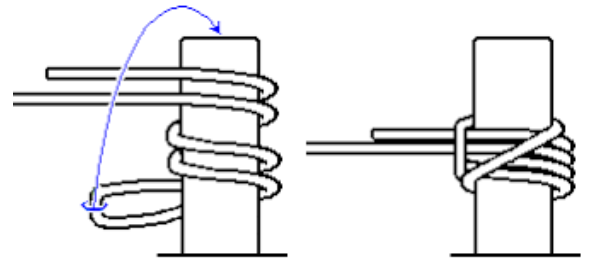
Double Pile Hitch

Place of use:

The Double Pile Hitch is a type of hitch used for attaching a rope to a pole or other structure. It is very easy to tie and can be tied in the bight, without access to either end of the rope, making it a valuable tool

How to use:

This type of knot is used to secure a line or rope to a fixed object. The first part of the knot is a round turn, which controls the load and provides friction against the support. This allows you to make the line taut. The two half-hitches secure the line and keep it tight



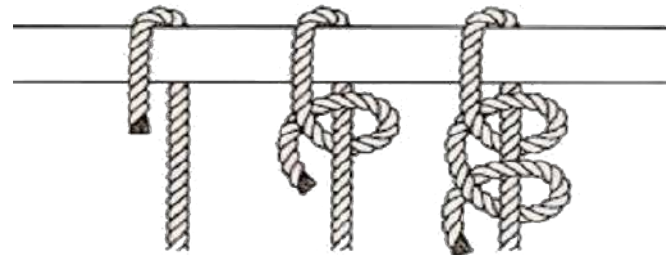
Half Hitch Knot

Place of use:

Half Hitch knot is useful for attaching a mooring line to a dock post or ring. It can be placed under a lot of strain and is easy to untie.

How to use:

Take the end of a rope up around the pole from back to front. Then take it around the pole again to form a round turn. Now take the working end across the standing part (the long 'unused' part). Then take the rope behind the standing part and tuck it behind itself to form a half hitch. Repeat to make a second half hitch. Pull on the ends to tighten the knot.



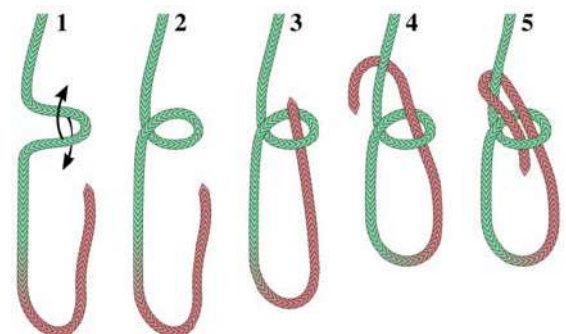
Bowline Hitch

Place of use:

The Bowline is used to make a fixed loop in the end of a line. It is relatively easy to untie when not under load. It is commonly used in sailing small craft, for example to fasten a halyard to the head of a sail or to tie a jib sheet to a clew of a jib.

How to use:

Form a small loop leaving enough rope for the desired loop size. Pass the end of the rope through the loop as though making an overhand knot. Continue around the standing end and then back through the small loop. Pull on the standing end to tighten the knot.



The figure-eight knot/ Figure-of-eight knot

Place of use:

The figure-eight knot or figure-of-eight knot is a type of stopper knot. It is very important in both sailing and rock climbing as a method of stopping ropes from running out of retaining devices. Like the overhand knot, which will jam under strain, often requiring the rope to be cut, the figure-eight will also jam, but is usually more easily undone than the overhand knot.



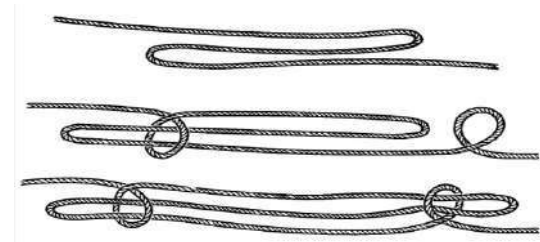
How to use:

Pass the tail over itself to form a loop. Continue under and around the standing end. Complete the knot by passing the tail down through the loop. Pull on both ends to tighten the knot.

The Sheepshank Knot

Place of use:

The Sheepshank is an unreliable knot traditionally used to shorten a rope or take up slack without cutting it. It can be used to bypass a damaged section of rope. While effective for temporarily shortening a rope or bypassing damage, the Sheepshank can fail if not kept under constant tension, making it unsuitable for critical situations.



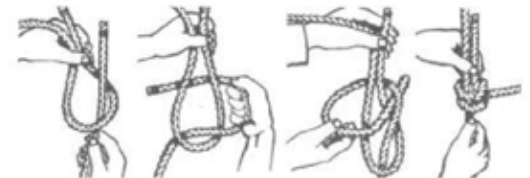
How to use:

The knot has several features which allow a rope to be shortened. It provides two loops, one at each end of the knot which can be used to pass another rope through. The knot remains somewhat secure under tension; the coarser the rope, the more secure it is. The knot remains somewhat secure under tension; the coarser the rope, the more secure it is. The knot falls apart easily when tension is removed.

