

Committee: Disarmament and International Security Committee (GA 1)

Issue: Eradicating the use of sea mines

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INTRODUCTION

“A mine is a terrible thing that waits and waits and waits and waits.” Over the past century, countries have been seeking ways to ensure their people’s safety from wars and attacks that have been terrorizing the international community. To begin with, it is a terrifying reality that sea mines fill an important role in naval warfare and since World War I up until today, sea mines pose a great threat to international shipping. Nowadays, mines are employed as offensive or defensive mechanisms in rivers, lakes, seas etc., but on the other hand, they can be used as a tool of psychological warfare. Naval mines have been long recognized as a relatively inexpensive weapon but one with significant tactical, operational and strategic value. In the past, older models of sea mines were used in wars but did not possess a “switch off” button like they have today. Global proliferation of sea mines has continued to grow and poses a great threat to maritime security. It is a fact that during World War II more than 500,000 sea mines were laid in the ocean and it is difficult to know exactly how many sea mines are still placed there. The major countries involved managed to remove some of them, but even so, numerous mines still litter huge areas of naval activity.

Today mines are becoming more complex and stealthy in order to meet the challenges and missions they are set to perform. But these missions are so broad and challenging that none of them can perform all the missions and purposes. Sea mines, throughout the years, have grown in complexity due to the intelligence in their firing systems, but on the contrary they have become simpler in other ways. Moreover, mines are considered to have more advantages in comparison to other means of warfare. For example, mines can make ships take longer routes than usually, mines are able to attack targets (ships, submarines etc.) that humans cannot hear or see and mines wait in line without attacking the enemy first, but wait for the enemy to attack in order for the mine to respond by retaliating to the threat. Last but not least, international law requires nations to declare when they mine an area so as to make it easier and not dangerous for civil shipping to avoid the placed sea mines. Therefore, during this years' CGSMUN conference, the delegates of

the Disarmament and International Committee, are called upon to debate and create a resolution, aiming to eradicate the use of the dangerous sea mines everywhere, thus eliminating the attacks and often the wars that can be caused by hostile sea mines.



'An Avenger-class minesweeper at work'

Freedberg, Sydney J. "From Sailors To Robots: A Revolution In Clearing Mines." *Breaking Defense*. Apr. 2015.

<http://breakingdefense.com/2015/04/from-sailors-to-robots-a-revolution-in-clearing-mines/>

DEFINITION OF KEY TERMS

Sea mines (Naval mines)

"A sea or naval mine is a self-contained explosive device placed in water to damage or destroy surface ships or submarines. Unlike depth charges, mines are deposited and left to wait until they are triggered by the approach of, or contact with, an enemy vessel. Naval mines can be used offensively—to hamper enemy shipping movements or lock vessels into a harbor; or defensively—to protect friendly vessels and create "safe" zones."¹

The Hague convention VIII of 1907

The Hague Convention VIII of 1907 is the Convention relative to the Laying of Automatic Submarine Contact Mines. "It aimed at regulating a weapon that seriously threatened both major surface warships and merchant ships, namely the naval mine. It was a response to the then available technology, principally mines triggered by direct contact with the hull of a ship. The Convention governs a weapon still in broad circulation and still a significant asymmetric threat to all maritime forces, including blue water navies."² However, the Convention is currently obsolete since then mine technology has advanced. On the other hand, it has been only partially updated by the San Remo Manual.

¹ "Naval Mine." Wikipedia. N.p., n.d. Web. 22 July 2015. <https://en.wikipedia.org/wiki/Naval_mine>.

² Haines, Steven. "1907 Hague Convention VIII Relative to the Laying of Automatic Submarine Contact Mines." *Stockton Center for the Study of International Law* 90 (2014): 411-45. Web. <<https://www.usnwc.edu/getattachment/518f81a2-3b1c-4b29-a01f-926df3351935/1907-Hague-Convention-VIII-Relative-to-the-Laying-.aspx>>.

The San Remo Manual

"The San Remo Manual was prepared during the period 1988-1994 by a group of legal and naval experts participating in their personal capacity in a series of Round Tables convened by the International Institute of Humanitarian Law. The purpose of the Manual is to provide a contemporary restatement of international law applicable to armed conflicts at sea."³

Naval mines can be categorized into three major groups; remotely controlled mines, influence and contact mines and their sub-categories.

