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Development of an Advanced Net-Centric Communication Management Suite: Multi-Modal Communication

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Even with advanced collaborative technology, communication remains a critical component to the success of a mission. Command and Control (C2) operators rely heavily on radio and chat communication to efficiently plan, direct, coordinate, and control assets. With the shift towards network-centric warfare, standard radio communication needs to meet the needs of today's warfighter. A net-centric communication management suite called Multi-Modal Communication (MMC) has been developed to increase the performance and situational awareness of the operator while also alleviating the workload and errors associated with this communication intensive environment. This integrated system captures, displays, records, and archives radio and chat-based communication to better equip the warfighters by providing instant access to past transmission as well as increasing the intelligibility of current messages. This poster and demonstration explores the development and testing of these advanced tools as compared to standard radio and chat interfaces. This study examined the performance associated with monitoring multiple communication channels with access to different tools. Performance was analyzed in regards to message detection, response accuracy and time. Data showed that MMC provides a balance between the speed of radio listening and the accuracy and datacapturing capabilities of chat displays. MMC can be a beneficial tool to C2 operators in its ability to increase intelligibly while providing a persistent, searchable visual display of voice and chat communication.