Starboard Knot

Place of use:

This type of knot is designed especially for one purpose, and I bet you can guess what that is. If you said, "Making the line fast to a cleat," you were correct. As you might imagine, this is used all the time on a sailboat, whether you're docking, towing a dinghy, or rigging a preventer. Knowing how to do it will make you a much handier sailing companion!



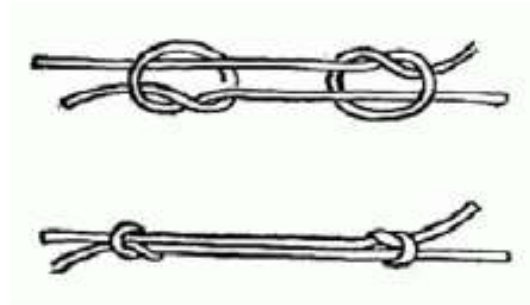
How to use:

Make a wrap around the base of the cleat. Begin your wrap on the edge furthest away from where the line originates. Make a figure 8 on the cleat. If the line is going to be under a lot of pressure, and the cleat is big enough, repeat this two or three times. Add a hitch to the final turn to lock it. Do this by making a loop with the tail end underneath, hook it around the cleat, and pull taut. The tail end should be pointing away from the line's origin.

The Fisherman's Knot

Place of use:

It is a bend (a knot for joining two lines) with a symmetrical structure consisting of two overhand knots, each tied around the standing part of the other. The Fisherman's Eye is one of several knots known as the "True Lover's Knot". It is a useful loop knot tied in the bight by one of at least four different methods.



How to use:

Tie a loose Overhand Knot with the working end of one rope around the other rope. Repeat with the working end of the second rope around the first rope and tighten both knots. Pull the standing parts of both ropes in opposite directions to seat the two knots together.

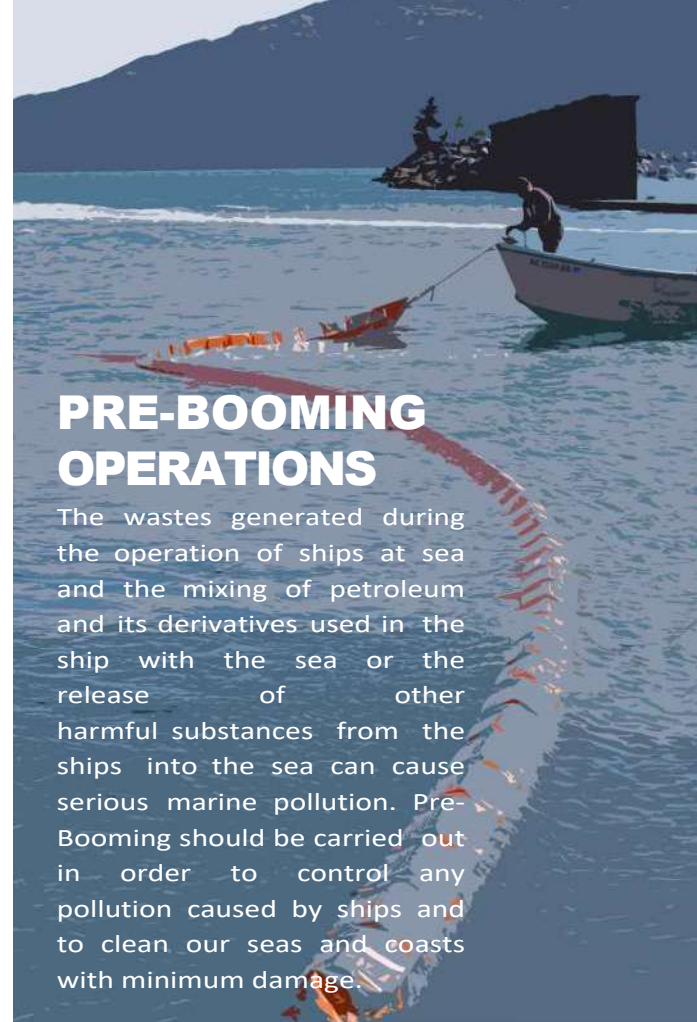
NRC Pre-Booming Activities

As NRC, we continue our **Pre-Booming** activities with the most experienced and equipped team in Turkey, with approximately 10000 meters of booms and 12 marine vessels. Within the scope of the activity, boom deployment is carried out around the ship, coastline, port and pier. In this context, a total of 1100 **Pre-Booming** operations were carried out in 2023 and 2024.



What is Pre-Booming?

Although our first priority against the pollution of our seas due to spillage from ships during maritime transportation is to prevent the spillage from occurring, in case of a spillage, the temporary spill booming process that we have done in order to prevent the sea and its environment from being polluted with oil and other harmful substances is called Pre-Booming. It is also called the “First Line of Defense” in emergency response operations.



PRE-BOOMING OPERATIONS

The wastes generated during the operation of ships at sea and the mixing of petroleum and its derivatives used in the ship with the sea or the release of other harmful substances from the ships into the sea can cause serious marine pollution. Pre-Booming should be carried out in order to control any pollution caused by ships and to clean our seas and coasts with minimum damage.

Pre-Booming Purpose

Pre-Booming is to temporarily confine the spill on the water surface until it is cleaned up and to prevent its spread. This prevents a spill from spreading to open waters and shorelines. In this context, **the Pre-Booming** process should completely enclose the area ensuring maximum containment of the spillage into the water.

