ARMY, MARINE CORPS, NAVY, AIR FORCE

TACTICAL CHAT

MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR INTERNET TACTICAL CHAT IN SUPPORT OF OPERATIONS

FM 6-02.73

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NTTP 6-02.8

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JULY 2009

AIR LAND SEA APPLICATION CENTER

MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES

FOREWORD

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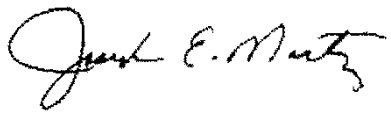

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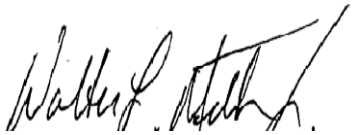

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PREFACE

1. Purpose

This publication provides multi-Service tactics, techniques, and procedures (MTTP) to standardize and describe the use of internet tactical chat (TC) in support of operations. Thus, it provides commanders and their units with guidelines to facilitate coordination and integration of TC when conducting multi-Service and joint force operations.

2. Scope

This MTTP publication is a tactical-level document for commanders and planners at all echelons. It details planning and employment procedures for executing operations using TC. Additionally this publication details TC operating parameters and system interfaces necessary to integrate internet TC-enabled operations across the joint operations area.

3. Applicability

This MTTP publication applies to commanders and planners at all levels across the Services who employ internet TC when conducting multi-Service and joint force operations. This document is intended to be theater non-specific and provides information extracted from existing Service directives, current lessons learned, and subject matter expert inputs. This publication is unclassified with restricted distribution.

4. Implementation Plan

Participating Service command offices of primary responsibility will review this publication, validate the information and, where appropriate, reference and incorporate it in Service manuals, regulations, and curricula as follows:

Army. Upon approval and authentication, this publication incorporates the procedures contained herein into the United States (US) Army Doctrine and Training Literature Program as directed by the Commander, US Army Training and Doctrine Command (TRADOC). Distribution is in accordance with applicable directives listed on the authentication page.

Marine Corps.[1] The Marine Corps will incorporate the procedures in this publication in US Marine Corps training and doctrine publications as directed by the Commanding General, US Marine Corps Combat Development Command (MCCDC). Distribution is in accordance with the Marine Corps Publication Distribution System.

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5. User Information

a. TRADOC, MCCDC, NWDC, Curtis E. LeMay Center for Doctrine Development and Education (LeMay Center), and the Air Land Sea Application (ALSA) Center developed this publication with the joint participation of the approving Service commands. ALSA will review and update this publication as necessary.

b. This publication reflects current joint and Service doctrine, command and control organizations, facilities, personnel, responsibilities, and procedures. Changes in Service protocol, appropriately reflected in joint and Service publications, will likewise be incorporated in revisions to this document.

c. We encourage recommended changes for improving this publication. Key your comments to the specific page and paragraph and provide a rationale for each recommendation. Send comments and recommendations directly to—

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TACTICAL CHAT
MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR INTERNET TACTICAL CHAT IN SUPPORT OF OPERATIONS

List of Figures

List of Tables

EXECUTIVE SUMMARY

TACTICAL CHAT
Multi-Service Tactics, Techniques, and Procedures for Internet Tactical Chat in Support of Operations

Internet tactical chat (TC) is a near-real-time synchronous conferencing capability designed for group and private message data transfers to provide online communications with other users. TC enhances critical communications capabilities through improved data messaging across units and echelons by simultaneously transmitting and receiving information among all participating and monitoring organizations. As a result, TC provides greater situational awareness through increased information volume and reduced exchange latency. While TC is used at the strategic, operational, and tactical level, this publication describes MTTP for the tactical employment of TC.

This publication:

- Provides standardized MTTP for multi-Service/joint TC capability.
- Provides structured military schematics to assist coordinated C2 of military actions facilitated by TC.
- Standardizes terminology and brevity used with TC in support of operations.
- Establishes standards for the setup, management, and use of TC at all levels.
- Describes proven TC management techniques and procedures to maximize information flow while minimizing task saturation and security risks.
- Applies to commanders and planners at all echelons when using TC to augment communication systems, to pass coordinating information, or to give command instructions.

Overview

Chapter I describes the basic concepts for operations using TC. This chapter provides the commander and planners with a foundation for coordinating, integrating, and executing TC in support of operations. It addresses basic TC concepts and capabilities along with the strengths and weaknesses of associated systems. The chapter concludes by detailing the different procedure documents used to disseminate command guidance concerning TC standards and operations.

Connecting with TC

Chapter II details the requirements necessary for a user to login and begin using TC with examples of what they can expect to see when connecting to a TC network. This includes: Service specific procedures directing TC use for a particular mission, standards for user call signs, room naming conventions, and procedures to navigate through a TC network to find a specific chat room.

Communicating with TC

Chapter III provides details for check in/out procedures as well as TC terms commonly authorized for use. This includes brevity word definitions to ensure messages or directives are unambiguous and easily understood by the intended recipients. Also included are techniques to effectively monitor multiple chat rooms, standards on color coding rooms, and methods to share information.

Best Practice Vignettes

Chapter IV highlights best practices of successful TC usage which include: executing orders, coordinating information, and augmenting current collaborative tools or systems of record. Examples given by mission area include: maneuver, logistics, intelligence, fires, force protection, air operations, and personnel recovery.

TC Troubleshooting

Chapter V provides information on user actions should TC fail to work properly. They include immediate action steps, follow on procedures, alternate communication options, and information on trouble ticket procedures.

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Chapter I

OVERVIEW

1. Tactical Chat

a. Tactical chat (TC) is a near-real-time, multi-participant means of textually communicating among military units. TC allows for predominantly jam free communications, similar to radio voice communications, over the internet. Anyone with a computer, a network connection, and compatible TC software can communicate textually using TC. In some instances, TC is the most effective means for warfighters to communicate, especially when mission conditions hamper information that would typically pass over voice communications. Therefore, in many cases text chat is the preferred method for warfighters to collaborate on urgent matters while helping to reduce radio and phone traffic.

b. TC provides synchronous conferencing primarily designed for groups in discussion forums, but can also be used to facilitate one-on-one communications via private messages or data transfers. A TC system composed of common-use software applications enables users at computer terminals to communicate with other terminal users using text. TC communications occur in “chat rooms” which are designated within a specific network to facilitate command and control (C2) or to coordinate information.

c. TC communications are analogous in function to radio communications. They must be clear, concise, and correct to be useful. TC must be structured in a way that is easily understood by the intended recipient while conveying an unambiguous message or directive. A good rule of thumb is to treat TC just like talking on a radio; less is more. However, TC is by no means the approved solution for all tactical communications. When communications are likely to raise questions, voice communications via phone or radio should be used to mitigate any potential for confusion.

d. Currently guidance across the Service’s describing the standardization and regulation of TC for use as a coordination tool is limited. Standardization is critical for the joint force commander to ensure communications are professional, disciplined, and clearly understood.

e. TC does not replace existing formal communications and its use must be consistent with existing doctrine and established procedures. TC is an enabling tool that can be used for coordination, integration, and execution.

(1) As a coordination tool, TC allows one user to coordinate tasks and distribute information to multiple groups across units both up and down echelons.

(2) As an integration tool, TC text windows allow for the free flow of common information between all echelons of users while also enabling collaboration and the cross flow of information:

(a) Between TC rooms.
(b) From text chat to voice nets.
(c) From other digital systems to text chat.

(3) As an execution tool, the ability to send information quickly to a broad base of users on TC facilitates the timely and accurate dissemination of commands, fragmentary orders, or mission changes critical to mission accomplishment.

2. TC System Types

a. There are multiple chat software applications used to communicate between elements, but all can be broken down into two basic types:

(1) Chat-specific Applications. Chat-specific applications are "single purpose," stand-alone software programs placed on a network of computers with the primary purpose of communicating via text. Jabber, Groove, mIRC and InfoWorkSpace (IWS) are commonly used chat-specific applications.
(2) Systems of Record (SOR). SOR are existing hardware and/or software applications with a specific function unrelated to TC, but they have an embedded chat capability. Advanced Field Artillery Tactical Data System (AFATADS) and Blue Force Tracker (BFT) are SORs currently used by tactical units.

b. In most instances, SOR are only configured to "talk" to other SOR on a specific network. However, if TC-specific applications are loaded they can be used to augment a SOR's connectivity. For example, operators can cut and paste text information from one SOR into a chat-specific application loaded on the same machine and essentially "broadcast" information in near real-time to a larger population of critical users instead of using the traditional time consuming methods such as radio, telephone, or written order. A depiction of how this "cross posting" of information enhances overall communications can be seen in figure 1.

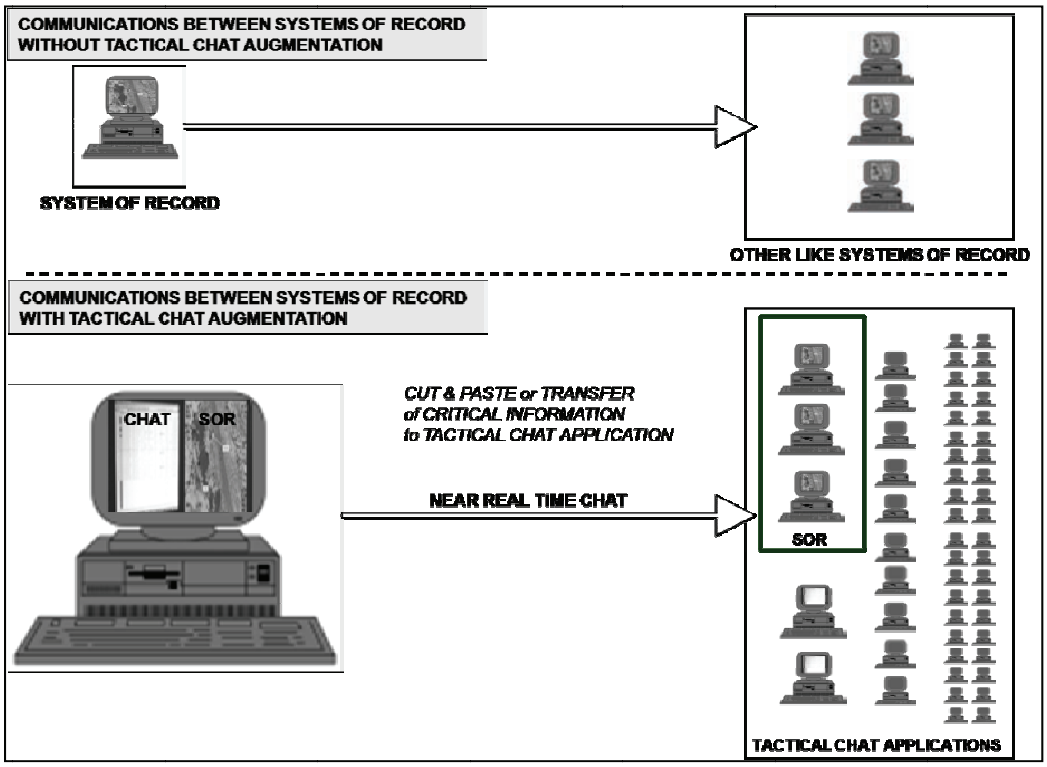

Figure 1. Cross Posting Information from SOR using Tactical Chat

3. **Uses of TC**

a. Command. TC is used in the command role when a commander issues an order using text messaging. Command TC normally occurs only in command TC rooms.
b. Other. Non-command TC is used primarily for information dissemination and cross flow coordination to increase situational awareness and understanding. Parallel planning is enhanced by the open discussion of issues over TC.

Note: Doctrinally, the Army does not currently use TC for C2, but instead uses a planning, execution, and C2 process outlined in FM 5-0 and FM 6-0.

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4. **Terms Specific to TC**

The following terms are specific to TC and are used throughout this publication to alleviate confusion with other commercial chat terms:

a. Chat—The process of communicating via text in a specific TC room.
b. Post/Message—Single entry of text communication via TC.
c. NET—A communication network defined by the collection of TC rooms on an individual server. This includes the span of users on a SOR.
d. Chat Room—A single TC forum with participating users communicating for a specific purpose or function. Room and channel may be used interchangeably.
e. TC Architecture—A detailed collection of terminals that are logged into a specific server to enable TC.

5. **Key TC Players**

The primary TC players are the warfighters: individuals designated by their commander or primary staff officer to participate in text-based communications to facilitate coordination or C2. These individuals are designated by function in the appropriate Service TC procedure documents. These documents further categorize users as room owners, participants, or observers depending on their roles, responsibilities, and function with respect to a particular chat room's purpose. Users have discrete TC call signs and join TC rooms to accomplish a mission, perform a function, or gather information.

a. Room Owner (RO)—Just as radio nets have net control, TC rooms must also have an overseer to function effectively. The RO is the individual responsible for a specific room with the authority to administer that room. RO duties and responsibilities include:

(1) Ensuring that the chat room is created and used in accordance with (IAW) priorities, directives, and unit standard operating procedures (SOPs).
(2) Establishing and enforcing chat room communications priorities, procedures, and protocols.
(3) Documenting the establishment of chat rooms by publishing detailed information in appropriate TC procedures documents.
(4) Establishing temporary rooms to handle short periods of high demand.
(5) Determining chat room members and assigning user levels (participant or observer).
(6) Establishing, maintaining, and archiving TC communications.

b. Participant—Participants are active members of the TC room accomplishing a particular mission or task. Participants are expected to contribute to room communications. Participants will be required to document critical traffic as directed by their chain of command.

c. Observer—Observers are passive participants who monitor TC chat rooms for situational awareness only. Observers are not expected to contribute to the room dialog. Observers may be required to document critical text traffic as directed by their chain of command.

d. Communications Staffs—Communications personnel are present at nearly every level of military operations to maintain and operate the network infrastructure upon which TC depends. Early and constant interaction with communications staffs will help develop a maintenance battle rhythm to limit TC down times.

