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Primary Research Material and Illustrations from U-Boat.Net Web Site*

*"The only thing that ever really frightened me during the war was the U-Boat peril"
Winston Churchill*

The Battle of the Atlantic was the longest battle of World War II, extending from the very first day of the war and continuing to the final surrender of Nazi Germany.

It was an enormous struggle for survival between the ships and aircraft of the Allied navies, air forces and merchant marines against the determined, and skilled *unterseebooten* (U-Boats) of the *Kriegsmarine*.

Variants of 8 Types of U-Boat were built during the war. First launched in June 1936, the Type VII was the most successful of the war and formed the backbone of the U-boat force. Like many other military designs, the original Type VII was quickly modified to provide longer range, better performance and revised armament. These additional variants resulted in an improved torpedo attack boat (VII-C), minelayer (VII-D), supply boat (VII-F) and other types such as Flak and repair boats. A total of 709 Type VII U-boats of all variants were built during the war – this was more than any other submarine built by any other nation. There were seven main variants, Type VIIA, VIIB, VIIC, VIIC/41, VIIC/42, VIID and VIIF.



Type VII-C U-Boat

In the early days of the war, the U-Boats held an advantage despite relatively small numbers due to the element of surprise, poor Allied technology and techniques, and

limited numbers of Allied escort vessels. The results were predictable and frightening as vast tonnages of Allied shipping fell prey to the U-Boats and the survival of Britain was threatened.

The **Wolf Pack** or "*Rudeltaktik*" as the Germans called it was made famous by Karl Donitz and was to have a devastating impact on allied shipping. The wolf pack tactic was devised to defeat the convoy system. The idea was to form a pack of U-boats, and to delay an attack until all boats were in position to conduct a massed organized attack. This would overwhelm the escorts as the sheer number and surprise of the attacking boats would throw the defense into disarray.

Things only started to change for the Allies after the United States entered the war and only then after it had established itself as an active participant in the battle. Indeed, the early days of America's entry into the war (called the "Happy Time" by the U-Boats), saw the highest losses of Allied shipping to U-Boat attacks.

The ability of the U-Boats to operate effectively in the Western Atlantic was aided by the development of the Type XIV, *Milchkühe* or "Milk Cow" re-supply submarine. They had no torpedo tubes or deck guns, only anti-aircraft guns. Due to its large size, the Type XIV could re-supply other boats with 400 tons of fuel, four torpedoes, and fresh food that was preserved in refrigerator units. In addition, the boats were equipped with bakeries to provide the luxury of fresh bread for crews being re-supplied.

The milk cows were of a priority target for



Type XIV

all Allied forces, and improved radar and air coverage eliminated most of them during 1943. Milk cow duty was especially hazardous - 289 sailors were killed out of an estimated complement of 530-576 men.

The tide in the U-Boat campaign finally turned as increased numbers of escort vessels equipped with improved detection equipment (Sonar) and weapons systems entered the fray along with the advent of Escort Carriers with their aircraft that filled the gap caused by the range limitations of shore-based aircraft.

These numerical increases were complemented by innovative tactics and closer cooperation between the allied navies and air forces so that by the latter years of the war, the U-Boats were continually on the defensive – attacked at sea and from the air as they were leaving port, throughout their patrols, and on return to port in an unrelenting campaign. The film, *Das Boot*, is a remarkably realistic portrayal of the U-Boat war and the conditions in which the German submariners served.

With only a few notable exceptions, the German U-Boats fought valiantly and with great skill and proved a daunting challenge for the hard-pressed Allies. They suffered terrible casualties – the highest casualty rate of any military force in the war – but kept coming back in an attempt to turn the tide.

Of 1,162 U-Boats built during the war, 751 were lost. 30,003 U-Boat sailors lost their lives at sea – a 75% loss rate that does not include those injured or permanently affected by their horrific experiences. Many U-Boat sailors had several boats sunk under them, only to go back to sea again until the law of averages caught up to them.

It is interesting to note the technological advances that were introduced into German U-Boats during World War II, many of which are still standard in modern submarines – the snorkel, anechoic coating, advanced hull design, etc. Fortunately, they came into operational use too late to turn the tide of battle back into the Germans' favour.

3,306 Allied Merchant Vessels and warships were sunk or damaged by German U-Boats during World War II. The following are a number of interesting facts associated with the U-Boat war.

- Canadian ships and aircraft participated in the sinking of 49 U-Boats.
- 17 Canadian warships were sunk by U-Boats.

- The most successful U-Boat commander was Otto Kretschmer who sank or damaged 51 Allied ships totalling 310,247 Gross Registered Tonnes.



Otto Kretschmer was captured when his U-Boat, U-99 was sunk by HMS *Vanoc* and *Walker*. He spent the rest of the war in a POW Camp in Bowmanville, Ontario. After the war he rose to the rank of Admiral in the West German Bundesmarine. He died as the result of an accident in 1998.

- The U-Boat force received a major setback when three of its top aces: Kretschmer, Prien and Schepke were all captured or killed in a ten day span in March 1941.
- U-507 sank the SS *Laconia* carrying 1500 Italian POWs. When she surfaced to assist in picking up survivors she was fired upon by Allied aircraft. This led to the "Laconia Order" forbidding U-Boats to stop to pick up survivors. There are only four recorded cases of U-Boat commanders committing atrocities against the survivors of sunken allied ships.
- U-537 landed the weather station in Martin Bay, Labrador that can be seen in the Lebreton Gallery.
- U-570 was captured by the British after sustained bombing and re-commissioned into the Royal Navy as HMS/M *Graph*, thereby becoming the only U-Boat to fight on both sides during the war.
- U-864 was sunk while submerged by a torpedo fired from the submerged Royal Navy submarine HMS/M *Venturer* – the only recorded instance of a submerged submarine being sunk by another submerged submarine.
- U-Boats fell prey to a wide spectrum of mishaps, but perhaps none was more tragic than U-1206 that sank due to a toilet malfunction.
- Rumours persist that U-977 transported senior Nazi leaders and gold to Argentina at the end of the war.
- The film, "Das Boot" is based on the exploits of U-96, and the capture of U-110 and its Enigma machine provides the basis for the film "U-571".
- In addition to the North Atlantic, U-Boats operated in every other maritime theatre of operations. The sinking of the

Mexican ship *Faja de Oro* by U-106 precipitated Mexico's entry into the war.

- U-196 conducted the longest patrol of the war of 225 days at sea; and, U-978 spent 68 days submerged, the longest submerged patrol of the war.



The U-Boat Memorial, Moltenort

**For more information on
German U-Boats during WW II
see
The U-Boat War 1939 - 1945
Research Paper (Number 4)**