

show #11 maps and orientation part 1

Information

Action with an anti-aircraft searchlight.

Background of the flak light (a military vehicle from 1974): the illumination of a date, namely the 19.12.1974.

On this day a satellite was launched from Cap Canaveral into orbit at that time. The special feature:

it was the first European intelligence satellite and the result of a historically significant Franco-German collaboration called 'Symphonie'.

Symphonie was the name of a Franco-German intelligence satellite project. The name can be translated as Gleichklang and was intended to express the absolutely equal cooperation between what was then West Germany and France.

Two satellites with this name were built. The satellites were stabilized with a swirl wheel and correction thrusters. Their main body was in the shape of a hexagonal prism, and their three deployable solar cell booms were each offset 120° from each other. The solar array booms were rigidly attached to the satellite and were therefore successively illuminated from both sides during one orbit of the Earth. They therefore carried solar cells on both sides.[1]

Each satellite has two parabolic antennas for transmitting data to a western and/or an eastern footprint and a smaller horn antenna for receiving data from the visible third of the earth. Each satellite had two transponders with 90 MHz bandwidth on board. The ground station could select by radio command which of the two parabolic antennas a transponder should transmit over (it was also possible to select both transponders one transmitting antenna).[2] They could each transmit one television program and 132 telephone channels. The Symphony satellites were the most technically advanced news satellites of their time.

They were originally planned to be launched on the failed Europar rocket. Eventually they were launched with two Delta 2914 rockets from Cape Canaveral. However, the U.S. government imposed a condition that the satellites would only be used for test purposes and not operationally, as it wanted to protect its own monopoly on news satellites. These unacceptable conditions for future satellites led to the development of Ariane 1.

Because of the restrictions imposed by the U.S. on commercial use, the satellites were used for educational television and humanitarian missions. These included, in particular, educational television in India and Africa, broadcasts for Deutsche Welle, Red Cross disaster relief operations, and United Nations peacekeeping missions.

The network of ground stations reached the number of over 50 stations worldwide in about 40 countries from Argentina to Africa, the Middle East and India to China.

Symphony 1 weighed 230 kg and was launched at 2:39 a.m. UTC on December 19, 1974, becoming the first Western European communications satellite to be placed in geostationary orbit by a Delta 2914 launch vehicle and positioned at 11.5° West. In 1977, Symphony 1 was moved to 49° East, where it remained for two years before returning to its former position.

Symphony 2 followed at 1:42 UTC on August 27, 1975, and was also stationed at 11.5° West, where it remained until it was decommissioned.

The satellites were designed to last 5 years; the actual mission duration achieved was exactly 10 years. Symphony 2 was deactivated by the DLR Space Operations Center (GSOC in Oberpfaffenhofen) on December 19, 1984, after it had been taken out of geostationary orbit by a de-orbiting maneuver.

Source: Wikipedia