6. **Capabilities/Strengths of TC**

a. The TC security level is determined by the host network. For example, TC communications conducted over a non-secure internet protocol router network (NIPRNET) would be non-secure communications, whereas a secure internet protocol router network (SIPRNET) would provide a secure net for TC communications.

b. TC facilitates real time communications laterally across units and vertically up and down echelons by allowing for rapid dissemination of information to a broad audience of users on the network and across connected networks.

c. TC provides a digital log of communications for verification and reference.

d. TC allows recent communication to be reviewed. Operators can be absent for a short period of time and review previous posts in a chat room to “catch up.”

e. More users can be connected and monitoring TC networks than is possible with radio networks.

f. Most chat applications use very little bandwidth.

g. TC reduces burden of voice communications relay.

h. TC allows users to customize settings to avoid information overload.

i. TC alleviates electro-magnetic interference issues such as static and intermittent operations for land-line connected elements.

j. When properly employed, TC has the potential to:

(1) Decrease target planning to execution timeline by allowing key users to monitor communications traffic and only input changes when needed.

(2) Enable timely decisions based on near-real-time information from multiple sources given the ability to monitor multiple rooms.

(3) Allow fast development and implementation of new procedures and/or processes between units or Services.

(4) Enhance the ability to achieve the right targeting effect at precisely the right time.

(5) Reduce the possibility of misunderstood coordinates or incomplete information that is common with garbled radio traffic.

7. **Limitations/Weaknesses of TC**

a. Inaccurate or misleading information is widely disseminated and passes to all TC users as quickly as accurate information. Retraction procedures are difficult and the inaccurate information is still kept in the room record.
b. Multiple incompatible TC programs may be in use in a theater of operations with different functionality and user interfaces.
c. TC room participation cannot be effectively controlled without extensive measures such as room password protection.
d. Collaboration with multinational members using TC is challenging due to security restrictions. Work-arounds are required to communicate with multinational members on other networks but they must still comply with theater security restrictions.
e. The authority of command information can be questioned due to misunderstanding or misidentification of the source sending a message or post.
f. Receivers of critical information must have the correct chat room open and easily visible to get data in a timely manner.
g. TC requires orders, questions, answers, suggestions, and discussion to be typed, thus slowing communications flow and introducing the potential for error when used by less experienced users.
h. TC requires a constant network connection to all locations and platforms.
i. Any user can create a room, which makes spontaneous room proliferation difficult to control and creates the potential for critical information to flow outside of normal channels taking focus away from primary rooms that require participation.
j. TC includes features that allow for private chat, which can inhibit information flow and the situational awareness of the main chat room.
k. Unlike chat room traffic, private chat is often not recorded, interrupting the logic trail and creating incomplete historical records of TC communications.
l. Textual data lacks inflection and emphasis when communicating information and commands, which creates perception challenges for intended receivers.
m. Short text messages can cause ambiguity and accuracy can be compromised without strict adherence to standard terminology (see appendix A).
n. Airborne assets and units relying on satellite links may still experience intermittent operations caused by electro-magnetic interference.
o. Not all C2 platforms are able to accommodate TC. Airborne C2 assets that are TC capable may not have the personnel onboard to devote sufficient attention to multiple chat rooms compared with land or ship-based units.

8. **Effects of TC on Situational Awareness and Understanding**

TC improves situational awareness by allowing leaders to make effective decisions based on the information from combined TC communication and other available tools. Users at all levels must:

a. Not use TC for the complete picture of the tactical situation.
b. Not make decisions based solely on information available in TC.
c. Not assume TC has achieved the intended coordination unless acknowledged.
d. Not overload TC rooms with requests for information or unnecessary traffic.

9. **TC Procedures Documents**

The intrinsic horizontal and lateral collaborative nature of TC makes in necessary to standardize procedures for TC down to the tactical level while also ensuring that users outside of the JOA are compliant with the TC procedures directed by the higher headquarters. It is not uncommon to see users at all levels down to platoon equivalent or from units outside of the task force participating in a joint task force (JTF) chat room. In order for a commander to ensure standardization, TC guidance at the highest level of use must be distributed, implemented and enforced down to the lowest level as well as across to all Services and coalition partners. The entry point for TC standard operating procedures is often the communication annex of the JTF operations order (OPORD).

a. Communications Annex to JTF OPORD. When published, the communications annex outlines the JTF's approved TC policies and procedures. Some of the major components of the TC portion of the JTF OPORD should include:

(1) TC standards and procedures for the JTF:

(a) User and chat room naming conventions
(b) Business rules / standard operating procedures
(c) Approved abbreviations and terminology

(2) Mission planning contact information
(3) Access control or password protection requirements
(4) User permission levels
(5) Authentication procedures
(6) Network configuration parameters
(7) Sufficient information to enable users to find appropriate rooms, participation requirements, and chat room users:

(a) List of standard chat rooms and their purpose
(b) Chat room owners, participants, and observers
(c) Description of use and hierarchy of information

b. The JTF OPORD is the base document for all subordinate commands. fragmentary orders (FRAGORDs) may be published off of the base OPORD to provide updates to TC procedures and standards. To disseminate TC guidance down to the tactical users, procedure documents published by subordinate units should be used. These documents should amplify the broad TC guidance published in the JTF OPORD and should never be less restrictive.

(1) Procedure Documents. There are three primary TC procedure documents used that are theater, component, or mission specific in nature and direct the proper use of TC:

(a) Appropriate Annex to OPORD [All Services]. See appendix D for a format example.
(b) Operational task chat (OPTASKCHAT) [Navy Specific]. See appendix E for a format example.
(c) Special Instructions (SPINS) [Air Component Specific]. See appendix D for a format example.

(2) TC procedure documents must adhere to TC standards set in the JTF or higher headquarters' OPORD. Subordinate TC procedures and SOPs outlined in procedures documents may be more restrictive than guidance described in the JTF OPORD.

(3) Planners at the operational and tactical level must ensure procedures documents facilitate common user understanding of TC operations in the JOA. Commanders using TC should assign room owners and network monitors at all levels with authority to regulate the execution of TC and ensure users are properly implementing the guidance provided in the TC procedure documents.

c. Navy

Navy-wide OPTASKCHAT provides the overall framework and guidance for using chat at the operational and tactical level. The Navy-wide OPTASKCHAT is a working document and can be specifically tailored by fleets, deployed strike groups, and task forces in order to meet the requirements of various operating areas and tactical situations. Commanders promulgate amplification and additional guidance in OPTASKCHAT supplements and inputs to the daily composite warfare commanders (CWCs) intentions messages.

d. Air Force

The Air Force uses SPINS to complement higher TC guidance. Subordinate Air Force units publish TC guidance down to the lowest level in appropriate baseline, weekly, and daily SPINS. Unit specific TC guidance can also be found in unit SOPs and flash bulletins.

(1) SPINS. The SPINS contain a communications section that describes TC procedures. This section will include all information found in the higher headquarters TC annex with added detail for operational and tactical level Air Force users. The SPINS are developed within the Air Tasking Order (ATO) process and become the approved policies and procedures for Air Force users of TC.

(2) Unit SOPs and Flash Bulletins. Unit SOPs and flash bulletins provide an additional reference for operation and tactical level unit specific TC procedures. Note: SOPs and flash bulletins often remain constant and may become outdated during prolonged deployments or when operating under different commands.

e. Marines

Marines use an OPORD to publish and promulgate TC guidance and procedures IAW the JTF OPORD. In the absence of TC guidance from a higher headquarters', the highest level of command for a particular mission or operational area will direct TC standardization and execution. Subsequent subordinate units will ensure their TC procedures comply with the higher headquarter's guidance and may not give less restrictive guidance.

(1) Communications Annex to the OPORD. Marine units operating under a JTF will publish TC guidance that is consistent with the JTF OPORD in a communication annex to their base OPORD. At the direction of the S-3 the Communications Annex of the Regiment/Battalion OPORD is developed by the communications staff in conjunction with other participating components to detail policies and procedures consistent with TC guidance from the JTF OPORD. TC information found in these OPORDs should expand upon corresponding guidance in the JTF OPORD and further detail TC operations down to the tactical level. A FRAGORD may be published off of the base order to provide updates to TC procedures and standards.

(2) Unit SOPs. Unit SOPs provide an additional reference for operation and tactical level unit specific TC procedures.

f. Army

The Army normally will use an OPORD to publish and promulgate TC guidance and procedures IAW the higher headquarters' OPORD. The communications annex to their base OPORD is the place where procedures for executing TC are described down to the tactical level. Doctrinally, the Army does not currently use TC for C2, but instead uses a planning, execution, and C2 process outlined in FM 5-0 and FM 6-0.

Note: The multi-Service TTP contained within this publication should be used on secure, protected networks. Always consider operations security, local guidance, directives, policies, and SOPs in the application of this TTP.

Chapter II

CONNECTING WITH TC

1. Requirements to Get Started

a. The minimum requirements for a user to access an existing TC network are:

(1) Computer hardware (i.e., laptop, desktop computer, or workstation).
(2) Licensed copies of the necessary and approved TC software installed.
(3) Network access to the system used by the TC host server (i.e., SIPRNET).
(4) Fundamental knowledge of basic computer and chat skills.
(5) Familiarization with theater/unit guidance and directives for TC operations.
(6) Familiarization with the specific TC application.

b. Advances in TC technology and theater-specific regulations and procedures may dictate specific requirements. Units must review TC guidance and procedures from units they are replacing or operating within theater to ensure they arrive with the proper hardware and software to integrate into the existing TC architecture.

2. TC User Call Sign Creation and Profile Development

Users must first establish an identity, or call sign, and post it in the TC directory before they can properly log on to a TC network and communicate with others using chat. Although methods to create call signs vary based on the TC application used, a unit standard should be established by the command, following the naming conventions outlined in this chapter, and published in TC procedure documents. TC call signs are especially critical for communications in chat rooms passing command information, as they are a primary means of authentication. Like radio call signs, TC call signs must be standardized to ensure users are clearly identified. Unlike radio, TC has broader, often displaced participation that require a user's identity to be clear to the entire network.

a. TC Call Sign Naming Conventions.

(1) Each user will have a discrete TC call sign that establishes his/her identity on the network. Depending on the TC system in use, this identity may reflect:

(a) The user's name when logging on with a common access card (CAC).
(b) The computer identification.
(c) The user's organization, function, and position IAW the naming conventions in this chapter (preferred).

(2) General Tips on Call Sign Creation.

(a) Make call signs sufficiently descriptive in nature so that users can easily identify who you are (organization, function, duty position).
(b) Make call signs authoritative if applicable to alleviate confusion when lawful orders are passed. CAC login and "by name" call signs can be used to regulate command authority using TC but is not recommended.
(c) Keep call signs as short as possible to alleviate taking up valuable message space in a chat room.
(d) Avoid using call signs associated with the user's name or computer's identification unless doing so to regulate command authority.

(e) During high operational tempo periods, make every effort to conduct TC over computers that do not require a CAC login unless intending to use CAC call signs for authentication purposes. This will enhance continuity during shift changes allowing users to retain their functional call sign while making it unnecessary to log off during critical communications. This also allows new users to scan through previous message traffic.

(f) Use the same TC call sign for an entire mission or deployment to minimize confusion, regardless of time spent off the network. TC call sign changes should be done for unit rotations rather than personnel shift changes.

(3) TC Call Sign Creation.

(a) Call signs will be created by combining two or more identifiers, separated by an underscore or space, to create a descriptive name that is easily distinguishable from other chat room users. Four identifiers may be used to ensure a call sign is easily identified by all users.

(b) Based on a specific area of operations, users should consider whether it is necessary to use the unit's location to further distinguish their call sign and facilitate clarity in a chat room.

(c) When an alternate call sign is required for an individual using a different computer or in a different location (i.e. in a backup facility), clearly indicate this status in the call sign:

- 3/1ID_FIRES_NCOIC_ALT
- 3/1ID_FIRES_NCOIC_TAC

(d) When there is more than one similar position in an organization monitoring the same chat room, numbers should be used in the usernames to differentiate

- CAOC_DTC1
- CAOC_DTC2

(e) See figure 2 illustrating call sign creation and table 1 for examples.

