

### **Site of Kamegakubi Test-Firing Range**

The Kamegakubi Test-Firing Range sits at the easternmost tip of Kurahashi Island. During Japan's medieval period (1185–1568), the island was a notorious base of piracy, and when the Imperial Navy was looking for a place to establish a proving ground for weapons and artillery in 1895, they presumably chose this location for the same reasons the pirates did: its relative seclusion, dense vegetation, and surrounding mountains all made it easy to protect and conceal the activities that occurred there.

The testing and development that took place at Kamegakubi was top secret, and certain details, such as who used the facility and when it was built, are still unknown. The first written evidence of military facilities there dates to shortly after the First Sino-Japanese War (1894–1895). It is generally assumed that a testing site for torpedoes, as well as a test-firing range for artillery and other armaments, were added to this facility after the Russo-Japanese War (1904–1905). It is also documented that Crown Prince (and later Emperor) Hirohito (1901–1989) visited and inspected these installations in 1917.

During the naval arms race between Japan, the United States, and Great Britain in the years leading up to World War II, the Kamegakubi Test-Firing Range rapidly grew in size as numerous new facilities were added. Training exercises for manned torpedoes called *kaiten*, or “heaven shakers,” are known to have been conducted there, as well as experiments with poison gas. However, the primary role of the Kamegakubi Test-Firing Range was as a test site for armaments and ammunition produced by the Kure Naval Arsenal.

Kamegakubi is also known as the test site for the main and secondary artillery batteries of the two most powerfully armed battleships ever built, the *Yamato* and its sister ship the *Musashi*. The *Yamato*'s main battery comprised three turrets, each with three 46-centimeter guns, the largest ever mounted on a warship. The Navy transported these guns to Kamegakubi by boat. At the wharf, they were lifted with a 200-ton rail-mounted gantry crane that transported them to the testing site. There, the guns' penetrative power was tested against different thicknesses of steel armor plating, and their accuracy and muzzle velocity were measured by firing them through a pair of electric nets. In order to protect personnel during the testing, three thick concrete blast barriers were needed to contain the shock waves produced by the massive guns.

The testing facility was not a welcome neighbor to the residents of the island. Despite the

secrecy surrounding the development of the *Yamato*'s guns, the test firing could not be kept completely secret. The shock waves created by the artillery were reputedly so strong that they rattled the sliding paper doors in the homes of Ōhaku, a village located 1.5 kilometers away. The ongoing testing also placed an economic strain on the local population, who were prohibited from fishing in the waters around the island as a security measure. In 1924, the fishermen organized a petition against the testing site, but they were unable to reclaim the right to fish.

At the end of World War II's Pacific theater, when it became clear that Japan was going to be defeated, the Imperial Navy removed most of the documents from the Kamegakubi Test-Firing Range. Upon discovering the facility, the Allied Forces searched and ultimately destroyed large parts of it. Afterward, the local population, impoverished by the war, scavenged metal scrap and other remaining materials of value. Over the following decades, the testing site was abandoned and soon became overgrown by dense forest.

Nonetheless, some signs of the former test-firing range still remain on the island. These include the ruins of an exploded mess hall, a double-walled concrete bunker that once contained shock wave measuring equipment, a nearby monitoring facility, and the stone jetty that bore the rail-mounted crane. In 2006, the Kurahashi Tourism Volunteer Association, which currently maintains the site, built an empty tomb as a memorial to the individuals who lost their lives here in test-related explosions. In 2020, the national government designated the Kamegakubi Test-Firing Range a Japan Heritage Site.