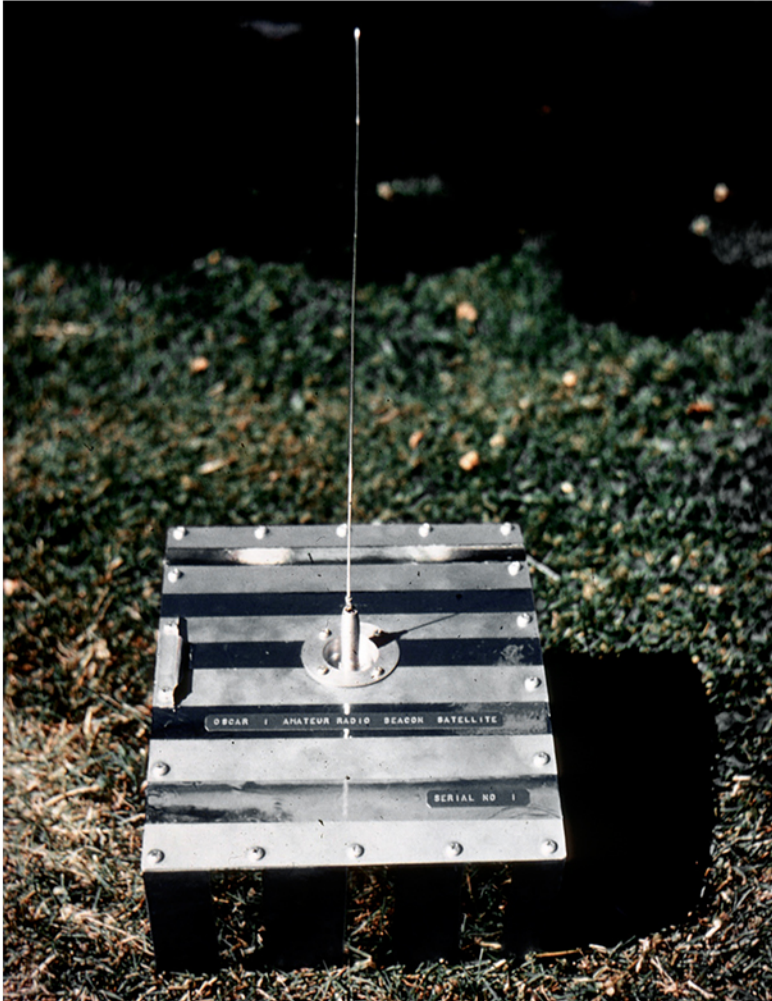


OSCAR-1 (Orbiting Satellite Carrying Amateur Radio)



OSCAR I (aka OSCAR 1) is the first amateur radio satellite launched by Project OSCAR into Low Earth Orbit. OSCAR I was launched December 12, 1961, by a Thor-DM21 Agena B launcher from Vandenberg Air Force Base, Lompoc, California. The satellite, a rectangular box (30 x 25 x 12 cm) weighing 10 kg., was launched as a secondary payload (ballast) for Corona 9029, also known as Discoverer 36, the eighth and final launch of a KH-3 satellite.

The satellite had a battery-powered 140 mW transmitter operating in the 2-meter band (144.983 MHz), employed a monopole transmitting antenna 60 cm long extended from the center of the convex surface, but had no attitude control system. Like Sputnik 1, Oscar 1 carried only a simple beacon. For three weeks it transmitted its Morse Code message "HI". To this day, many organizations identify their Morse-transmitting satellites with "HI", which also indicates laughter in amateur telegraphy.

OSCAR-1 lasted 22 days ceasing operation on January 3, 1962, and re-entered January 31, 1962.

The uniqueness of the OSCAR-1 spacecraft was not only that it was built by amateurs, only about four years after the launch of Sputnik-1, but that it was the world's first piggyback satellite and the world's first private non-government spacecraft.

Immediately following the launch of OSCAR-1, United States vice president, Lyndon B. Johnson, honored it with a congratulatory telegram to the group sponsoring this momentous event in the history of Amateur Radio. It read: "For me this project is symbolic of the type of freedom for which this country stands — freedom of enterprise and freedom of participation on the part of individuals throughout the world.

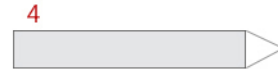
The original backup of OSCAR-1 has been restored and is fully operational, running off AC power. As of 2011 it is on display at ARRL HQ in Newington, Connecticut and continues to broadcast "HI" in Morse Code at 145 MHz.

Today, more than fifty years later, Project OSCAR's mission is "To initiate and support activities that promote the Satellite Amateur Radio Hobby". Project Oscar's primary goal is to reach out and provide logistical support, training and in some cases equipment to amateur radio associations, schools and the public at large.

2



Cut out the two blue circles



5



A square with side length 7.

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