Multi-Modal Communication System

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Abstract

The Multi-Modal Communication (MMC) tool was designed to alleviate the workload and errors associated with intensive communication environments. MMC is a network-centric communication management suite that captures, records, and displays radio and chat communications to the operator so that they have instant access to all current and past information. This provides a balance between the speed of radio listening and the accuracy and data capturing capabilities of chat displays. The MMC tool also employs virtual audio display technology to spatialize the multiple audio signals to aid in the intelligibility of the radio communication. The combination of these technologies has led to the design of a communication interface that improves the performance of operators confronted with monitoring high volume of communication.

Categories & Subject Descriptors: J.4 Social and Behavioral Science, Subject: Psychology

General Terms: Human Factors

Keywords: Communication System, Distributed/Collaborative Multimodal Interface, Network-Centric

MMC Features:

Verbal Comm. is transcribed into text

Flag lines of text for easy review

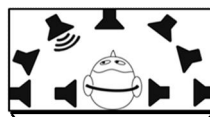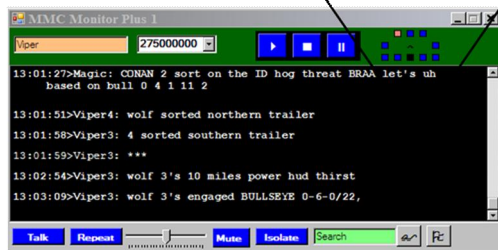Audio is archived and can be replayed

Playback control buttons

Search for keywords of flagged items

Edit or Annotate messages

Organize talkers spatially with 3D Audio

Push to Talk

Repeat function offers instant replay of last few seconds of comm.