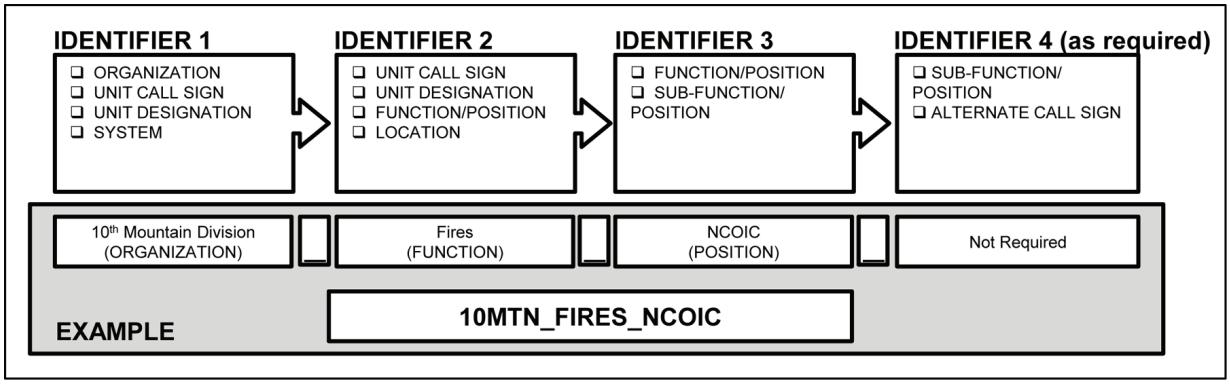

Figure 2. How to Create a Tactical Chat Call Sign

(f) Call signs should be as short as possible yet descriptive enough for all TC users to identify the owner of the call sign. Priority of identifiers is from left to right and identifiers should not be reused.

(g) TC call signs are intended to increase joint interoperability. Therefore, unit nicknames alone are not to be used as TC call signs as they do not meet the naming convention and can cause confusion (e.g., Bulldog_12). Call signs allocated in TC procedure documents are appropriate when function and agency are also identified.

(h) Call signs may be structured using the following identifiers:

Identifier 1, "where": The first portion of a call sign should clearly highlight the user's organization or designation. This identifier is the first one seen by TC users in a traditional left to right scan and also facilitates grouping users from the same organization when looking at an entire chat room population. When dictated in the ATO or OPORD, a system identifier can be used as the first entry to clearly group similar platforms (i. e., U for unmanned aircraft system (UAS), B for bomber, AH for attack helicopter). First identifiers should consist of one of the following as applicable:

- Organization
- Unit Call Sign (when approved in ATO or OPORD)
- Unit Designation (if different than organization)
- System type

Identifier 2, "who": The second portion of a call sign is used to further describe the user's function in their organization. It can be a subordinate unit, mission area, or call sign when approved and published in the ATO or OPORD. If like users are chatting in separate theaters or countries, the second identifier can be used to identify their location. This is especially useful when chatting with rear detachments. Second identifiers should consist of one of the following as applicable:

- Unit Call Sign
- Unit Designation
- Function/Position (authority)
- Location

Identifier 3, "what": The third portion of a call sign should distinguish what the user does in their organization. This is normally the last entry in the TC call sign if it clearly identifies the user from the TC population by indicating their function or authority. Third identifiers should consist of one of the following as applicable:

- Function/Position (authority)
- Subfunction/Position

Identifier 4 "other": The fourth portion of a call sign is used as required to distinguish the user's subfunction as necessary or highlight that the user is at a different location or using an alternate call sign. Fourth identifiers should consist of one of the following as applicable:

- Subfunction/Position
- Alternate TC Call Sign or Location

Table 1. Examples of TC User Call Signs	
Duty Description	**TC Call Sign**
4th Infantry Division G-3[1]	4ID_OPS_G3
4th Infantry Division G-3 (Rear Detachment)	4ID_REAR_G3
4th Infantry Division Plans Officer	4ID_OPS_PLANS
25th Infantry Division Assistant G-2[2]	25ID_INTEL_AG2
C/2-10 Air Assault Commander	10CAB_C/2-10_ASSLT_CDR
3/1 Infantry Division Fires NCOIC[3]	3/1ID_FIRES_NCOIC
1st Marine Division G-3	1MARDIV_G3
TACC[4] Senior Watch Officer	TACC_SWO
2nd Regimental Combat Team G-3	2RCT_G3
1st BCT[5], 4th Infantry Division UAS[6]	UAS_4/1ID
CAOC[7] Senior Intelligence Duty Officer	CAOC_609_SIDO
CAOC Senior Operations Duty Officer	CAOC_609_SODO
CAOC Command and Control Duty Officer	CAOC_609_C2DO
ASOC[8] Air Battle Manager 1	ASOC_WARRIOR_ABM1
CRC[9] Senior Director	CRC_RESOLUTE_SD
UAS Aircraft Call Sign FAZER 51	U_FAZER51
Bomber Aircraft Call Sign RHINO 63	B_RHINO63
JTAC[10] Call Sign VIKING 11	J_VIKING11
USS[11] Enterprise Tactical Action Officer	CVN65_ENT_TAO
NETWARCOM[12] Plans & Policy	USFFC_NNWC_N5
Helicopter Anti-submarine Squadron 6	CCAW5_HSL6_OPSO

1. Army or Marine Corps component operations staff officer
2. Army of Marine Corps component intelligence staff officer
3. Noncommissioned officer in charge
4. Tactical air command center
5. Brigade combat team
6. Unmanned aircraft system
7. Combat air operations center
8. Air support operations center
9. Control and reporting center
10. Joint terminal attack controller
11. United States Ship
12. Network Warfare Command

b. Authentication Principles.

(1) Accurate call signs and TC discipline are the primary means of TC authentication over a secure communications networks since there are no intrinsic security capabilities in current TC applications to support authentication. It is essential that chat users ensure they are logged on and identified with the appropriate TC call sign.

(2) Another way to support authentication using current TC applications is to login with a CAC enabled call sign that details the specific name, rank, and organization of the TC user. This method is helpful in command chat rooms with a group of users familiar with the command structure to positively identify an individual possessing the authority to issue lawful orders to others.

(3) If there is ever a question of the authenticity of a user, the recipient of message traffic should question the user over TC or by an alternate means as soon as possible. ROs should police their rooms and approach or purge any users with a questionable identity.

(4) Security functions, such as password protected rooms, are also available to ensure the identity of chat room participants.

(5) For any command issued over TC, the entry must come from a user authorized to issue the command. The entry must identify the action to be taken and the recipient of the command. Recipients will acknowledge all TC commands. See Chapter 3, *Communicating with TC*, for examples of commands and acknowledgment of commands using TC.

c. Profile Development.

(1) Profiles are utilized in many TC applications as a quick reference for detailed information concerning users that the call sign alone does not facilitate. As a result, organizations must ensure users update their profile information in order to enhance and expedite:

(a) Authentication.
(b) Coordination.
(c) Alternate communication.
(d) Troubleshooting.

(2) TC users should as a minimum populate user profile fields with organization, position, and alternate communication means. ROs should police their rooms to ensure participants' profiles are current, complete, and accurate. A profile that is shared by multiple users (e.g. different shifts), should be populated with common information.

(3) At a minimum, profile information should include:

(a) Complete unit or organization name and user's position.
(b) Email (SIPRNET, NIPRNET).
(c) Telephone (Defense Switched Network [DSN], voice over secure internet protocol [VOSIP]).
(d) Radio net and frequency (if applicable).
(e) Alternate point of contact with contact information.

- Opposite shift contact.
- Next higher echelon in chain of command.
- See table 2 for profile development examples.

Table 2. Profile Development Examples

Organization/Position: 3rd Brigade, 1st Cavalry Division, Fires NCOIC[1] Email: firesncoic@army.mil Phone: DSN 123-4567 Radio Net/Frequency: 3rd Brigade Fires Net Alternate POC: HHQ: 3rd Brigade 1st Cavalry Division (S-3)[2] Alternate Contact Information: DSN 876-5432
Organization/Position: 609 CAOC[3], Senior Operations Duty Officer Email: caocsodo@centaf.af.mil Phone: DSN 123-4567; Fax: DSN 123-4568 Radio Net/Frequency: NA Alternate POC: CAOC CCO[4] Alternate Contact Information: DSN 765-4321

Organization/Position: 3rd MAW[5] TACC[6], Senior Air Coordinator Email: taccsac@3mawfwd.usmc.mil Phone: DSN 123-4567 Radio Net/Frequency: TAC[7] CMD[8] Alternate POC: CAOC Marine Liaison Officer Alternate Contact Information: DSN 765-4321

1. Noncommissioned officer in charge
2. Battalion or brigade operations staff officer
3. Combat air operations center
4. Central control officer
5. Marine aircraft wing
6. Tactical air command center
7. Terminal attack control
8. Command

3. **Chat Rooms**

This section will provide TC users with a fundamental understanding of the different types of chat rooms, chat room naming conventions, where to find room descriptions, and the security issues specific to chat rooms.

a. Types of Chat Rooms.

(1) There are two basic types of chat rooms, official and unsanctioned.

(a) Official Chat Rooms. Official chat rooms are approved rooms that are established and used as published in TC procedures documents. They are used to conduct TC specific to a function or mission and are permanent in nature.

- Official chat rooms may consist of command chat rooms such as an Operations Net, or functional chat rooms such as a Fires Net.
- Official chat rooms used for command purposes may have the word "command" or "CMD" to describe the function of the chat room.
- Official chat rooms may also be created for coordination purposes or for use as a "question and answer" outlet.

(b) Unsanctioned Chat Rooms. Unsanctioned chat rooms are those created by users to temporarily augment official rooms and facilitate discussion outside of the approved TC structure dictated in special TC procedure documents. Due to excessive proliferation of unsanctioned chat rooms, their use is highly discouraged unless they are critical to accomplishing a specific mission and there is intent to publish them properly as official chat rooms. Unsanctioned chat rooms are temporary in nature and may be automatically purged by some TC applications after a period of time. Unsanctioned chat rooms should not be confused with private or whisper chat (see chapter III).

(2) Units may establish a group of common use rooms for ad hoc use to facilitate side-bar conferences and clarification on non-time-critical issues. Having these rooms published and available as "official chat rooms" saves setup time, makes it easier for users to join the room, and allows the discussion to be

added to the archive. These common use rooms also help to alleviate the proliferation of unsanctioned chat rooms. Examples of common use rooms are:

(a) 3BCT_Conference_Room
(b) CAS_Meeting_Room
(c) OIF_IED_Discussion_Room

b. Establishing Chat Rooms.

(1) Naming Conventions.

(a) Naming conventions are designed to aid users in finding chat rooms and are based on the unit call sign or designator followed by the specific function of the room. Commanders maintain the right to implement a more detailed naming standard, but chat room names should follow a similar naming convention to TC call signs as described in figure 3.

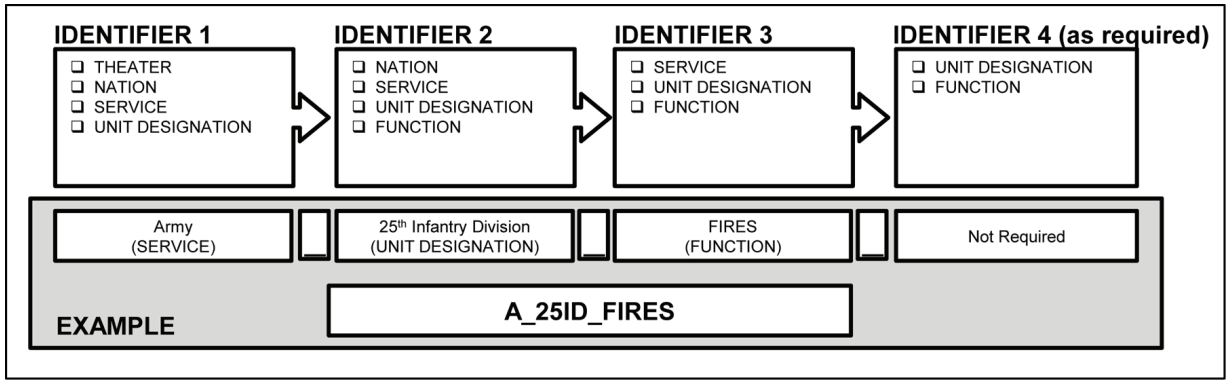

Figure 3. Creating a Tactical Chat Room Name

(b) To facilitate logical organization of a potentially large number of rooms used in joint and combined organizations, an additional designator preceding room names may be required to describe what nation and/or Service the room belongs to. If necessary, the specific theater may be used to further distinguish the room from other similar chat rooms (i.e., OEF [Operation ENDURING FREEDOM], OIF [Operation IRAQI FREEDOM]). See tables 3, 4, and 5 for examples of TC chat room naming standards.

Table 3. TC Chat Room Service and Nation Characters

Service Character		**Multinational Character**	
Army	A_	United Kingdom	UK_
Navy	N_	Canada	CA_
Marine Corps	M_	Australia	AS_
Air Force	F_		
Coast Guard	C_	**Other**	
Theater Level Room	#_	Special Operations Forces	S_

Table 4. Examples of TC Chat Room Names	
Owning Unit and Room Function	**TC Room Name**
Theater level (OIF) dynamic targeting room	OIF_Dynamic_Targeting
Combined Air Operations Center (609th) Control Officer	CAOC_609_CCO
10th Combat Aviation Brigade Command Net	10CAB_CMD
3rd Brigade Combat Team (BCT), 1st Cavalry Division, Fires room	3/1CD_FIRES
2nd BCT, 1st Infantry division, 2-77 Armor, Intelligence room	2/1ID_2-77AR_INTEL
TACC[1] Air Defense	TACC_ AIRDEF
DASC[2] to FSC[3] coordination	DASC_FSCCOORD
Senior Director of the CRC[4] Room	CRC_RESOLUTE_SD
Specific area of jurisdiction room for the CRC	CRC_EAST
1. Tactical air command center *2. Direct air support center* *3. Fire support cell* *4. Control and reporting center*	

Table 5. Examples of Room Names with Additional Identifiers	
Functional name by theater-level mission set	#_Dynamic_Targeting
Service with organizational name or call sign and function	F_603ACS_DO

c. Chat Room Descriptions.

