

HawkEye 360 Launches Latest RF Collection Satellite Cluster

By Richard Scott

Space-based radio frequency (RF) data and analytics group HawkEye 360 (Herndon, VA) has successfully launched its latest satellite cluster into Low Earth Orbit. Cluster 11, comprising three multi-band RF collection satellites, was launched from Vandenberg Space Force Base, California, on Dec. 20 last year as part of the Bandwagon-2 rideshare mission with SpaceX. First contact was established the following day.

According to HawkEye 360, Cluster 11 features upgraded payloads that increase data collection capacity, expand bandwidth to enable lower frequency collection, and allow multi-band signal capture. High-speed downlink transmitters further improve data delivery rates, quadrupling the speed at which data is transmitted back to Earth.

Cluster 11 will operate in a mid-inclination orbit, enhancing HawkEye 360's ability to monitor and collect RF data in the high-demand equatorial region. It will follow Clusters 9 and 10 into service – both of which became operational during 2024 – and replace HawkEye 360's pioneering Pathfinder cluster following its retirement in December.

Launched in December 2018, the Pathfinder satellites served as HawkEye 360's proof-of-concept to demonstrate that a commercial operator could reliably capture and provide RF data (a capability hitherto restricted to the government and classified sectors). Initially designed for a two-year mission, the Pathfinder cluster far exceeded its life expectancy.

HawkEye 360 provides space-based RF signal collection and geolocation as a service for the defense, government and commercial sectors. The company long-term goal is to operate a

constellation of 60 satellites, divided into 20 clusters of three.