

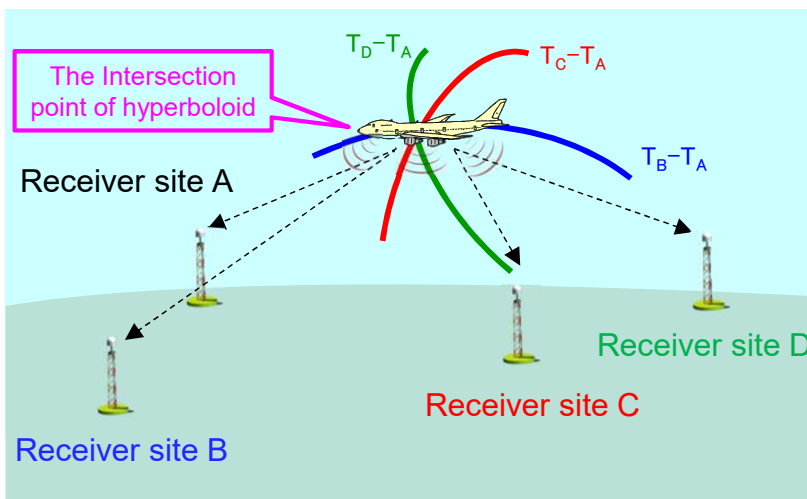
Wide Area Multilateration (WAM)

WAM (Wide Area Multilateration)

WAM utilizes a multilateration technology for airport surface surveillance and expands a coverage area. It flexibly enables to meet a surveillance requirement such as for airport or for en-route, by locations of receiver stations.

Principle

WAM is a monitoring system to display a calculated position of an aircraft by the difference between received reception times from an aircraft transponder at four or more receiving ground stations deployed in wide range.

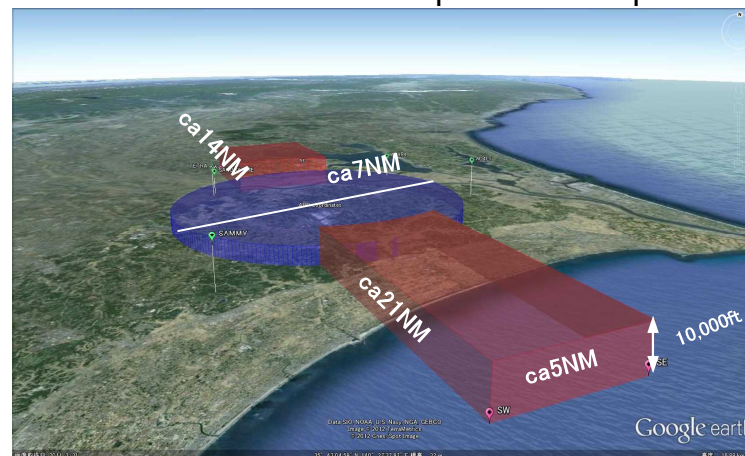


WAM Receiver

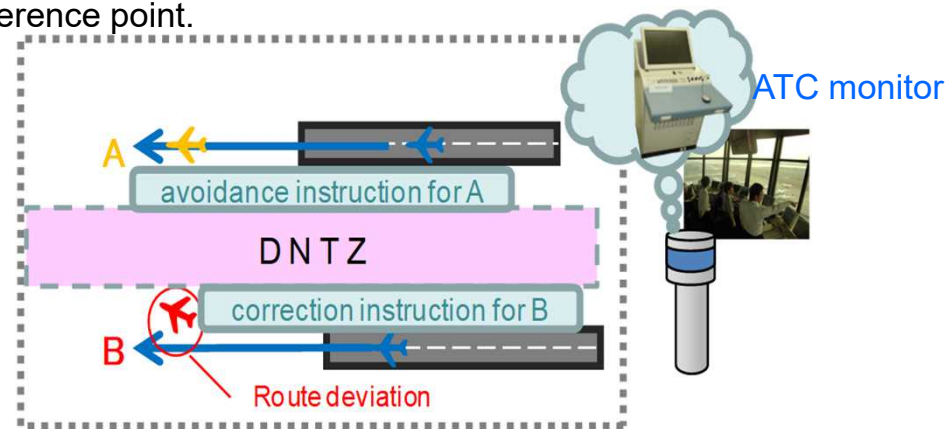


WAM Antenna

The WAM in Narita international airport is operated as Precision Runway Monitor to monitor the simultaneous departure from parallel runway.



The coverage of WAM in Narita is composed of a circle in radius of 7.4NM, rectangle width 5.4NM of 14NM north side and 21NM south side from the airport reference point.



Monitor by MLAT with ASDE, WAM and ASR/SSR

ATC monitors the simultaneous departure flights not to invade the Departure No Transgression Zone (DNTZ) which is set between the both runways and the extended lines.