

Turtle Ship “Gobuksun”

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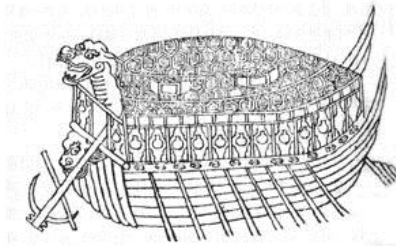
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Gobuksun was the world’s first unconventional (iron-clad) wooden war ship invented by the military genius Admiral Yi Sun-Sin of the Chosun Dynasty in 16th century Korea. Yi Sun-Sin used these Gobuksun war ships in his naval battles against the Japanese invaders during the 7-years long Imjin War and proved the ships’ unrivaled destructive capabilities through decisive and undefeated victories over the enemy fleets.

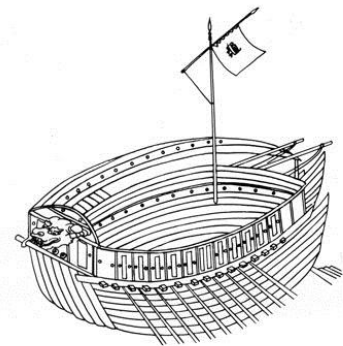


Juasuyoung Gobuksun

cannon to shoot from. There were six cannons each on the port and starboard sides, two on the shoulder walls, and one on the stern.

The Gobuksun was propelled by oars; each ship had eight large oars on either side and each oar was pulled by a team of five sailors: four oarsmen and one leader. When the ship was not engaged in battle, only two oarsmen were needed to row each oar. However, when the ship was under battle maneuvers, the entire team of five oarsmen worked together for maximum power and agility. The Gobuksun needed roughly 90 oarsmen in total for optimal operations. Additionally, the Gobuksun could have two masts on its back for sails. One sail was for the forward wind and the other sail was for the parallel, or adverse wind.

Gobuksun’s outer shell structure was the same as a flat-bottom Panoksun war ship, but it was additionally covered with a turtle shell-shaped (some insist ‘iron-clad’) dome heavily studded with sharp spear tips facing upward. This design was intended to deter enemy landings and fire attacks, which was a common method of destroying ships at that time. Each Gobuksun was armed with approximately 15 cannons on wooden carts; there was an opening in the armor for each



Tongjeyoung Gobuksun

The Gobuksun had two decks, a bottom deck and an upper deck. The section under the upper deck housed the oarsmen safely from enemy fire and arrows. In the chamber on the upper deck, a crew of approximately 50 sailors worked under the protection of the turtle shell-shaped



**Reduced size exhibition sample
at Hyunchoongsa Shrine**

dome, including the captain, his aides, cannon crews, and archers. The crew used openings on the sides of the ship for the cannons, and slats designed as lookouts; the sailors could look out the slats but outsiders could not look in. Thus, the Japanese called this new, fearsome Gobuksun the “Blind Ship.” The Japanese were unable to devise a way to successfully battle this innovative war ship. Japan’s main artillery, the Jochong(Japanese muskets), was useless against the Gobuksun’s thick wooden walls or the (iron-clad) dome.

To enhance the fearsome impression of the Gobuksun, Yi Sun-Sin mounted a large dragon head on the bow of the ship in lieu of the standard ship bow. The dragon head had a large open mouth, from which billowed through a concealing smoke to impair the enemy’s visibility.

It is known that there were two prevailing variations of the Gobuksun, as can be seen in *The Book of Choongmugong Collections*. The first, more popular model, called the “Juasuyoung” model, had the dragon head stretched up like a fearsome monster. The other model, the “Tongjeyoung” model, had a much smaller dragon head with an open mouth that could be used to fire cannons from, much like the openings on the side of the ship.

As we can see from the old classic drawings of the Gobuksun above, they look somewhat awkward and unrealistic. This is due to the lack of accurate and proportional drawing techniques at that time. The life-sized model built by the Korea Naval Academy is one of the most realistic and accurate modern models in existence these days.