Pre-Booming Advantages

Increased **Pre-Booming** will help prevent damage to our natural resources. There is no doubt how great this threat is for our country, especially considering that majority of oil transfers take place at sea. In the event of a leak, **Pre-Booming** will help reduce environmental damage, time and clean-up costs, and the economic impact on the community where the spill occurs. In short **Pre-Booming** will provide greater protection to human health, the environment and economic losses.



THE IMPORTANCE OF CREATING A CULTURE OF OCCUPATIONAL HEALTH AND SAFETY IN WORKPLACES

Introduction

Occupational accidents and diseases worldwide are a multifaceted problem that threatens the physical and psychological integrity of workers and disrupts the productivity and competitiveness of businesses. International Labor Organization (ILO) data shows that approximately 2.78 million workers lose their lives every year due to occupational accidents or occupational diseases, while around 374 million non-fatal occupational accidents occur. More strikingly, according to ILO data, approximately 7,700 people die or suffer permanent disabilities as a result of work accidents or occupational diseases every day. Looking at this picture from the Turkish perspective, it is noteworthy that, according to the Social Security Institution (SSI) statistics, the number of occupational accidents in Turkey has exceeded 400,000 annually in recent years, with more than a thousand workers losing their lives each year as a result.

These figures reveal the necessity of building a comprehensive and sustainable occupational health and safety (OHS) culture that goes beyond legal compliance or criminal sanctions.

Occupational health and safety is not a field that can be limited to technical measures such as "control of dangerous machinery and equipment" or "use of personal protective equipment". On the contrary, it is a multi-layered issue in which many components interact, from internal communication to leadership models, from the education level of employees to the production style of the enterprise. In workplaces where an OHS culture is embedded, employees feel safe, and businesses have stable production processes, cost-effective operations and a positive perception of corporate reputation. Therefore, it is possible to say that an OHS-oriented approach provides a critical advantage not only for employees but also for the long-term sustainability of businesses.

Definition and Importance of Occupational Health and Safety Culture

Occupational health and safety culture refers to the development of a common set of values, beliefs and behaviors that prioritize safety and health for everyone in an enterprise, from management to employees in the field. The basis of this culture is the transformation of "safe behaviors" into a corporate reflex rather than an individual responsibility. Although legal regulations and standards set out the minimum requirements in the field of OHS, building a lasting safety culture is only possible in an environment where employees voluntarily comply with these rules and even offer suggestions for improvement when necessary.

Especially when accident statistics are examined, it is seen that most of the fatal or seriously injured cases are caused by "human error" or "organizational communication deficiencies". This shows that technical measures alone are not sufficient, and that preventive mechanisms must be embedded in the collective consciousness of every employee through cultural transformation. This transformation necessitates a participatory and dynamic work culture where each individual feels responsible for the safety of both himself/herself and his/her colleagues, overcoming the "nothing can happen to me" approach.

Leadership, participation and resource allocation

Top management's attitude and resource allocation play a decisive role in the institutionalization of an OHS culture. According to research by the European Agency for Safety and Health (EU-OSHA), leadership support for OHS practices is a factor that increases adoption of safe behaviors by at least 30%. A "safety-first" approach expressed only in verbal statements loses credibility when it is not reflected in actual practices on the ground. Instead, steps such as the budget allocated for occupational safety experts and workplace physicians, the supply of reliable personal protective equipment, and the uninterrupted continuation of regular training and inspection programs concretize the sincerity of the business in the eyes of employees.

Likewise, encouraging employee participation and giving staff at all levels a voice in decision-making processes puts OHS culture on a solid footing.

OHS committees and employee representatives assigned in the field of OHS ensure that challenges and hazardous situations encountered in the field are communicated directly by employees to senior management. Such interaction makes a big difference in mapping the real risks on the ground and implementing improvement plans. Research shows that businesses where employees are actively involved have up to 40% lower rates of occupational accidents compared to businesses with limited involvement.

Proactive approach and risk management

One of the most important building blocks of occupational health and safety culture is a proactive risk management approach. Traditional approaches emphasize the investigation and reporting carried out after an accident occurs. However organizations with a modern OHS culture aim to identify dangerous situations or behaviors in advance and take precautions without waiting for an accident. "Near-miss" reports often carry clues that can be precursors to serious accidents. Therefore, creating a management climate where employees can report near-misses without delay and are seen as "responsible partners" rather than "complainers" can help reduce potential risks by as much as 60-70%.

The success of a proactive approach depends on making the risk assessment process periodic and systematic. Using separate analysis methods for each of chemical, biological, physical, ergonomic and psychosocial risks shows which issues should be prioritized. While it is not possible to reduce risk to zero, especially in high-hazard sectors (mining, construction, chemistry, etc.), a continuous improvement cycle can reduce hazards to a minimum acceptable level. Data confirms that accident frequency rates in large-scale enterprises practicing proactive risk management are 3 to 5 times lower than in enterprises with a traditional approach.

Training and awareness raising activities

Continuous training and awareness raising is one of the most important elements that ensure the permanence of OHS culture. For example, in Turkey, the Occupational Health and Safety Law No. 6331 and related regulations require workplaces to provide occupational health and safety trainings to their employees at certain intervals.

