12th ICCRTS "Adapting C2 to the 21st Century" The Future of Chat

Track 8: C2 Technologies and Systems/Track 4: Cognitive and Social Issues: Track 2: Networks and Networking

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Battlespace situation assessment *sharing* is a primary activity driving distributed command and control (C²). Efficient situation assessment depends upon quick interpretation of the context within which it is developed. In distributed C², the primary tool for consistency in operational situation assessment is the common operational picture and the daily briefings/updates that define the changing battlespace. The *context* for this situation assessment is most often provided by the tactical warfighter, provided critical mission-relevant information. The primary method for capturing context resides in chat systems throughout the C2 community. It is a relatively recent phenomenon, beginning with Operation Enduring Freedom and continuing with the current reconstruction activities. Users number in the tens of thousands on any given day.

Transference of context relies heavily on archaic methods of communication: the written word, especially text chat. There has been little technology refresh in this area. Predictions of what chat will look like in the next decade have not been forthcoming. It is our charter to extend the concept of chat to accommodate next generation warfighters, technologies, and mission directives. We present the history of chat use and technologies with a conceptualization of "future chat" in disparate communities, from anti-submarine to chemical-biological warfare to special operations and NASA advance teams conducting exploratory activities in harsh and austere environments.

Outline:

- 1. Short history of chat systems concept of operations and technologies (1990-2006)
- 2. Chat use across the Joint community and within military services
 - a. Software (Internet Relay Chat, Instant Messaging, blogs, portals), hardware, networks, standards
 - b. Policies, security
 - c. "Human" issues (procedures/ C2 concept of operations)
- 3. Internet influences on chat software, hardware, and processes
- 4. Next generation chat (the ten year picture)—software, hardware, and C2 process