(1) Users can locate detailed information on specific chat rooms in TC procedure documents. They should be listed as chat room descriptions and include detailed information such as:

(a) Room name.
(b) RO with contact information.
(c) Room description and purpose.

(2) It is the responsibility of the RO to ensure that all chat room descriptions are accurate and that the contact information is published correctly in the appropriate TC procedure documents listed above.

(3) Examples of chat room descriptions are shown in table 6 and a more detailed example is found in appendix F.

Table 6. Sample Chat Room Descriptions		
Room Name	Room Owner	Room Description
#_CAOC_CBTOPS	CCO DSN: VOSIP: Email:	The combined air operations center (CAOC) combat operations room will be used to direct the functions of the Combat Operations section. The primary purpose is to provide CCO with information regarding current operations and to pass required CCO or higher approval downward. This room is used to update CCO on those events which pertain to execution of current tactical air and space operations. Applicable specialty/support leads should provide information to this room. The CCO room is the bridge between the operational level and tactical levels of chat. The CCO will manage and dictate tasking in this room.

d. Chat Room Access Control.

(1) In some cases, sensitive information exchange and coordination may be conducted in password protected or access controlled chat rooms. These rooms may exist for a specific purpose, time period, or permanently assigned for detailed coordination between authorized users. In these instances, the room should be formally established and managed by an RO.
(2) The owning unit of an access controlled room is responsible for ensuring identified users are given the means required to access the chat room:

(a) Passwords.
(b) Access cards.
(c) Appropriate networks.

4. **Finding and Identifying TC Rooms**

a. TC user guidance should be published in the TC procedures documents.
b. Guidance should provide sufficient information to enable a user to find appropriate rooms, participation requirements, and chat room users. Guidance should include the following information at a minimum:

(1) Standard chat rooms.

(a) Purpose of each chat room.
(b) Room owner.
(c) Participants and observers.
(d) Description of use and hierarchy of information.

(2) TC standards.

(a) Naming conventions.
(b) Business rules / standing operating procedures (SOPs).
(c) Approved abbreviations and terminology.

(3) Network configuration parameters.
(4) Authentication procedures.
(5) User permission levels.
(6) Access control or password protection requirements.
(7) Mission planning contact information.

c. Another commonly used procedural tool to ease chat room navigation and detail chat room use and participation level is a TC Guard Chart or Chat Room Plan. The below TC Guard Chart (figure 4) can be published in unit TC procedure documents as a smart sheet for users to conduct TC operations. Another variation of this chart can be found in appendix F.

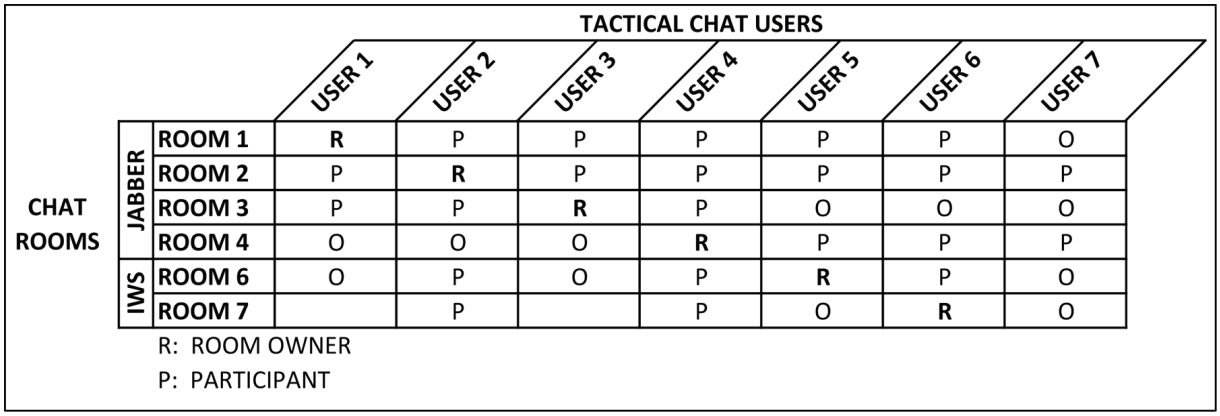

Figure 4. Example Tactical Chat Guard Chart

Chapter III

COMMUNICATING WITH TC

1. Check-in/Check-out Procedures

a. Check-in. Nearly all TC programs automatically announce room entry with a highlighted entry stating the user has joined the chat room. The RO will treat this notification as a check-in. An example of a user checking in to a chat room is depicted in figure 5.

Figure 5. Example of Tactical Chat Check In

b. Check-out. As with check-in, a message will be generated automatically when a user has disconnected from the chat room. This will function as a check-out. An example of a user checking out or leaving a chat room is depicted in figure 6. ***ROs and participants should note that a critical user unexpectedly leaving a TC room may be indicative of a connectivity problem with that critical user.***

Figure 6. Example of Tactical Chat Check Out

2. Finding TC Room Users

While various TC applications have different ways to determine who the users are in a given chat room, there are two common methods. TC operators can either search the list of users in a chat room, or conduct a chat room net call.

a. Search List of Users.

(1) All TC users can determine who is in a chat room by scrolling the user list. In many applications, the user list is located on the right side of a chat room window.

(2) Using naming conventions as outlined in chapter 2 significantly enhances this capability because it results in “lumping” like users together in the user list. This is especially critical in chat rooms with a large amount of participants.

(3) Depending on the TC application, the user list may be manipulated as required by the user. A proven method is to alphabetize the user list for ease of use.

(4) Most TC applications will also allow a user to expand the user list to show more users at once, as well as click on users to find their specific profile information.

(5) An example of a user list is shown in figure 7.

Figure 7. Example of a Chat Room List of Users

b. Conduct a Net Call.

(1) Net calls may be accomplished by any participating user and are done similarly to traditional voice net calls or radio checks to confirm which users are actively monitoring a chat room.

(2) A net call may be executed at any time, but is particularly helpful prior to sending messages or commands where a specific audience is required to receive and acknowledge the traffic.

(3) Use of net call should be used only when necessary so they do not interfere with key message traffic in a chat room.

(4) An example of a TC user-to-user net call is depicted in figure 8.

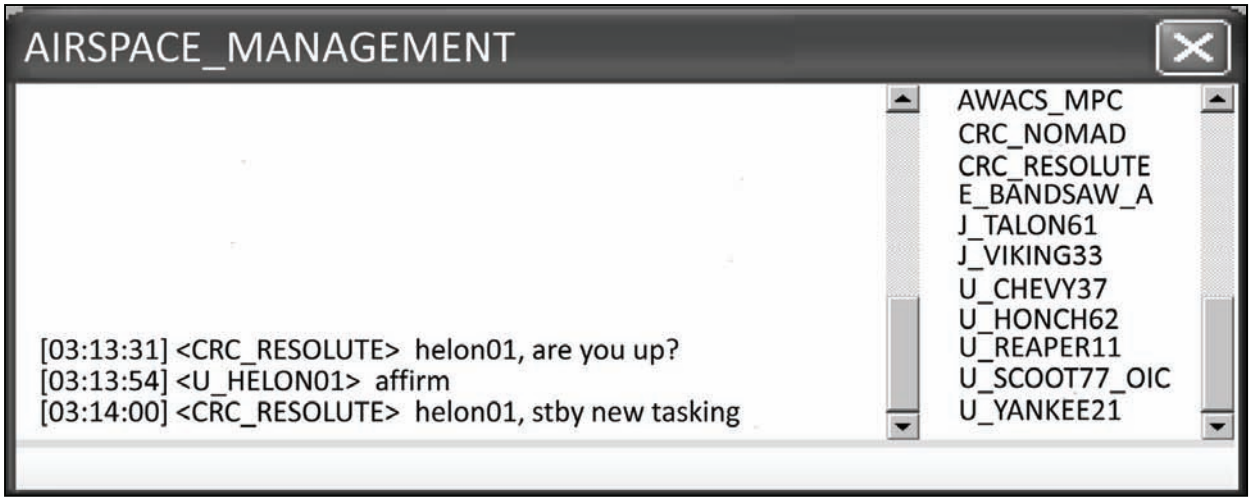

Figure 8. Example of Tactical Chat Net Call

3. **Roll Call**

(1) Roll call is a formal process used prior to or during the transmission of essential information over TC to identify whether key recipients of an intended message are "present" in the chat room. Roll call should be initiated by the RO and authorized participants only.

(2) Due to the large number of participants in a chat room, the use of a roll call can be challenging. Rules of thumb for conducting a roll call:

(a) In addition to the message content, the roll call message must clearly state:

- Which users are required to acknowledge the roll call.
- How users should respond to the roll call.
- Any specific instructions required of the users conducting the roll call.

(b) By default, users assigned as observers are not expected to respond to roll calls unless specifically asked.

(3) Participants conducting the roll call will acknowledge and reply as directed. Their reply may be as simple as a "c" for "copy" or as defined in appendix A, but may also include a brief situation report if tasked.

(4) An example of a system specific roll call is shown in figure 9.

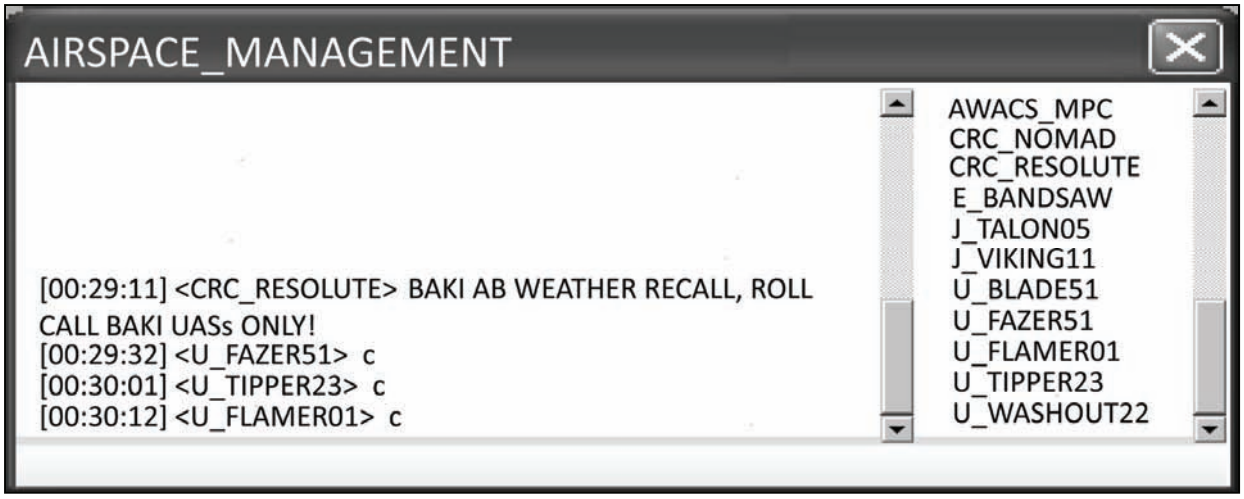

Figure 9. Example of Tactical Chat Roll Call

4. Standard TC Terminology and Abbreviations

The nature of chat as a means of coordination requires discipline in order to minimize ambiguity and facilitate the understanding of messages sent and received. Plain language may be the most effective means of passing information, especially with new users or when giving commands. As a result, users should avoid generating new terminology and abbreviations.

a. Abbreviations are used in TC to expedite information flow. However, they should not be used at the expense of clarity and accuracy of information sent.

b. Do not use "civilian convenience" abbreviations commonly used in non-tactical chat (i.e., lol, j/k, bff).

c. Avoid abbreviations that could have multiple meanings, unless made very clear in the context of the message.

d. In order to streamline TC communications and minimize the amount of traffic populating a chat room at a given time, brevity should be used whenever applicable.

e. Use approved terms detailed in Service, multi-Service, and joint publications.

f. See the table in appendix A for examples of standard TC terminology and abbreviations for use during TC communications.

5. Message Structure

a. As with traditional radio transmissions, TC message structure should be standardized in order to avoid confusion. A basic TC message should adhere to the following format:

(1) Addressee (who a user is sending the message to).
(2) Message information.
(3) Applicable instructions.

b. Unlike traditional radio transmissions, it is not necessary to include the originator's call sign when conducting TC because it will be displayed in front of the message traffic in the chat room window.

c. There is also no need to end a message with "over" or "out" because the posting of the message ends the message string in a chat room window.

d. An example of TC message structure is depicted in figure 10.