However, this legal obligation is often seen as a "formality" or to "save the day" and the effectiveness of trainings remains low.

However, when successful examples are examined, it is seen that training contents go beyond theoretical explanations and are supported by practical field studies, group discussions enriched with cases and even virtual reality (VR) based simulations. Such training approaches ensure that employees are "realistically" prepared for the hazards they may encounter in their work processes. In addition, with the "Behavior Based Safety" (BBS) approach, employees observe each other and give constructive feedback, which not only strengthens communication but also provides the opportunity to understand and correct the causes of dangerous behaviors. Field studies show that businesses that implement BBS-oriented training programs experience a 25-30% reduction in the frequency of occupational accidents.

Management of psychosocial risks and corporate communication

Although physical risk factors (machine safety, electricity, chemicals, personal protective equipment, etc.) are often the first things that come to mind when it comes to OHS, psychosocial risk factors also have a serious impact on occupational accidents and occupational diseases. Intense stress, unbalanced workloads, long working hours, inadequate rest opportunities or communication problems between workers lead to loss of focus and fatigue, inviting accidents. Data from the European Statistical Office (Eurostat) shows that there is a significant increase in musculoskeletal disorders and mental health problems, especially when office workers face high levels of stress.

One of the ways to minimize such psychosocial risks is through openness and transparency in internal communication. The human-centered dimension of OHS culture is strengthened by the ability of employees to report hazards to managers without hesitation, to raise problems related to workload or working order, and to quickly put solutions to these problems into action. Especially cases of psychological violence such as "mobbing" both increase the risk of accidents by disrupting workplace peace and damage the reputation of the organization. For this reason, management should adopt an attitude that is "open to learning" and "solution-oriented" rather than "blaming" or "punishing". This approach supports both physical and psychological safety.



Evaluation, monitoring and continuous improvement

The establishment of an OHS culture depends on regular monitoring and measurement of internal performance and taking continuous improvement steps in line with the results. Monitoring indicators such as accident frequency rates, severity rate, number of near-miss notifications, and employee satisfaction surveys reveal the safety record of the organization. The "Plan-Do-Check-Act (PDCA)" cycle, especially in OHS management systems such as ISO 45001, encourages continuous improvement by systematically analyzing this data.

However, internal and external audit mechanisms also play an active role in identifying gaps in the organization's current practices or areas for improvement. Compliance with legal regulations is important to demonstrate that minimum standards are met; however, a true safety culture goes beyond the requirements of the legislation and prioritizes the specific risks and needs of the business. Some leading businesses in our country integrate OHS performance with the corporate reputation index, thereby developing a "people-centered" image in the eyes of employees and customers. Research has shown that such businesses achieve significantly positive results in both financial performance and employee engagement.

Conclusion

Establishing an occupational health and safety culture in workplaces is an indispensable step not only to avoid legal sanctions or to make statistics look low, but also to build a corporate structure that respects human life combines sustainability and productivity goals on a common ground. Beyond technical measures, culture represents a set of shared values, attitudes and behaviors adopted within the corporate structure. Consistent leadership from senior management, encouragement of employee participation, continuous training, proactive risk management, a holistic approach that takes into account psychosocial factors, integration of innovative technologies and regular performance measurement all play a critical role in establishing a safety culture.

Businesses that have achieved this transformation not only achieve significant reductions in occupational accidents and occupational diseases, but also employee motivation, production quality, corporate reputation and competitiveness. Today, OHS culture is recognized not as an "additional cost" or "legal obligation", but rather as a "strategic investment for the future" and one of the most tangible manifestations of "respect for human beings. Therefore, for all organizations that adopt a people-oriented and sustainable business approach, implementing and continuously developing an OHS culture is both an ethical obligation and the key to long-term success.

If businesses adopt occupational health and safety as a corporate culture with the right policies and practices, they will achieve a healthier, happier and more productive workforce. In the long run, this will provide great gains in terms of both economic and social aspects and will be one of the strongest pillars of corporate success.



Mount Erciyes

Erciyes, one of the highest mountains in Turkey, rises as a single mass in the southwest of Kayseri Province. The summit of Erciyes resembles a dome with its general appearance. On the peaks of the mountain, which are deeply cut by floodplains and formed by domes and ridges, a ridge runs roughly east-west and there are two peaks on this ridge. One of these, the 3917 m. high Büyük Erciyes, is also the peak of the mountain. The second hill is the Safrakaya hill or Küçük Erciyes (2700 m.) located to the west of it.