**Actual size reproduction
By Korea Naval Academy**

This revolutionary Gobuksun ship was a brilliant military innovation which saved Korea from its enemies and helped earn Yi Sun-Sin his reputation for ingenuity and creativity.

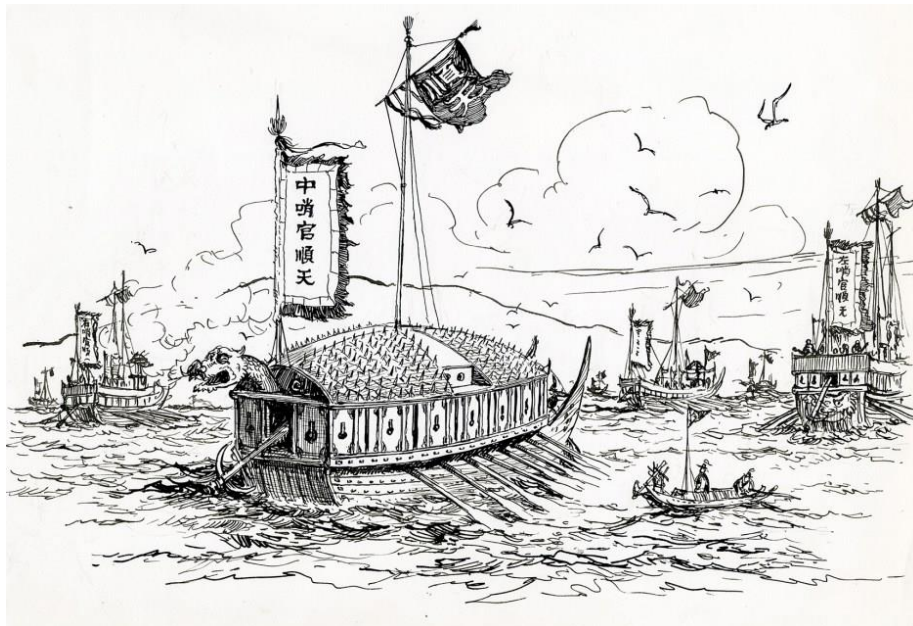
In April 2016, US Naval Institute News released the results of the survey conducted under the article “What is the greatest warship of all time and why?” More than 26,000 votes from nearly 900 readers were in and 7 ships were selected.

1. USS Constitution of the U.S. Navy, 1794, 304 feet(93 m) long. 3-masted wooden battleship with iron-clad hull.
2. Gobuksun Turtle Ship of Chosun Dynasty (Korea) 1591, 70-110 feet(21-34 m) long. Turtle shell shaped convex-covered wooden warship with a flat bottom.
3. USS Enterprise of the U.S. Navy, 1960, 1,122 feet(342 m) long. Nuclear powered aircraft carrier.

4. HMS Dreadnought of the UK Royal Navy, 1906, 525 feet(160 m) long. The only battleship to have a sunk on submarine.
5. USS Iowa of the U.S. Navy, 1943, 887 feet(270 m) long. Battleship that served in the Korean and Vietnam Wars.
6. USS Nautilus of the U.S. Navy, 1930, 371 feet(113 m) long. Nuclear powered submarine.
7. SMS Emden of Germany, 1916, 497 feet(151 m) long. A light cruiser.

USNI news reported that the Korean turtle ship Gobuksun received special recognition for her unique design of powerful psychological weapon of smoke-spewing dragon's head at the bow, virtually impenetrable structure and fast and maneuverable agility.

The ships played a decisive role in defeating the Japanese regent Toyotomi Hideyoshi's numerically-superior fleets during Japan's invasion of the Korean peninsula of the Imjin War which lasted for 7 years from 1592-1598.



< Courtesy- USNI News, April 6, 2016 >

When we compare the seven winners above, we can see that the Gobuksun is the smallest and the oldest of all, created nearly 2 centuries before the USS Constitution – the second oldest war ship.

Amazingly, the Gobuksun was the only impenetrable wooden marine tank on the water launched in the 16th century in Korea.

What a gem she was!