Remotely controlled mines

"Controlled mines (or command detonation mines) can be in place in peacetime, which is a huge advantage in blocking important shipping routes. The mines can usually be turned into "normal" mines with a switch (which prevents the enemy from simply capturing the controlling station and deactivating the mines), detonated on a signal or be allowed to detonate on their own."⁴

Influence mines

"These mines are triggered by the influence of a ship or submarine. Such mines incorporate electronic sensors designed to detect the presence of a vessel and detonate when it comes within the blast range of the warhead."⁵

Moored mines

"The moored mine is the backbone of modern mine systems. They are deployed where water is too deep for bottom mines. They can use several kinds of instruments to detect an enemy, usually a combination of acoustic, magnetic and pressure sensors, or more sophisticated optical shadows or electro potential sensors"⁶

Bottom mines

"Bottom mines are used when the water is no more than 60 meters (200 feet) deep or when mining for submarines down to around 200 meters (660 feet). They are much harder to detect and sweep, and can carry a much larger warhead than a moored mine.

³ "San Remo Manual on International Law Applicable to Armed Conflicts at Sea, 12 June 1994." Treaties and States Parties to Such Treaties. International Committee of the Red Cross, n.d. Web. <<https://www.icrc.org/ihl/INTRO/560?OpenDocument>>.

⁴ "Naval Mine." Wikipedia. N.p., n.d. Web. 22 July 2015. <https://en.wikipedia.org/wiki/Naval_mine>.

⁵ "Naval Mine". *op. cit.*

⁶ "Naval Mine". *op. cit.*

Bottom mines commonly utilize multiple types of sensors, which are less sensitive to sweeping.”⁷

Contact mines

“Contact mines need to be touched by the target before they detonate, limiting the damage to the direct effects of the explosion and usually affecting only the vessel that triggers them.”⁸

BACKGROUND INFORMATION

Mine History

Sea mines were probably first used during the siege of Antwerp in 1584–85, but it took almost another two hundred years for any serious development in this kind of weaponry. China was actually the first country that used underwater explosives. After the Chinese discovered that the explosives underwater performed the same as they did outside the water they decided to place charges under enemy riverboats to destroy them. As a result the idea of sea mining was connected firstly with underwater explosions. The very first contemporary sea mine in today’s definition was invented by the American David Bushnell in 1776. His mine was a simple, watertight wooden keg. The mine was loaded with gunpowder and fitted with a gunlock and hammer and it hung from a float. At that time this kind of mine was called a torpedo. This device exploded as a consequence of the keg floating against a ship. Several accidents have proved the mines’ destructive force, because they were considered to be too tricky and of great danger but also difficult to handle.

World War I & II

The two World Wars have witnessed the most widespread maritime operations in world history, but even today naval mines laid during the wars pose a significant threat to civilian and international shipping. The mine counter-measure systems (MCM) and the autonomous or remote controlled vessels are evolving rapidly and seek to destroy sea mines and provide a safe path. To begin with, during the Second World War the underwater-boat (U-boat) fleet dominated in the battle of the Atlantic. German submarines operated in World War II in the Mediterranean Sea, in the Caribbean and also along the U.S. coast. To protect the British Isles from the German U-boats, governments launched one of the most

⁷ “Naval Mine”. *op. cit.*

⁸ North Atlantic Treaty Organisation. "Naval Mines and Counter Measures." N.p., n.d. Web. <http://www.bluebird-electric.net/submarines/naval_mines_mine_countermeasures_hunting_sweeping_destroyer_neutralization_counter_measures.htm>.

extensive naval mine laying operations. An important fact about World War II is that most of the nations that used sea mines during the war had created mines that were able to be dropped from aircrafts and then float on the surface. As a result it was possible to lay them in enemy harbors.

Korean War

During the Korean War, the North Koreans mined the Wonson Harbor with more than 3,000 Russian mines. The mine warfare in the Korean War was a shocking event to the U.S Navy. The United States aimed to protect South Korea and did not focus completely on defeating North Korea so as to avoid a third World War. As a result the Navy of North Korea adopted a well-adjusted approach to mine warfare in the 1950's, which it used to isolate the South.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

Unites States of America

The United States has extensively used naval mines the past century, namely during both World Wars. It is a fact that during World War I the United States had done very little to advance naval warfare. The use of naval mines was abandoned during the Cold War period and re-entered the scene during the opening days of Operation Desert Strom. Because the nature of today's conflicts is local, the use of sea mines is restricted. Nowadays, due to the fact that sea mines are even more dangerous than they were in all human history, the United States have found a new way to address the real threat of mines. They will replace the fleet of 14 minesweepers in the following 15 years with multifunction vessels. Generally for the United States, the interest in mine warfare is actually historical and has followed a pattern of peaks and valleys.

