

Cooperative Technologies and Frequency Sharing Between Unmanned Aircraft Systems (UAS) Based Wireless Relay Systems and Terrestrial Networks

[Objective] Development of Massive Space-time Block Coded Relaying Involved by Multiple Ground Stations and Unmanned Aircrafts

[Summary] Unmanned aircraft system (UAS) based wireless relay communication is able to quickly re-establish the connection between isolated areas and the network. We have been developing a UA based space-time block coded (STBC) amplify-and-forward (AF) relay. STBC-AF relay improves the relay communication quality while alleviating the complexity problem at UAs. It was experimentally demonstrated that STBC-AF relay is effective to quickly re-establish the connection between isolated areas and the network.

