

The proposed experiment will explore the use of the meteorburst radio channel for the precision synchronization of clocks and frequency standards at remote sites. A precise rubidium frequency reference and time reference at a client site will be brought into synchronization with references at a master site via two-way time transfer techniques, such as those employed over leased satellite communications channels. The meteorburst channel is intermittent and sporadic, so opportunities for the transfer of timing information are limited compared to that under existing satellite-based systems.

This project builds on experiments performed under a prior experimental license granted under a Special Temporary Authorization, file no. 0850-EX-ST-2014. The signal design and processing techniques will be similar to those used in the previous work, and one of the antenna installations we will use was erected during the previous effort.

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