The Russian Federation

The Russian Federation is considered to be one of the greatest maritime powers that play a significant role in the naval world but has also played a major part during both World Wars. The past decades the issue of naval mines was of minor importance for the Russian Navy, whereas other countries have long understood the significance of the issue. Recently the Russian Navy has put more weight on the issue of mine warfare. It must be noted that Russia is the country that invented the standard modern mine and still has the world's largest arsenal of naval mines.

China

Nowadays China is also one of the greatest maritime powers in the whole world but also an international threat to other countries. China has been taking naval mines serious since the 1900's and that is the reason why China is considered to be the clear-up and comer in the international mine warfare game. China reportedly possesses between 50,000 and 100,000 mines of over 30 varieties. A recent focus on rocket-rising mine-development indicates for China *"a new understanding of the art of sea mine warfare [whereby] it is essential to implement effective sea mine warfare over a vast range of deep sea areas [and to] develop and equip rocket sea mines capable of mobile attack."* Furthermore, China is building a modern and powerful Navy with which China is focusing on operations not only in the country's near sea regions but also beyond the country's sea borders. This naval modernization has started since the 1990's and the design work on their newer ships started in the 1980's. Lastly, some observers have the opinion that China's military and navy modernization effort has been strengthened by the U.S. operations against Iraq in Operation Desert Strom in 1991. Lastly, China has reportedly stated that the country is prepared to deploy 80,000 sea mines during any future and potential conflict, in order to claim control of the seas.

Iran

It is a fact that if intense confrontation and conflict between other nations and Iran continues to exist in the upcoming years it is believed that Iran will attack with thousands of fatal sea mines in order to try to halt oil tanker traffic as well as take out American warships. Moreover, Iran's naval forces as well as the country itself have been influenced and as a result changed by the Islamic Revolution, the controversial relations with the international community etc. From the above-mentioned factors the country has been influenced in the field of naval forces and how to equip them and organize them. Iran has two naval forces: the Islamic Republic of Iran Navy (IRIN), and the Islamic Revolutionary Guard Corps Navy (IRGCN).

NATO (North Atlantic Treaty Organization)

The North Atlantic Treaty Organization is an intergovernmental military alliance based on the North Atlantic Treaty which was signed on 4th April 1949. The organization constitutes a system of collective defense, while its member states agree to mutual defense in response to an attack by any external party. Since the end of the Cold War, NATO countries have embarked on transformation initiatives within their militaries to address the

new security realities of the 21st century. The reality is that sea mines are of great danger and NATO is one of the few organizations that can actually help to decrease the use of those sea mines because their proliferation is of vital importance to NATO. It is obvious that the organization will continue take a major part in this topic and intervene when it sees fit so as to maintain along with the nations international peace and security.

International Maritime Organization (IMO)

The International Maritime Organization known as the Inter-Governmental Maritime Consultative Organization was formatted in 1959 but it was established in Geneva in 1949. The International Maritime Organization is a specialized agency of the United Nations with 171 Member States and 3 Associate Members. The IMO was created to accomplish the regulation and achieve the protection and safety of international or civilian etc. shipping into an international framework. The organization's main responsibility is in this framework to include safety, environmental concerns, technical co-operation, legal matters, efficiency of shipping and maritime security. Lastly, in order to become a member of the International Maritime Organization a country has to ratify a multilateral treaty, the Convention on the International Maritime Organization. The first country that ratified the convention was United Kingdom and the most recent member is Zambia. Of the UN member states the ones that are not members are Afghanistan, Andorra, Armenia, Belarus, Bhutan, Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Kyrgyzstan, Laos, Lesotho, Liechtenstein, Mali, Federated States of Micronesia, Nauru, Niger, Rwanda, South Sudan, Swaziland, Tajikistan, and Uzbekistan.

TIMELINE OF EVENTS

Date	Description of Event
9 June 1855	The very first successful mining in history.
Crimean War (1853-1856)	In the Gulf of Finland more than 1500 naval mines were laid by Russian sea mines specialists.
1862	In 1862 the first ship by a mine was sank and it was the USS Cairo in the Yahoo River in Mississippi.
1904-1905	Major use of sea mines during the Russo-Japanese War
1907	Several nations in the Hague Peace Conference attempted to have mines banned as weapons, with no total success.
June 1918	About 70,000-72,000 mines were laid spanning the northern exits to the North Sea.
1959	Formation of the International Maritime Organization. The IMO is the United Nations' specialized agency responsible for improving maritime safety and preventing pollution from ships.
1984	Magnetic sea mines destroyed 19 ships in the Red Sea, alleging that Libya could be responsible for this minelaying. Countries such as United States, France and Britain and three other nations responded by launching one of the largest minesweeping operations, Operation Intense Look, in the Red Sea that involved more than 46 ships.
1988	In United Arab Emirates, Dubai an Iranian M-08 mine forced a US navy ship to seek temporary repairs because it made a 8m hole in the hull of the frigate USS Samuel B. Roberts.
18 September 1997	Mine Ban Treaty: "The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, commonly referred to as the Mine Ban Treaty, was adopted on 18 September 1997 and entered into force on 1 March 1999".