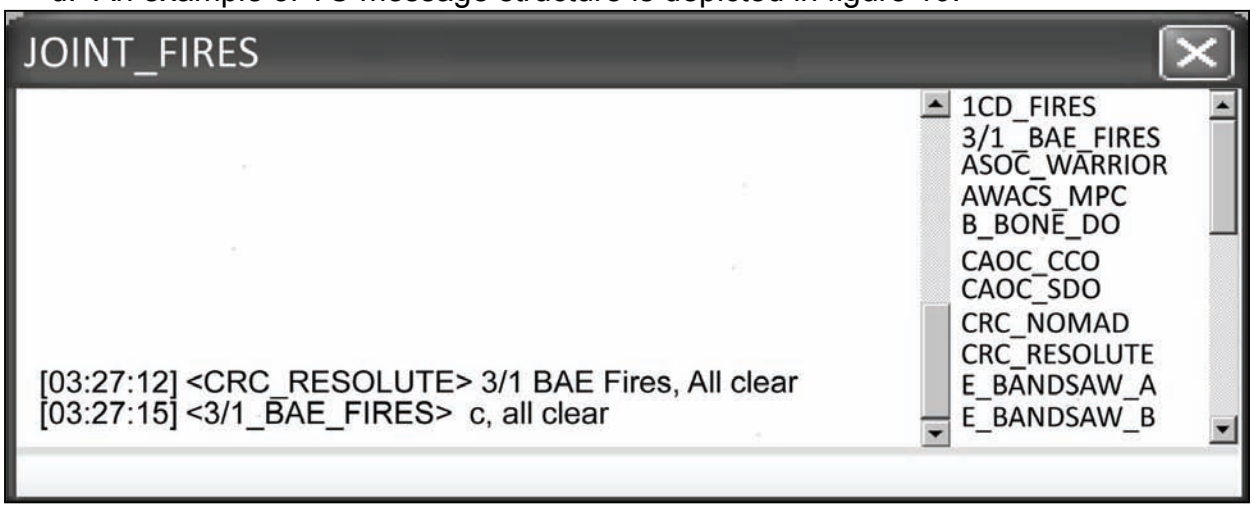

Figure 10. Example of Message Structure to Specific Addressee

6. Context

TC users must realize that context and intent are extremely difficult to convey over chat and users may perceive information passed differently. For example:

a. Use of capital letters can be misinterpreted as “yelling” or “anger.”

b. High priority message traffic that is not highlighted or directed to a particular user may be perceived as less of a priority.

c. Use of capital letters should be limited to TC messages that are of high importance to the chat room population such as flash traffic.

7. Flash Traffic

a. Flash traffic is the use of all capitalized words to convey timely, critical information rapidly to all members of a TC room. Flash traffic is normally used by ROs and participants only. Flash traffic should be followed by critical information sent in standard message structure format with a roll call if required.

b. For more information on acceptable flash words, see FM 1-02.1 / MCRP 3-25B / NTTP 6-02.1 / AFTTP(I) 3-2.5, *Multi-Service Brevity Codes*.

c. Examples of commonly used flash words are listed in table 7.

Table 7. Examples of Flash Traffic

FLASH WORD	Meaning
AIR DEFENSE WARNING (in specific color)	Hostile attack is: RED: Imminent or in progress YELLOW: Probable WHITE: Improbable
CEASE FIRE	Discontinue firing / do not open fire. Missiles in flight are allowed to continue to intercept; continue to track.
CEASE ENGAGEMENT	A fire control order used to direct air defense units to stop tactical action against a specified target. Guided missiles already in flight will continue to intercept.
CHECK FIRE	Immediate pause of planned or current indirect fires.
DOWNED AIRCRAFT	Initial notification of potential combat search and rescue or personnel recovery event.
FPCON (Letter)	Force protection condition.

FRAGO	Fragmentary order follows.
HOLD FIRE	An emergency fire control order to stop firing on designated target to include destruction of any missiles in flight.
HOSTILE	Air to Air: A contact identified as enemy upon which clearance to fire is authorized in accordance with theater rules of engagement (ROE).
IDF	Indirect fire.
IED	Improvised explosive device.
IFE	In-flight emergency.
IMMEDIATE	Immediate fire mission / counter-fire mission.
INVESTIGATE	Verify specified elements of ROE, positive identification (PID), collateral damage estimate (CDE), and/or coordination of forces on the referenced target/track.
MEDEVAC	Information on a medical evacuation (MEDEVAC) request.
POI	Point of impact.
POO	Point of origin.
PRE-PLANNED	Pre-planned fire mission.
ROLL CALL	Initiate a TC roll call.
SAF	Small arms rire.
SAFETY	Immediate safety issue or potential fratricide.
SMACK	Clearance to employ ordnance on surface target coordinates. ROE, PID, CDE, coordination of forces, and commander's guidance requirements on the referenced target/track have been satisfied. NOT TO BE UTILIZED IN A CAS (close air support) SCENARIO.
TARGET	(Air to Ground) ROE, PID, coordination of forces, and commander's guidance requirements on the referenced target/track have been satisfied. Target/track correlation and CDE must be accomplished prior to employing ordnance/fires.
TIC	Troops in contact.
URGENT	Information that requires immediate attention.
WEAPONS (FREE/TIGHT/HOLD/SAFE)	Engagement status IAW ROE or *Brevity* ublication.

Note: Any user of a TC room with situational awareness of an immediate safety issue, potential fratricide, or other timely, critical information may post in any TC room or use flash traffic without the permission of the RO.

8. **Color Coded, Highlighting, and Sound Enabled Chat**

a. Many TC applications allow users to convey critical information in TC through the use of colors and sounds to highlight messages to the members of a chat room. For example, some users configure their TC application so that improvised explosive device (IED) flash traffic comes across as red with audio of an explosion that alerts TC users of the message.

b. Most TC applications can also alert personnel to a new message in a chat room they are monitoring by highlighting the room name. This is useful when users are monitoring more than one chat room at a time.

c. Colorizing key words linked to critical communications or TC call signs and enabling sound cues when supported by the TC software enables users to effectively monitor TC while maintaining appropriate focus on other systems critical to the mission. An example of TC color coding is depicted in Table 8.

d. Color and sound coding must be standardized in the appropriate TC procedure documents and users must accurately input the chat words necessary to "trigger" the appropriate color or sound cue. Some TC systems default to a certain color. Users should consider the capabilities and limitations of the TC application in use when planning how to best use colors, sounds, and other cues. An example of how inaccurate typing can lead to confusion and potential delays during a critical event is shown in the following medical evacuation MEDEVAC scenario:

MEDEVAC SCENARIO

A MEDEVAC operation conducted during combat operations was delayed due to the inaccurate typing of a TC user. When passing the severity of the injury in a command TC room, the user typed the abbreviation for urgent surgical, "urg-surg," to relay the casualty's condition to higher headquarters. Because the TC application they were using was set to trigger color and sound alarms for the word "urgent surgical," the message was sent with no enhancing characteristics and may have been mistakenly overlooked for a short period of time. This could have caused a critical delay in launching the MEDEVAC aircraft if the receiving user was not paying particular attention to that chat room when the message came through. Fortunately, in this scenario, the user did not rely solely on color and sound alarms and caught the error before it became an issue. This situation also highlights how TC may not be the C2 medium of choice during MEDEVAC operations.

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Table 8. Examples of TC Color Coding

Message	COLOR
FLASH TRAFFIC / Critical Unit Communications	red
Own unit elements/subordinate elements	green
Unit Commander	blue
Key External Agencies	brown
Higher Headquarters	orange

9. **Reports**

a. TC is an effective tool for sending scheduled and unscheduled reports. However, unnecessarily saturating TC rooms with report information could create a situation where users could miss seeing critical posts in fast-scrolling TC rooms (i.e., frequent posts by many users, causing text to scroll quickly). There are two primary report types used over TC applications: ad hoc and recurring.

(1) Ad Hoc Reports. Ad hoc reports are submitted as required to send or receive information (see figure 11). Examples of ad hoc reports include:

(a) In-flight reports.
(b) Size, activity, location, unit, time, and equipment (SALUTE) reports.
(c) Position reports.
(d) Status reports.

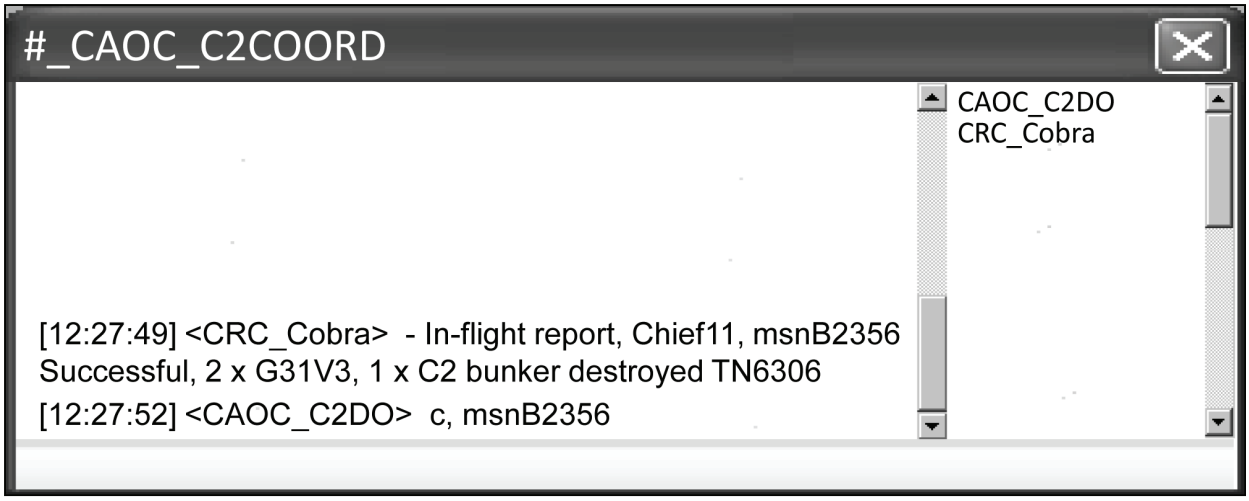

Figure 11. Example of an Ad Hoc In-flight Report

(2) Recurring Reports. Recurring reports are those submitted IAW a published battle rhythm at predictable, reoccurring times. Examples include:

(a) Airspace reports.
(b) Daily situation reports (SITREPs) and rollups.
(c) Fuel and ammunition status reports.
(d) Personnel reports.

b. The following are rules of thumb for submitting reports using TC.

(1) Reports submitted in TC rooms should be done to enhance the situational awareness of multiple users of the room.
(2) User specific reports should be sent by private chat or other means if available.
(3) Reports that are not time critical should be submitted by other means such as email, to avoid taking up valuable chat room space.
(4) Long reports should be submitted in less utilized, slower scrolling rooms so they do not interfere with critical text communications in a busier chat room.
(5) Lengthy reoccurring reports should be:

(a) Submitted often enough to ensure timeliness of information and contribute to the chat room population's situational awareness.
(b) Not reoccur too often as to contribute to information overload in a room.
(c) Highlight only changes to previous reports to limit amount of information in the chat room window.

(6) Reports following a line-format should be constructed ahead of time using another program (e.g., Microsoft Word or Notepad) and pasted into a chat room. This will facilitate accuracy and ensure the entire report is submitted at once and not broken up by chat room message traffic.

10. **Time Synchronization**

a. Synchronization. Time synchronization in TC is critical to support the submission of real-time information. In many cases the TC time may not be synchronized with the time format dictated in theater guidelines. Therefore, it is imperative that operators do not rely on the TC time as the sole source for synchronizing operations.
b. Guidelines. Theater guidelines should specify the unit of time in use for operations.

(1) Theater unit of time should be synchronized on TC network servers.
(2) Zulu time is the standard for TC networks. Use of zulu time maximizes standardization and joint integration while minimizing confusion.
(3) Users must clearly state when a TC message references any time other than the theater approved standard unit of time.

c. Time Stamps. It must be clearly understood that the time stamp automatically attached to a TC post reflects the time a message was sent and is not related to the content of the message. Users should never use the TC application indicated time stamp as an actual event time. ***Times associated with a specific event (time on target, IED) must be clearly indicated in the message content.***

(1) When a computer is added to a domain, it automatically uses the default network timing source for its time stamp. This source is set by domain controllers and should be the same as the unit of time used in theater.
(2) Certain systems, such as airborne platforms with integrated TC systems, may use their own time source.
(3) It is the responsibility of the RO to ensure their TC application is using the appropriate time.

d. Time Hacks. A daily time hack is necessary for accurate and timely transmissions using TC. Users will enhance precision of chat communications by adding a time hack to:

(1) All lawful orders.
(2) Any time sensitive information.

11. **Acknowledging TC Communications**

a. As with traditional voice communications, it is necessary that the sender and receiver of TC information close the communication loop to ensure acknowledgement and receipt of TC posts.
b. It is very easy to send a message using TC, but not as easy to determine if and when the message was received and understood. See figure 12 for an example of acknowledging TC communications.

