

# SECRETS & SPIES RESEARCH DOSSIER

## **The Ku-Go Death Ray**

By Sera Sasahara and Momo Matsui - Sendai Sirayuri High School, Japan

During the Pacific War, the Imperial Navy of Japan attempted to use radio waves for the practical realization of energy weapons. The Ku-Go Death Ray was one such weapon, a horrible thing for attacking, killing or destroying people and objects by ray. In particular, it damages human bodies, airplanes and cars. The intention was to stop their function with a burst of strong energy. The arrival time was almost instantaneous.

The meaning of Ku-Go Death Ray in Japanese is the “Z weapon.” There were many types of Ku-Go Death Ray, for example, a ray to damage a person's eyesight, leading to decreased or impaired vision. Also, another ray would create a health hazard, such as cancer of the skin. And yet another was a nauseating ray that could precipitate suicide.



Artist's rendering of the use of Ku Go (Tanken)

Development of the Ku-Go Death Ray began with the desire to use radio waves and detection lasers indirectly on communication devices and directly as weapons for attack. At first, it was intended to radiate radio waves with a parabolic mirror and burn and destroy airplanes and vehicles. By the end of the war, Shimada City in Shizuoka Prefecture had a weapons research institute for developing such a murder weapon (Writerzlab). It was commonly known as the Z-laboratory.

At the laboratory, they had been researching how to generate powerful radio waves with a magnetron (magnetism) to cause damage to an enemy's airplane engine and other vehicles. At that time, the Japanese were increasingly also deprived of airspace, and it was said that this weapon would be to stop an airplane's engine and crash it with powerful electromagnetic waves.

At the end of World War II, a famous scientist from that time joined the Weapons Research Institute in Shimada City. It was renamed the Shimada Biology Laboratory. Later, famous Japanese scientists such as Shinichiro Asanaga, who won the Nobel Prize in Physics, and Hideki Yukawa gathered and worked there.

After the war ended, the surviving researchers created a new company, and the microwave research conducted at the laboratory was used in various fields of life and industry. The technology is now useful for household appliances such as microwave ovens, which are a staple of modern life.



Researchers posing in front of the Shimada Biology Laboratory, 1947?

When we first began researching the “Ku-Go Death Ray,” we thought it was gravely fantastic to kill or destroy something with a ray. And we wanted to investigate in detail. But now, as technology advances, we would like to do what we can to discover and block such destructive technologies in the future so that they will not be used in war and so people can live in peace.

## Works Cited

Tanken. (n.d.). *Satsujin kousen to reza heiki* [Death rays and laser weapons]. Retrieved from

<https://tanken.com/deathray.html>

Writerzlab. (August 7, 2018). *Satsujin kousen z! satsujin kousen no himitsu kichi –shimada*

*kenkyujo to ha?* [Death ray z! shimada research institute – secret base for death rays].

Retrieved from <https://writerzlab.com/satsujinkousen-z/>