## **TYK Wireless Telephone**

In the era when there was only a Morse code wireless telegraph, the world's first "wireless telephone" to send voices wirelessly was invented in 1912, and successfully completed the first telephone call test in Japan. This device was called the "TYK-type wireless telephone" and was the first wireless telephone to be put into practical use in the world, and in 1913 it was installed in Toba and Kamishima, etc. (A remote island about 14 km from Toba) in Mie Prefecture. After a successful call experiment, a public communication service using wireless telephones started in 1916, with more than 15,000 practical calls. Later, the TYK wireless telephone won a foreign patent and contributed to the introduction of Japanese technology overseas.

TYK: Initials of Inventors Uichi Torigata, Eitaro Yokoyama, and Masajiro Kitamura

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## Mt. Fuji Radar

This was the world's tallest radar at the time, installed at the top of Mt.Fuji at an altitude of 3,776 m to prevent typhoon damage in October 1964. The detection area was able to cover Honshu and Shikoku with a radius of 800 km, and it was also possible to detect typhoons over the Pacific Ocean. In 1977, the meteorological satellite "Himawari" was launched, enabling high-precision observations, and in November 1999, the Mt. Fuji radar became obsolete and ceased operation.

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## **MU** radar

The MU radar (Large radar for observation of the middle and upper atmosphere) using the two-dimensional active phased array antenna system constructed in 1984 is the largest atmospheric observation radar in Asia, and has been monitoring the middle and upper atmosphere and lower atmosphere for 3,000 to 4,000 hours per year for more than 10 years, accumulating valuable data. The MU radar enables continuous and flexible atmospheric observation, contributing to the development of radar technology as well as atmospheric science.

MU: Middle and Upper Atmosphere