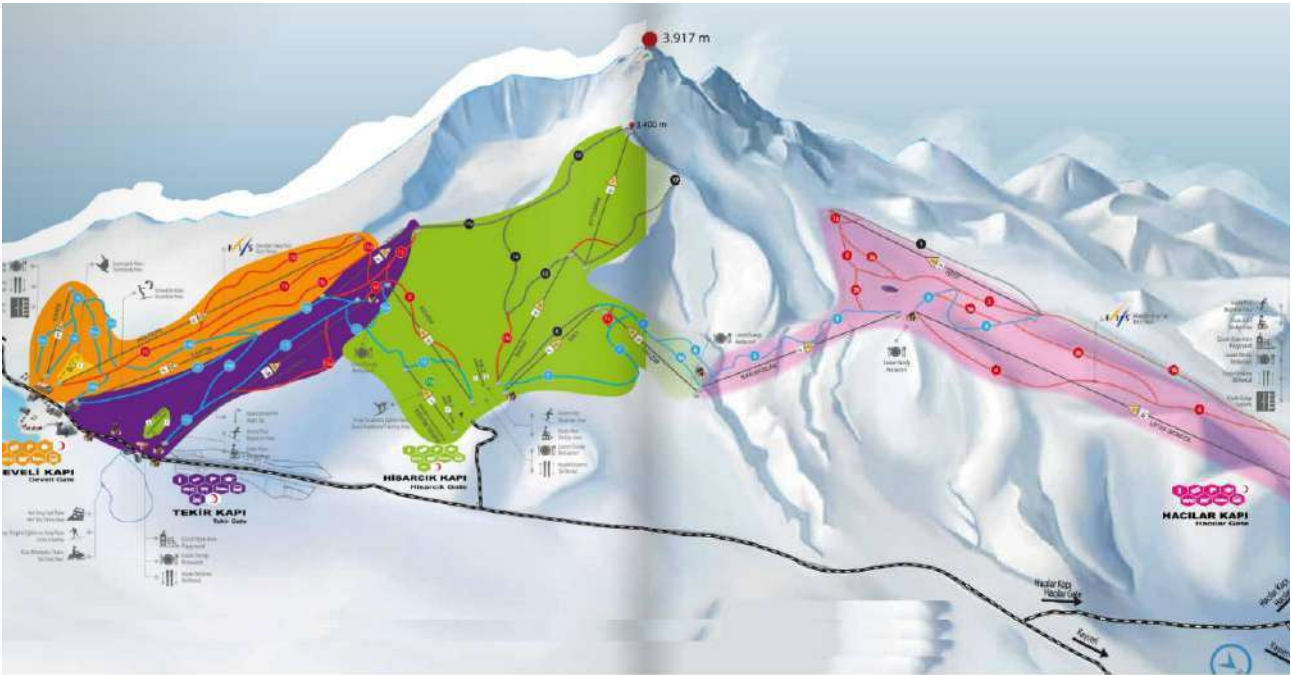
The number of gondolas and mechanical facilities equipped with the latest technology at international standards reached 18 in total and 25,500 meters in length in the 2015 season, and 20 in total and approximately 35,000 meters in length in 2016, when the Master Plan was completed. These systems satisfy the users in terms of safety, comfort, technology and speed. As a relatively risky sport, security is an important factor in areas where skiing is practiced. A "ski patrol" team of 20 people is one of the important advantages of Erciyes in terms of piste security and search and rescue activities in Turkey. This special team, which ensures the safety of the piste, not only checks the marking and safety measures, but also helps guests who have a problem while skiing and transports them safely to the medical teams when necessary. In Erciyes Tourism Center, special measures have been taken for situations and days when snowfall is not sufficient.

There is an artificial snowmaking system that is activated during periods of low snow levels and is effective on an area of 1 million 700 thousand square meters.

In addition to activities such as alpine skiing, Nordic skiing, snowboarding, snowkiting, sledding, biathlon, snow-tubing, snowshoeing, snow rafting and mountain climbing in winter, it offers a wide range of opportunities for mountain tourism in summer such as trekking, climbing, mountain biking, parachuting, paragliding, horse riding, tobogganing (summer sledding) and kite surfing, creating an environment where you will experience excitement and pleasure together.

24 World Snowmobile Championship, the first major international event of the year - SNX Turkey was held in Erciyes Ski Center, one of the most important ski centers not only in Turkey but also in the world. The Snowcross World Championship, one of the most prestigious extreme sports organizations organized by the International Motorcycle Federation (FIM), was held in Erciyes for the first time in our country under the name of SNX Turkey by Kayseri Governorship, Kayseri Metropolitan Municipality and Kayseri Erciyes A.Ş. with the support of the Turkish Motorcycle Federation.

Erciyes Ski Center is already a candidate to become one of the world's leading tourism centers.



Within the scope of the project, Erciyes Ski Center has 200 kilometers of ski slopes in International Ski Federation (FIS) standards and with varying degrees of difficulty 36 kilometers of gondola, double and fixed speed cable car lines, summer and winter activity centers, daily social facilities for 5 thousand people, congress and culture centers, restaurants and cafes, football fields and training centers, health centers and hotels with a capacity of 6 thousand people.

After the Second World War, skiing, which has grown into a global tourism branch, has developed especially in Austria, Switzerland, France and Italy, and these countries have leading names of the world's winter sports centers. The advantages of Erciyes Ski Center, which has the

qualities to compete with its world-class counterparts, and its attractive points for athletes interested in this sport are as follows. First of all, the fact that it is located 25 kilometers from Kayseri city center and the airport is an important advantage. Especially in the Alps, it takes hours of road travel from the airport to reach the ski resorts, whereas a skier arriving in Kayseri by plane can strap on skis and start skiing freely on the slopes in Erciyes within half an hour. Another reason is that Erciyes has a network of facilities and ski slopes equivalent to the system in the Alps. A skier can enter Erciyes by road through four different gates in an area within a 20 kilometer arc and can reach the desired location by means of rope transport systems and pistes.