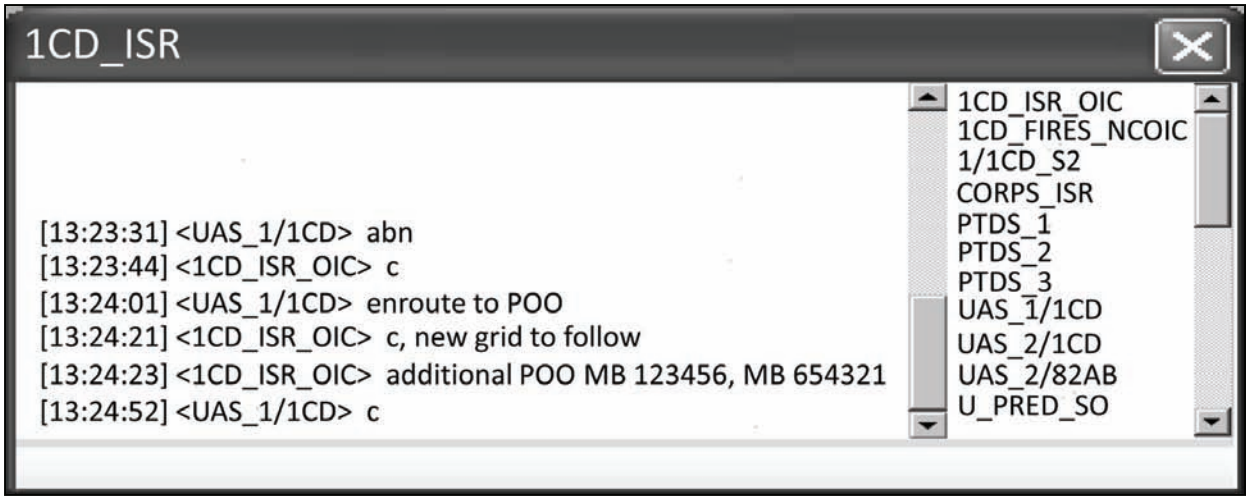

Figure 12. Example of Acknowledging Tactical Chat Communications

(1) Recipients of posts should acknowledge communications even when they are unable to process the information due to higher priorities.
(2) Examples of TC acknowledgement can be found in appendix A and include:

(a) Roger (rgr).
(b) Will Comply (wilco).
(c) Copy (c).
(d) Standby (stby).
(e) Working (wkg).
(f) Affirmative (affirm).

12. **Commands**

a. Commands given over chat are no different than those issued over a voice frequency and will typically only be given over TC command nets.
b. Guidelines for TC commands.

(1) Commands disseminated via TC must be clear and concise to reduce the potential of misunderstanding.
(2) Command messages must show intended recipient if not directed to the entire chat room population.
(3) If multiple addresses have been issued the same order, a roll call should be used to ensure acknowledgement and understanding by all participants.
(4) The requirement for the intended recipient to acknowledge the receipt of formal orders applies exactly as it does in verbal communications.

(a) If a brief back is required to facilitate understanding of a command and the commander's intent, the receiver of the message should make every effort to conduct the brief back verbally.
(b) If TC is the only available means, then the receiver should brief back their understanding of the command in their own words and avoid simply cutting and pasting the original command to validate they understood the commander's intent.

(5) When relaying orders for another agency, users should include the order issuing agency's TC call sign and the term "directs" followed by the order (e.g., G3 directs…).

c. Do not use TC to pass or relay commands or lawful orders when:

(1) Theater, Service, or command dictates otherwise.
(2) Another medium would be faster or more effective.
(3) The order contains information beyond the need to know of the other chat room participants.

d. Examples of commands and lawful orders utilizing chat are:

(1) Flash traffic.
(2) Operation orders.
(3) Reposition or committing forces to a specific tasking (see figure 13).
(4) Aircraft commands to return to base.
(5) Clearing fires.
(6) Activating an airspace control measure or fire support coordination measure for a particular asset to support a mission.

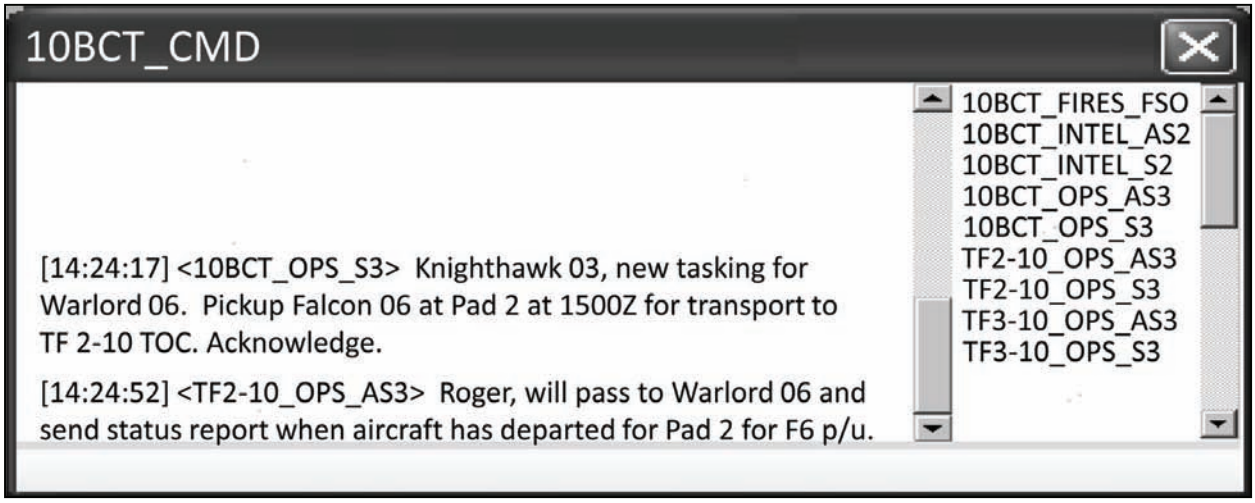

Figure 13. Example of Lawful Orders on Tactical Chat

13. Private Chat

The majority of TC applications allow users to conduct private chat, commonly referred to as whisper, to discuss topics apart from the chat room population. This feature is often used as a way to conduct detailed coordination that could otherwise flood a chat room and cause confusion of the other users. It allows for private agency-to-agency coordination by allowing one user to invite another into their own personal chat room. Private chat keeps unnecessary details out of the main room.

a. There are several key considerations when using private chat:

(1) Private chat should only be considered for essential matters that concern one or two users, where a phone or similar means is impractical.
(2) When a discussion is likely to generate confusion, a private chat room may be used.

(3) Where a complex or long transmission to a small group is necessary, a private room is the preferred method. Units should have these rooms established in advance for this purpose.

b. Private chat has the potential to negatively impact the TC community. Private chat:

(1) Will reduce the main chat room users' situational awareness.
(2) Will potentially reduce other users' access to critical information.
(3) Should be short in duration and as specific as practical.
(4) Should not be used when information is time critical.
(5) May not be authorized by the RO, as stated in the room description.

c. Avoid using private chat to communicate decisions or orders. Decisions and orders should be communicated in an official command TC room or by other means. When communications are likely to raise questions, or cannot effectively be conveyed via private chat, a phone or radio shall be used in order to mitigate the potential for confusion.

14. **Chat Room Layout Rules of Engagement**

In order to increase efficiency, units should filter information flow based on mission requirements. Units may choose to separate key staff functions into specific chat rooms or use TC to consolidate radio nets matching a traditional voice net structure. A key to success is for units to appoint qualified operators to participate in these chat rooms to maximize the flow of information. Commanders must carefully assess the number of chat rooms and cross check to ensure their TC users can accomplish the task without distraction or task saturation. Leaders need to make an assessment based on both the mission and the capabilities of their TC users to determine the number of TC rooms their operators can effectively monitor.

a. Users must be given guidance on which TC rooms require participation vs. observation for task accomplishment and they must configure their screen accordingly. This is traditionally found in a TC Guard Chart found in procedure documents such as annex K to an OPORD, SPINS, or OPTASKCHAT.

b. Operators responsible for very specific, mission essential tasks should monitor a single priority chat room. If needed, users may add one or two additional rooms as required for critical situational awareness.

c. Operators with multiple duties or broader responsibilities may need to monitor multiple windows. Rules of thumb for monitoring multiple windows:

(1) Recent theater experience has shown that four to six rooms are typically the maximum number that can be effectively monitored at any given time.
(2) Up to ten additional rooms may be open, but minimized and occasionally "cycled through," or have features such as "flash" in mIRC, to assist with notification when new traffic is posted.
(3) Resizing priority chat rooms to make them stand out enables a more effective scan pattern and reduces the likelihood of missing information due to a fast TC scroll rate caused by frequent posts from the chat room population.
(4) TC rooms with a fast scroll rate should be configured larger than other TC rooms with less communications.

(5) Making priority rooms larger and moving them to the left side of the screen compliments a typical TC scan pattern (left to right).

(6) Use of dual monitors with all chat rooms tiled on one (left or right monitor) as a technique may also be useful to minimize confusion with other computer applications.

d. Figures 14, 15, and 16 give examples of the three different chat room layouts based on user experience, competence, and responsibilities. Some platforms, particularly aircraft, may have limited screen space to show multiple windows simultaneously. Individual platforms will have to prioritize their chat room participation and ensure that all participants are aware of these deficiencies.