UN INVOLVEMENT: RELEVANT RESOLUTIONS, TREATIES AND EVENTS

- [1907 Convention relative to the Laying of Automatic Submarine Contact Mines](#)
- [People's Liberation Army Navy \(PLAN\)](#)
- [Mine Ban Treaty](#)
- [The United Nations Convention on the Law of the Seas \(UNCLOS\)](#)
- [United Nations Mine Action Service \(UNMAS\)](#)
- [Convention on the International Maritime Organization](#)
- [United Nations General Assembly Resolution A/RES/62/99](#)
<http://www.mineaction.org/sites/default/files/documents/Assistance%20in%20Mine%20Action%20-%20A.RES_.62.99%20-%20English.pdf>
 - From 10 January 2008, Sixty-second session, Agenda item 29
 - Resolution adopted by the General Assembly on 17 December 2007 62/99. Assistance in mine action
- [United Nations General Assembly Resolution A/RES/64/84](#)
<http://www.mineaction.org/sites/default/files/documents/Assistance%20in%20Mine%20Action%20-%20A.RES_.64.84%20-%20English_0.pdf>
 - From 13 January 2010, Sixty-fourth session, Agenda item 28
 - Resolution adopted by the General Assembly on 10 December 2009 64/84. Assistance in mine action

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

The most attempts to solve the issue that have been undertaken in the past century have been minesweeping operations, treaties and conventions. To begin with, the Hague Convention VIII Relative to the Laying of Automatic Submarine Contact Mines was the first step towards the right direction so as to regulate the use of sea mines. The question of sea mines was actually first suggested to the US Secretary of State by a French representative in August 1906. One important fact about the outlook of this discussion on sea mines was that the next year the Hague Peace Conference would take place in order to help in the best way possible. The Russo-Japanese War caught the attention of the European powers and with

this war the opportunity came to notice this new type of weapon and its danger. The Conference actually managed with great success to place restrictions on a specific type of mine, on the automatic contact mines. In 1994 the San Remo Manual on the International Law Applicable to Armed Conflicts at Sea is the most recent document as a solution for the eradication of the use of sea mines worldwide.

POSSIBLE SOLUTIONS

Proposing and implementing solutions in such a challenging and important issue is of great difficulty and the solutions must be effective. The solutions that can be implemented on sea mines are not similar with other international problems. Moreover, the fact that conventions but also treaties concerning sea mines have not managed to eradicate their use indicates the uniqueness of the issue and that stricter measures must be taken into consideration so that all Member States understand the significant situation.

To begin with, as far as the Mine Ban Treaty is concerned the already ratified members of the Treaty have produced obstacles because they cannot meet their deadlines. The Treaty sets strong and difficult goals that must be accomplished in order for some state to be a member of the treaty. Some countries are more effective and other less or not effective in achieving their goals. Secondly, all the treaties, documents and more generally all the efforts concerning the issue should make Member States understand on a first stage the importance of the situation and if they centralize the actions they need more transparency so that awareness will be allowed and improved. Better cooperation between NGO's and international organizations should be encouraged. The United Nations Mine Action Service (UNMAS) is of great importance because it is probably the only body that can actually coordinate all the efforts around the sea mines.

FURTHER READING

http://oceanlink.info/ocean_matters/undersea_mining.html

<https://www.icrc.org/eng/resources/documents/article/other/57jmst.htm>

<http://fas.org/man/dod-101/sys/ship/weaps/mines.htm>

<https://www.usnwc.edu/getattachment/518f81a2-3b1c-4b29-a01f-926df3351935/1907-Hague-Convention-VIII-Relative-to-the-Laying-.aspx>

<https://www.usnwc.edu/getattachment/2532931a-d351-4663-a96f-22cb5173c5c4/Chatham-House-Workshop-Summary--International-Law-.aspx>

http://www.navy.mil/navydata/cno/n87/usw/issue_33/china.html

<http://www.imo.org/en/Pages/Default.aspx>

<https://www.isa.org.jm/authority>

VIDEOS

<https://www.youtube.com/watch?v=jo5aLDsfoaw>

<https://www.youtube.com/watch?v=27la83p6rA4>

<https://www.youtube.com/watch?v=qDMUekfOR-E>

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