An aerial photograph of a large body of blue water. A long, narrow, brownish-orange line, representing an oil spill, stretches diagonally across the frame from the upper left towards the lower right. A thin, dark line, likely a boom, follows the edge of the spill, attempting to contain it. The water's surface shows small, repetitive ripples.

THE USE OF BOOMS IN OIL SPILL RESPONSE

Accidental spills of oil from ships or pipelines into lakes, rivers, streams and seas can cause serious marine and land pollution. Boom deployment is carried out in order to control the pollution and to collect the spillage with minimum damage to our seas and coasts. Collecting spilled oil is not as easy as it seems. The booms to be used must be suitable for the correct response to the ambient conditions and the boom deployment technique must be planned correctly. With the booms used in the spill recovery process, there are methods of capturing the oil, directing the spill to a more suitable collection area and protecting sensitive areas such as beaches, important water resources, historical and touristic areas.

What is a Boom, Purpose of Use, Types

What is a Boom?

Booms are materials used to contain, collect and control oil spilled into the sea/water, change the direction of oil flow on the water surface and direct it to the point of collection.

Booms Intended Use

There are 2 important purposes for using booms in spill response.

- Containment of oil spill
- Changing the direction of oil
- Protection

Boom Types

Fence Booms

The fence booms consists of a flexible PVC tarpaulin and floating flat foam to control spillage in oil spill containment operations in relatively safe and windless waters. The fence booms provides excellent performance and durability and is one of the most economically priced booms available.

Curtain Booms

The curtain booms is a lightweight and fast oil response boom ideal for response in harbors, rivers, inland waters and coastal waters where rapid response is required. The boom is made entirely of thermally welded PVC material with grab handles and anchoring points provided.

Inflatable booms suitable for use in a wide range of conditions from sheltered waters to offshore, ocean waves. Used especially on ships or jetties to ensure safe, fast and efficient collection of spillage. Inflatable booms have excellent resistance to sunlight, abrasion, seawater, puncture, wear and tear.

Shoreguardian Boom

It is a oil spill response boom for shallow water environments making it suitable for shorelines, marshy coastal areas and beaches. The shoreguardian boom is useful in areas subject to tidal surges. The two parts at the bottom of the boom are filled with water and the upper part with air.



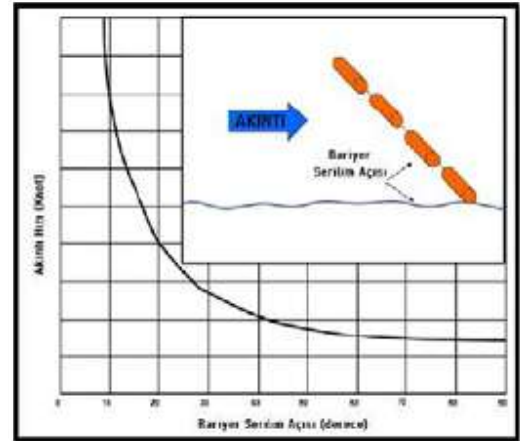
Boom Deployment Techniques

Before starting the response, the right strategy for collecting the spill needs to be determined. Correct and effective response is directly proportional to the choice of boom type. When selecting the boom, the area of response, weather/sea conditions and the deployment technique should be taken into consideration.

Boom Angle of Deployment

After determining the appropriate boom for the response, the area where the oil will be collected and the boom angle of deployment should be adjusted. While determining the boom angle of deployment, the current speed should be taken into account. As the current velocity increases, the boom angle of deployment should be reduced.

Current velocity m/s	Boom angle of deployment (degree)
0.35	90
0.4	61
0.5	44
0.6	36
0.7	30
0.8	26
1.0	20
2.0	10



Boom Deployment Methods

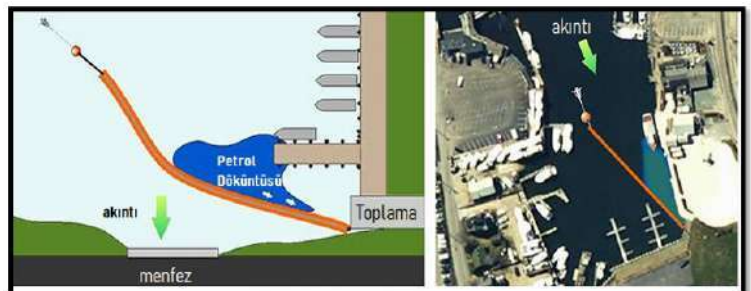
Containment/Collection Method

A deployment technique in which the oil layer floating on the water is encircled to increase its thickness in order to prevent the oil from spreading on the water surface and to facilitate collection aimed at preventing oil spillage. Available in U, V and J configurations.