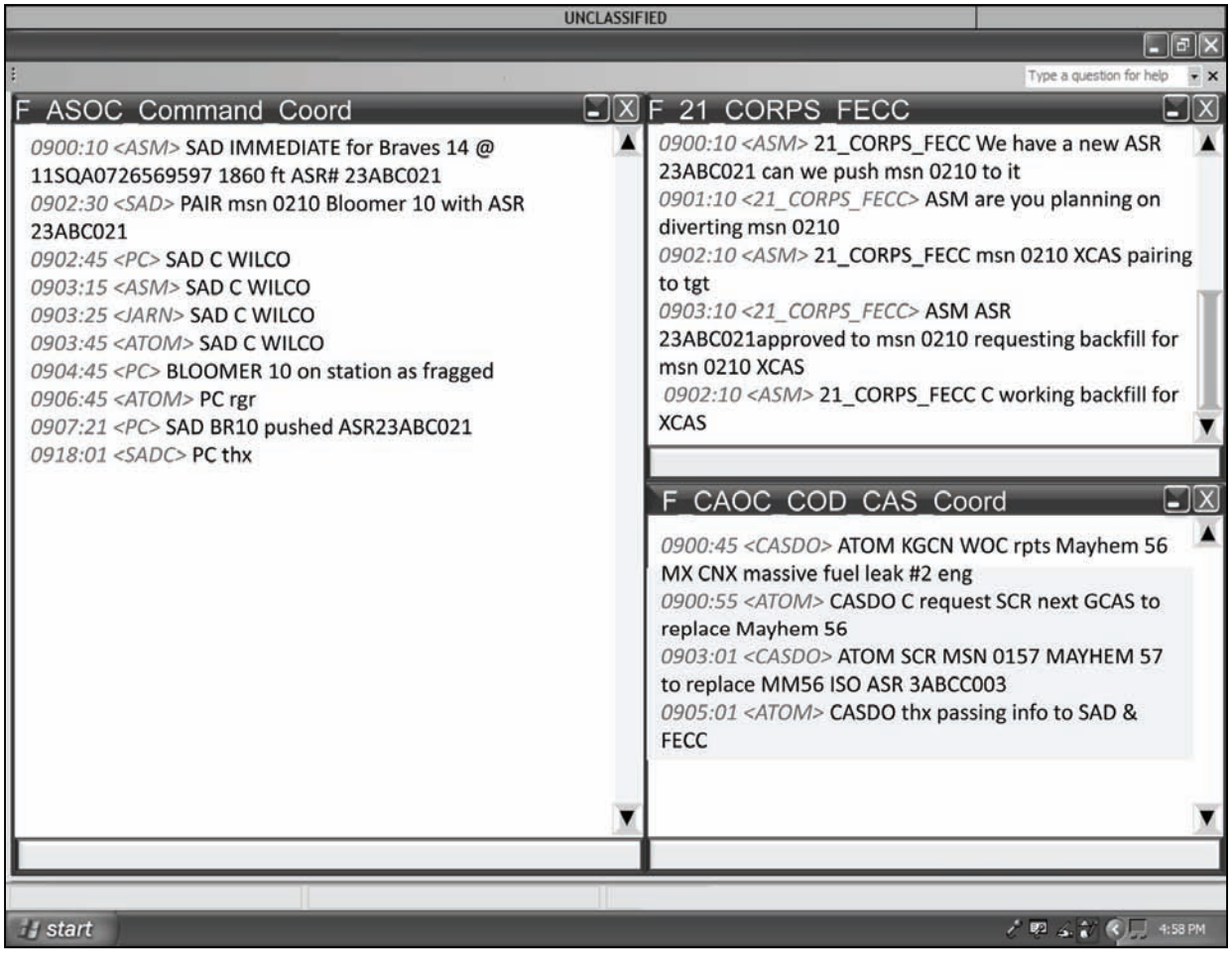

Figure 14. Chat Room Layout Example – 3 Rooms

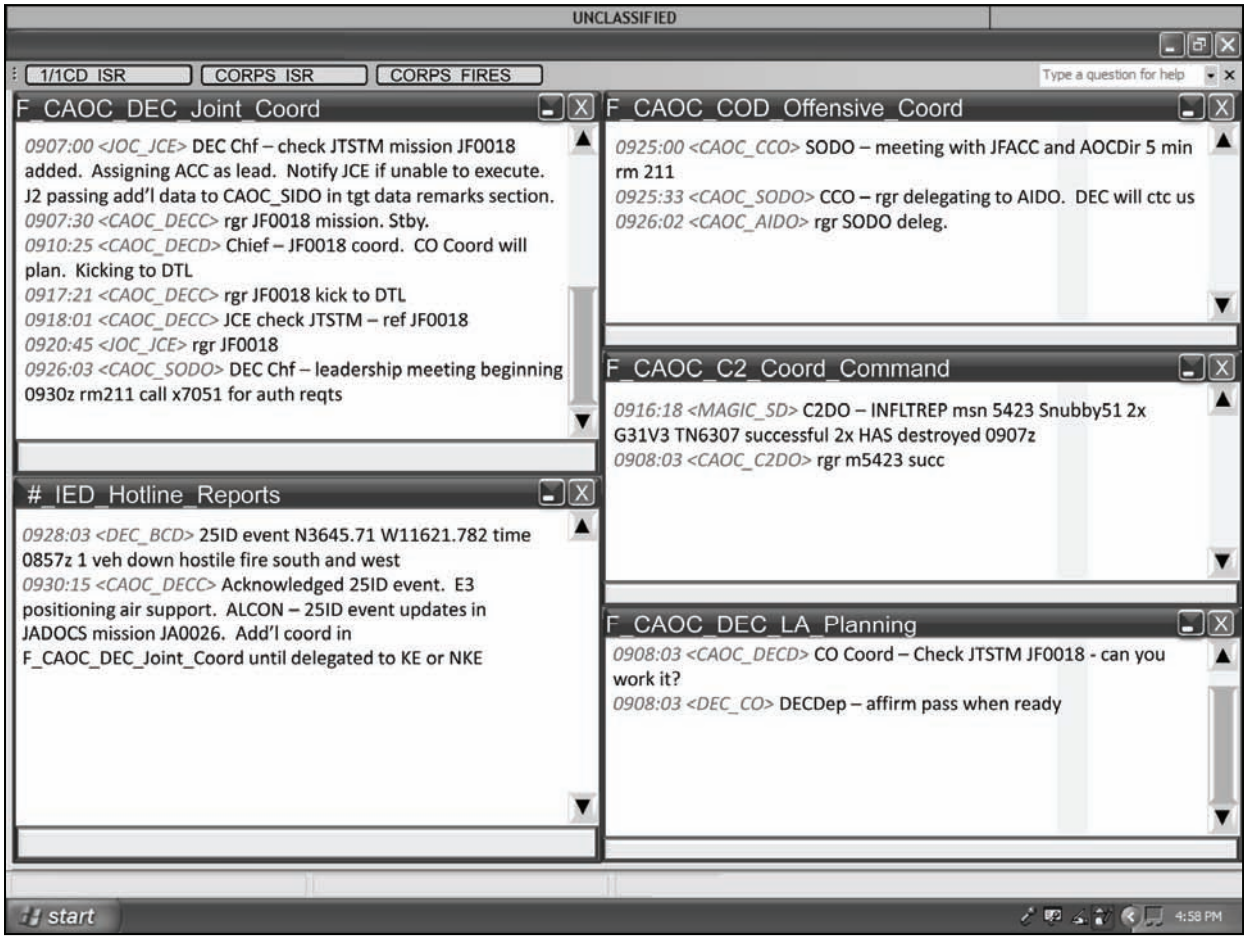

Figure 15. Chat Room Layout Example – 5 Rooms

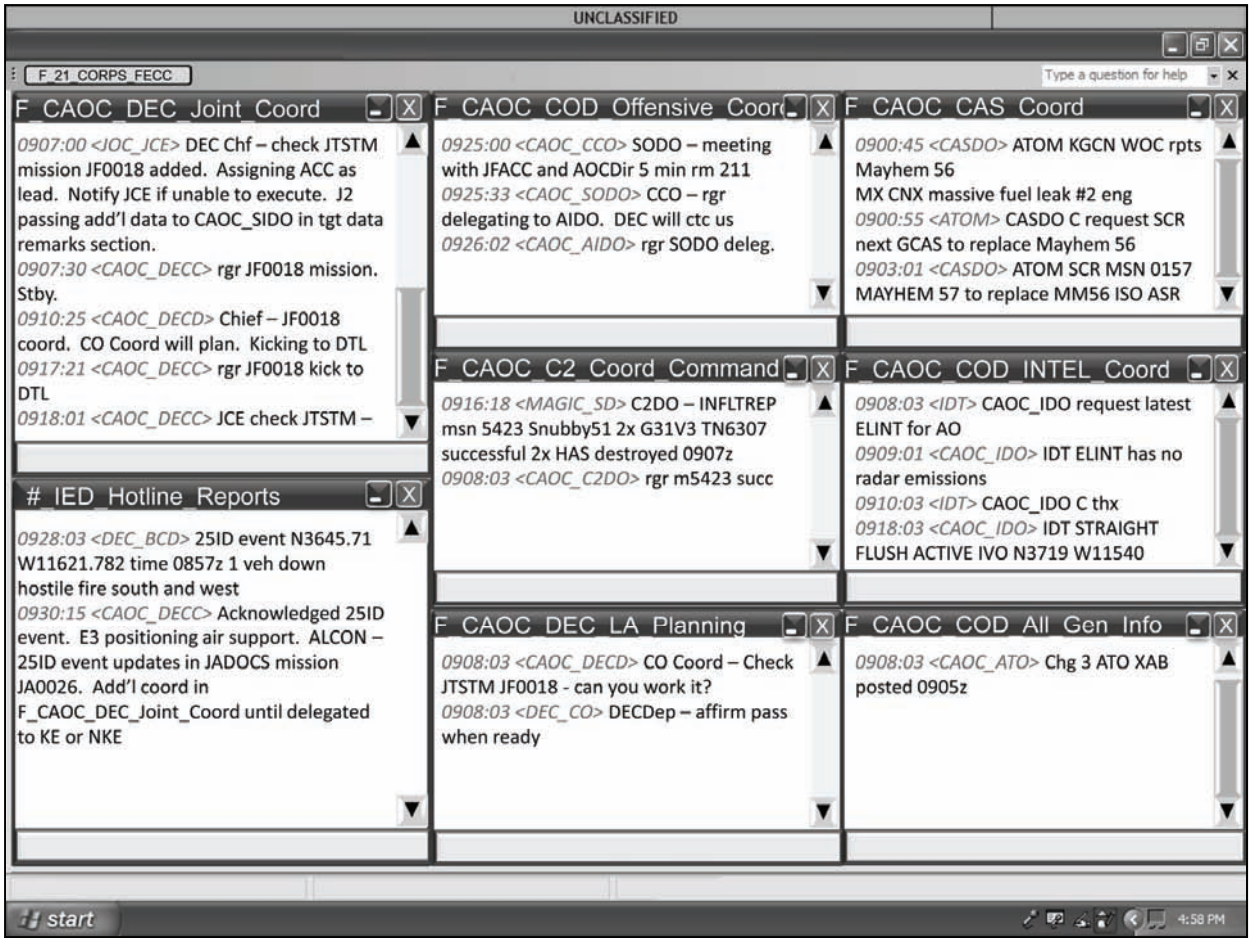

Figure 16. Chat Room Layout Example – 8 Rooms

15. Minimizing Communication Errors

An important element of TC is the ability to allow users to pass information between chat rooms, from chat room to voice net or chat to another digital system. This inherent flexibility allows information posted in one chat room to be quickly passed on to a larger population for simultaneous action on the information. For this reason, it is critical to minimize communication errors when transferring information so that only accurate information is disseminated.

a. Cut and Paste. Cutting and pasting information to cross post into multiple TC rooms is a way to quickly work a tactical problem in parallel. However, be advised timely quality control of outgoing message information should occur prior to sending.

(1) When using cut and paste, extreme care must be used to ensure all pertinent information is copied.

(2) For critical communications, users should proof read the text line prior to pasting the information into a different chat room or SOR to ensure accuracy and to prevent inadvertently spreading bad information.

(3) An alternate method to consider is sending a link or directions to the room of interest to avoid pulling information out of context. Consideration must be given to limitations on access to other rooms, the urgency of disseminating the information, and the releasability of the information.

b. Accuracy. The potential for inadvertently spreading bad or improperly coordinated information on TC is high. Attention to detail is critical.

(1) Users must pay particular attention to ensure their posts are entered in the right TC room. As a rule of thumb, users should check twice before hitting send.

(a) Check the room name prior to entering a TC post.
(b) If a post is typed into the entry line of the wrong room:

- copy and paste the entry into the right room, and
- delete the text from the entry line of the wrong room prior to hitting enter on the computer.

(2) If an error is made in posting a message, quickly correct the error and ask for acknowledgement from all pertinent users.

c. Scroll Rate Error. Users must be aware that posts may quickly scroll off the screen in a rapidly scrolling TC room.

(1) It is critical that users possess the ability to “keep up” with traffic scrolling quickly in a chat room, especially when sending chat that requires acknowledgement to specific users.
(2) If no acknowledgement is received from the intended recipients:

(a) Scroll up in the chat room to ensure you posted in the right room.
(b) Send a message to the intended recipient to receive acknowledgement of message.
(c) If acknowledgement is not received after an appropriate amount of time, repost the information. Consideration should be given to the amount of information posted. Large amounts of information posted a second time will cause an additional rapid scroll rate and could worsen the problem.

(3) Users must realize that based on communications priorities and the tactical situation, their post may not be the highest priority at the time for the intended recipient. Patience is required in these situations.

Chapter IV

BEST PRACTICE VIGNETTES

1. Warfighting Mission Areas

TC has become a common means of collaboration throughout tactical operations. TC can be a primary, secondary, or tertiary means of communication and is often selected as the primary means due to its flexibility and ease of use. This chapter contains best practices for using TC with specific examples showing how TC, in the coordination, integration, and execution of missions, often augments current collaborative tools and systems of record. Examples highlight how TC has improved operations across major warfighting mission areas to include maneuver, logistics, intelligence, fires, force protection, air operations, and personnel recovery.

2. Maneuver

TC is used in maneuver to augment other communication means both across units and up echelons. While TC cannot replace voice communications, it can greatly enhance situational understanding when used for communicating between echelons above division (EAD) assets and tactical or operational units. TC is also used to enhance maneuver by augmenting systems of record to ensure critical information is passed quickly to the largest number of required users.

a. Several methods in which TC enhances maneuver include:

(1) Sending and receiving mission information and orders.
(2) Sending, cueing, and lasing instructions to UAS mission payload operators.
(3) Providing real time UAS information directly back to the supported maneuver unit's tactical operations center (TOC).
(4) Providing real time updates on close air support (CAS) or close combat attack (CCA) support to maneuver units in contact.
(5) Facilitating a common operational picture (COP) by collaborating information between TOCs on the location and movement of unit troops on the ground with adjacent or supporting forces.

b. Several examples of how TC enhances maneuver are described in the following vignettes.

CORDON AND SEARCH VIGNETTE

During a day mission by ground maneuver units conducting cordon and search operations in a small village known for harboring insurgents, a Predator UAS flying in support of troops on the ground spotted movement on the roof of a previously searched building. The UAS operator, noticing that the forces conducting the cordon and search had already begun moving away from the structure, used TC to immediately notify the ground unit's TOC that an individual was moving on the roof and appeared to be getting into a hide site. After communicating this information to the troops on the ground, the TOC confirmed that the individual seen by the UAS was not in their unit, and with the assistance of the UAS operator using TC, was able to direct his troops to reenter the building and "talk" them to the suspected hide site over voice communications. The individual hiding on the rooftop was then captured. The use of TC in this instance was critical to the capture of an insurgent that would otherwise have escaped. Units have begun to incorporate VOSIP with TC in OIF to allow units to speak directly with UAS operators, increasing productivity by 50%.

SECURING THE OBJECTIVE VIGNETTE

During Operation Iraqi Freedom, 3rd Corps Headquarters published an OPORD to secure an objective area for Multi-National Division-Baghdad (MND-B). TC operators, armed with the detailed planning of phased objectives, units tasks, and supporting assets published in the OPORD, were able to maintain real time awareness of the operational environment through TC by monitoring critical chat rooms populated by the organizations enhancing C2 for the mission. As the operation unfolded, MND-B Headquarters TC operators used the timely information flow provided through TC to respond immediately to critical tasks. Information radioed from the field to unit TOCs was quickly passed up to MND-B over TC, and operators were able to coordinate A-10 and field artillery support, adjusting, synchronizing, and deconflicting it through the "Fires" chat room based on mission developments. By using TC to adjust fires, friendly forces were quickly and accurately able to maximize maneuver and ensure mission success.

3. **Logistics and Force Sustainment**

TC is used in logistics and force sustainment operations to pass necessary and often critical logistics information without flooding voice communication mediums. This enables forces to provide support and services to help ensure freedom of action, extend operational reach, and prolong endurance. TC is also used to send detailed logistics and other sustainment reports across units and up and down echelons IAW a published battle rhythm or when ad hoc reports are requested by higher headquarters. It can also be used between units to coordinate logistical support for troops passing through another unit's area of operations.

a. Several methods in which TC enhances logistics and force sustainment include:

(1) Passing daily logistical reports to TC users.
(2) Providing forward arming and refueling point (FARP) status reports to users.
(3) Forecasting and coordinating for logistical restocking of critical supply items.