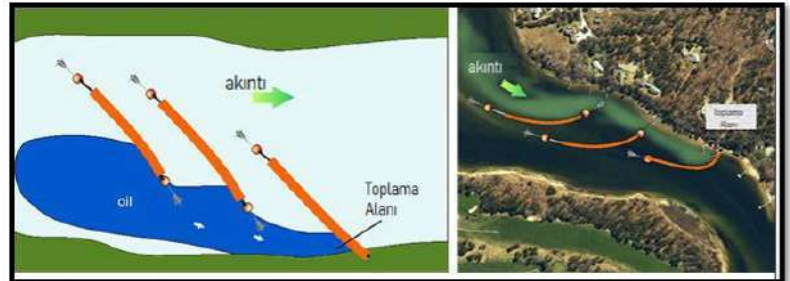
Diversion Method:

It is the process of diverting the oil to a less sensitive location or to an area where collection will take place. The diversion technique is used to gradually divert oil to shore with a single boom or several booms when normal boom deployment is not possible due to high current velocity.



a- Cascade Diversion Technique

The cascade boom configuration can be used to divert, deflect or move the spill. Several booms can be laid in this configuration when a single boom cannot be used due to fast currents or when it is necessary to leave openings in the boom for ship traffic. In a cascade boom deployment, the use of a short type of boom will be more effective and successful in waters with high currents.

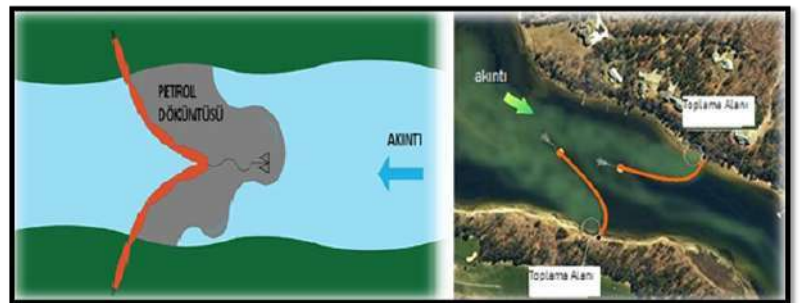


b- Open and Closed Chevron Technique

In areas with strong currents, a cascade chevron boom technique can be used to prevent, stop, divert or move a plume to a more suitable collection area.

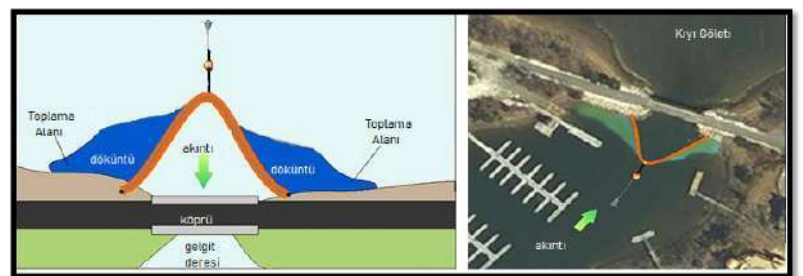
While the closed chevron technique is used to divide a spill to divert it to two or more collection sites, an open chevron can be used where boat traffic must be able to pass.

In the open chevron configuration, the two boom locations are separately anchored in the midstream and one anchoring point is upstream or downstream of the other.



Protection Method:

It is the diversion of oil away from economically / culturally / historically important or biologically sensitive areas such as port inlets, power plant cooling water intakes, aquaculture facilities or nature conservation areas. This technique is effective in low-flow areas. Freshwater outflow from a river or stream can help maintain the boom configuration and remove oil from the area within the boom.

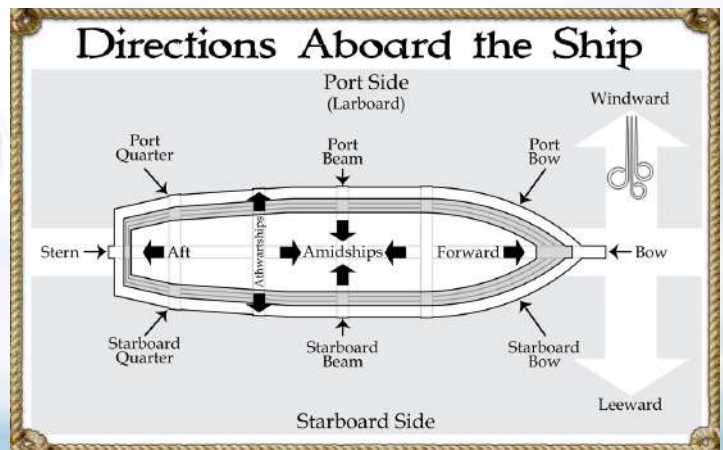


Maritime Port and Starboard Terms

Sailors use the terms starboard to describe the right side and port to describe the left side. So where did these terms come from?

If we think logically about why the terms 'starboard-port' are used and not 'right-left', it's because right and left change according to the point of view. When you turn your boat 'to the right', the viewer from the other ship sees it turning 'to the left'.

The terms left and right, which can cause confusion in mutual communication, are not used in a sensitive subject such as sailing in order to avoid misunderstanding. In sailing and water sports, starboard and port are the basic terms used to refer to the left and right sides of a ship or boat.



In English, starboard is said to have started to be used as 'steorbord' in the first century in England. In those days, the rudder blades were on the right side of the boat and shaped like oars. 'Steorbord', derived by combining the English word 'steer', which means to orientate and steer, and 'board', which means side, was used to mean the right side where the boat was steered. This rudder on the starboard side was also used as an oar, a driving force to help the boat maneuver while docking. The reason why the rudder was placed on the starboard-right side was because sailors were generally right-handed.



Because of this oar on the starboard side, boats were usually docked on the left side. The left side was the loading and unloading side of the boat. The left side of the boat was identified as 'laddeboard', derived from the English word 'lade' meaning 'to load, unload with a ladle'. However, in the course of time, it is said that the term 'larboard' was started to be used for the left side of the ships, taking into account the sound harmony with 'steorbord'. Since the boats always docked in the harbor from the left side, from the 16th century onwards, the term 'port' was used instead of 'larboard' for the side facing the harbor and the pier, where the personnel disembarked.

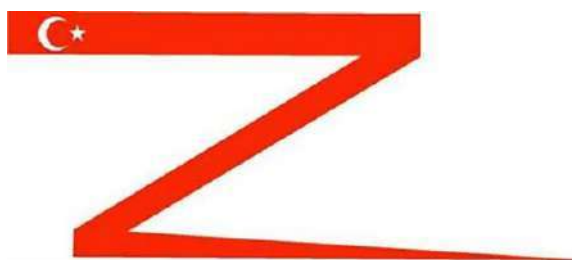
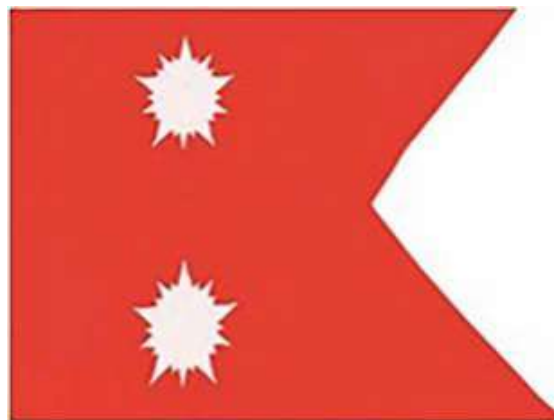


While the ship's crew was loading and unloading on the port side, the captain and the first mate would stand on the starboard side and manage the work. In time, after the steering wheels were moved to the center line of the hull instead of the right side, the term steerboard was changed and the name "starboard officer" was used to mean the place where the captain and ranking persons were located on the right side.



The origin of the use of red color on the port side dates back to Viking ships. In Viking ships, the shields placed on the left side of the ship during battle were usually painted red, and it is said that the term "red side" started to be used to refer to the left side of the ship.

The introduction of the word starboard into Turkish can be done in two ways. First, the English expression 'starboard' can be directly translated into Turkish as 'sancak'. In other words, the right side of the boat is the starboard side of the admirals who carry stars on their shoulders, the starboard side of the officers and the commander. It belongs only to the flag officers and the captain-commander of the ship. Currently, ships in the Turkish Navy use a long and thin flag or pennant (sancak) with a Turkish flag motif to identify the ship's commander, and other than that, pennant for the group commander, commodore or fleet commander, if they are on board. On ships, the vehicles of the ship's commander and the officials who have pennants are docked on the starboard side and these people get on and off from the starboard side. This pier, called the starboard pier, is wider and more comfortable than the personnel pier. Pennant holders used this pier when they entered and left the ship and were greeted with a boatswain's pipe



The term 'iskele' may have been taken with the direct translation of the English word 'port' into Turkish. In military navies, the commander of the ship and the officers who own the pennants use the starboard side when coming and going to and from the ship, while the ship's personnel have to use a simple pier and stairway on the left side, which is not as comfortable as the starboard stairway. As a result of these approaches, the left side is called 'iskele (port)' and the right side is simply 'sancak (starboard)'.

The practice mentioned here does not only apply to the ship's boardwalks and piers, but many things on the starboard side of the ship belong to the commander or the flag officer. For example, there are two seats in the wheelhouse on the bridge. The starboard seat always belongs to the commander or the officer in command, and the port seat belongs to the watch commander. The commander's seat cannot be occupied without permission, except by the commander and the officer in command



In summary, the terms 'right-left' are not used to avoid any confusion on board ships, as they vary according to the view and posture, and are replaced by the terms 'starboard-larboard', meaning the right and left of the ship. These terms make it easier for seafarers to navigate, communicate commands and communicate with other ships.

STORY



Burçak AVŞAR

Kars Base Supervisor

Born in Kars in 1984, Burçak Avşar graduated from METU Chemical Engineering Department in 2008. She worked as a Production and Quality Engineer at Kars Çimentoş Cement Factory, as a manager in many positions in BTC Oil Pipeline Project and has international OPRC, HNS trainer certificates. She also manages the integrated management system of our company.

Avşar, who has been working in BTC Oil Pipeline Project since 2009, has successfully completed her 15th year in the project and has successfully managed numerous exercises and operations during this period. She started his duty as HSE Supervisor and is currently working as Kars Base Supervisor and Management Representative in our company. Ms. Avşar is a graduate student at Kafkas University Institute of Science and Technology, Department of Interdisciplinary Occupational Health and Safety and is fluent in English. She also holds a Class A occupational safety specialist certificate. She is an exemplary manager who has developed herself in terms of solution-oriented, quick action, perseverance, work discipline and ethics.

NRC

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