(4) Coordinating with adjacent units to assist with the critical resupply of units passing through their area of operations.
(5) Passing changes in personnel status reports to facilitate rapid requests for forces.
(6) Coordinating aerial refueling missions to prolong support operations.

b. An example of how TC enhances logistics is described in the following vignette.

CRITICAL REFUELING VIGNETTE

During Operation Enduring Freedom, a 10th Mountain Division Blackhawk helicopter returning from a battlefield circulation mission ran into a wall of thunderstorms while coming over a mountain pass. They did not have enough fuel to return to the airfield and were in a fuel critical situation. They notified their battalion TOC using both voice and chat over Blue Force Tracker (BFT) that they needed information on the status of fuel available at a nearby forward operating base (FOB) that was out of radio communications range and not usually configured to refuel helicopters. The TOC immediately requested and received an ad hoc status report from the FOB using TC. The FOB responded, indicating that the FARP was currently in a "cold" status but that they could have it operational in time for the helicopter's arrival and had enough fuel to support the mission. This information was sent back to the helicopter via voice communications and the crew was able to divert to the FOB for refueling and eventually returned safely to their home airfield after the weather had passed. The combined use of voice communications, TC, and a system of record with chat capability, resulted in the logistical resupply of an aircrew and the successful completion of their mission.

4. **Intelligence**

TC is used extensively in the intelligence community in support of targeting to gather and disseminate near real-time intelligence, surveillance, and reconnaissance (ISR) data among multiple users. TC is effective because of its inherent ability to inform a broad base of users about rapid changes. Using TC, intelligence officers can update their estimates immediately, giving commanders a more accurate picture of the most current situation in the operational environment.

a. Several methods in which TC enhances intelligence include:

(1) Receiving, analyzing, and distributing SALUTE reports.
(2) Receiving, analyzing, and distributing battle damage assessments (BDAs).
(3) Comparing ISR data by coordinating to cross-cue multiple ISR assets.
(4) Passing enemy indirect fire information from multiple ISR assets to quickly acquire enemy locations for conduct of counter-fire operations.
(5) Forwarding UAS ISR information to operation centers and other TC users to include:

(a) ISR sensor-to-shooter communications (see figure 17).
(b) Counter IED detection/interdiction.
(c) Status and station time of UAS asset providing tactical over watch.

(6) Quickly redirecting ISR assets to priority missions decreasing response time.

(7) Directing ISR assets to use optics and systems such as electronic identification and moving target indicators.
(8) Gathering timely intelligence information and quickly incorporating it into the COP to provide a near real-time picture of the operational environment.

b. Examples of how TC enhances intelligence are described in the following vignettes.

SNIPER VIGNETTE

During a daylight operation, a Hunter UAS was orbiting near troops in contact with the enemy at a road intersection. The Infantry Soldiers on the ground began to take sniper fire from one of the surrounding structures but were unable to pinpoint the location of the sniper due to sunlight and many buildings near their position. The company commander immediately reported the situation to his battalion TOC. The message was heard by the intelligence officer who recommended tasking the nearby UAS with an orbit that would facilitate locating the sniper. The TOC battle captain then contacted the UAS operator through TC with the mission information and recommended areas to conduct surveillance based on the intelligence officer's analysis. The UAS was immediately moved to an orbit that facilitated viewing the buildings surrounding the ground forces. With the help of the battalion intelligence officer giving the UAS operator pan and zoom guidance, the location of two snipers was pin pointed. The information was then passed through chat and video imagery to the TOC for targeting.

THEATER TO BRIGADE ISR COORDINATION VIGNETTE

JSTARS [Joint Surveillance Target Attack Radar System] was used during curfew hours in Bagdad, Iraq, to monitor an area for movers using moving target indicators (MTI). Just after midnight, they observed a MTI in a neighborhood known for its recent IED activity. With its onboard TC system, the JSTARS coordinated directly with a brigade combat team (BCT) TOC to use their Shadow UAS to further investigate the MTI. Using chat, the Shadow was tasked by the battle captain with a new orbit and objective. With the assistance of the BCT S2's analysis of the Shadow video feed, the BCT was able to quickly obtain positive identification of a 5-man team emplacing IEDs and immediately notified the combat aviation brigade via TC and a nearby ground patrol with a SALUTE report over voice communications. Within 30 minutes, two Apache helicopters destroyed the target and a ground patrol was directed to the scene to secure the area and conduct the BDA.

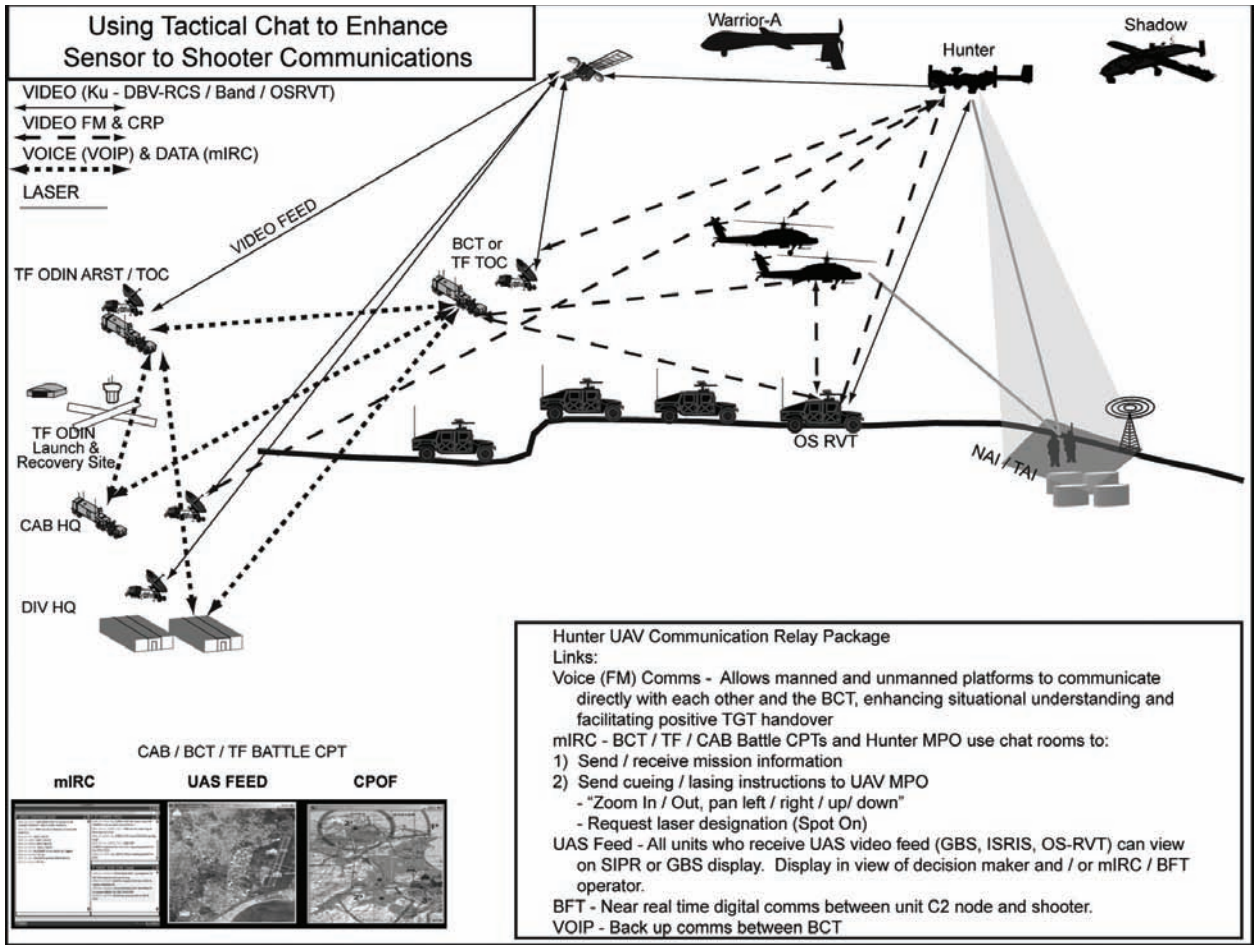

Figure 17. Sample Sensor-to-shooter Communications Net Using TC

5. **Fires**

TC is used in the conduct of fires to enhance the collective and coordinated use of indirect and joint fires through the targeting process. The ability to deconflict airspace rapidly using chat has proven significant in reducing the time required for the conduct of fires in recent operations. TC has significantly enhanced the coordination process and reduced the kill chain by coupling the ability to consolidate all airspace coordination for a given area or responsibility into a single chat room.

a. Several methods in which TC enhances fires include:

(1) Rapidly deconflicting airspace.

(2) Reducing the kill chain by allowing users to monitor communications traffic and only input changes when needed.

(3) Coordinating counter battery fire by cross-cueing multiple assets.

(4) Providing rules of engagement (ROE) verification.

(5) Disseminating information and coordinating activation and deactivation of:

(a) Restricted operations zones (ROZ).

(b) Special use airspace.

(6) Passing information to coordinate surface fires to include:

(a) Point of origin (POO).
(b) Point of impact (POI).
(c) Maximum altitude.
(d) Airspace impacted.

b. Examples of how TC enhances fires are described in the following vignettes.

CLEARANCE OF FIRES VIGNETTE

Ground units in Afghanistan were commonly separated by more than 90 kilometers. Line-of-sight issues made TC the primary method of communication between battalion and brigade TOCs. The radio telephone operator would monitor a minimum of four chat rooms (battle captain, CJTF Fires, CJTF ASOC, and combined joint special operations task force) for significant activities. The CJTF and division chat rooms were used for clearance of fires between unit boundaries above the battalion level and into numerous CJTF-owned areas in support of extremely long convoys and air-assault operations. Rather than contacting several agencies via radio or telephone and taking several minutes to initiate fire missions on a fleeing target or in the middle of a TIC, unit fire support elements used TC rooms to request fires and deconflict airspace required for the mission in a matter of seconds. An example of this transaction would look like this in the Fires Chat Room:

"[03:31:27] <2/1BDE_BAE_FSE> IMMEDIATE Fire Mission, POO, Grid 28M MC 13245 24512, Killbox 32AY1SE, POI GRID 28M MC 14212 26114, Killbox 32AY3NE, MAX ORD 8.5K"

The CRC controller acknowledges the fire mission request and works to move or restrict manned aircraft from affected airspace/altitudes.

"[03:31:28] <CRC_Resolute> 2/1BDE_BAE_FSE, stby wkng"

Once the CRC controller has issued all restrictions, moved aircraft if required, and sanitized affected airspace using radar awareness from their scope, they provide clearance to the requester.

"[03:31:57] <CRC_Resolute> 2/1BDE_BAE_FSE, Resolute all clear"
"[03:32:04] <2/1BDE_BAE_FSE> c"

Once the fire mission is complete, the brigade fire support element notifies users of the end of mission.

"[03:41:23] <2/1BDE_BAE_FSE> EOM
"[03:41:31] <CRC_Resolute> c"

COUNTER BATTERY VIGNETTE

Upon taking indirect fire at a forward operating base (FOB), TC was used to cross-cue and coordinate multiple ISR and fires assets within theater to respond. Counter battery radar initiated the process after picking up the incoming rounds and immediately posted their POO in the fires chat room. A UAS operator with an asset overhead immediately slewed his optics to the POO grid and informed the supporting unit of a possible positive identification (PID) of an enemy mortar/rocket team. Airspace controllers in the fires chat room reading the message traffic simultaneously began clearing airspace for counter battery fire while a new UAS was assigned to follow and maintain PID of the enemy if they traveled outside of the line of site of the initial UAS. At the same time, a counter-fire was coordinated over TC, an air weapons team was ramped up, and a nearby ground patrol was notified of the target. A fires process that has traditionally taken numerous radio calls and large amounts of time to synchronize was coordinated and executed in a few short minutes using TC.

6. **Force Protection**

TC is used to enhance force protection by quickly disseminating key information so that commanders can continue to present maximum combat power while preserving their forces and responding to threats in a timely manner.

a. Several methods in which TC enhances force protection include:

(1) Immediately disseminating threat level changes and base defense conditions to all users.
(2) Directing unit responses to enemy attacks such as indirect fire.
(3) Changing or updating mission oriented protective postures.
(4) Sending personnel and equipment reports following attacks on FOBs.
(5) Changing or updating air defense postures in response to an aerial threat.
(6) Coordinating defensive counterair (DCA), [USMC used the term antiair warfare] or air defense artillery (ADA).
(7) Directing force protection surveillance system operations.

b. An example of how TC enhances force protection is described in the following vignette.

AIR DEFENSE VIGNETTE

During an air defense exercise hosted by the Weapons Tactics Instructor Course at Marine Corps Air Station Yuma, AZ, the Army Patriot and Marine Tactical Air Operations Center (TAOC) heavily utilized TC during the execution phase of the mission to pass timely information. Both units used it to pass engagement orders, Link-16 target track numbers, missile inventories, and status reports. In the words of one observer, “this hugely aided the Sector Air Defense Commander’s ability to address immediate threats with the most pertinent weapons system, F/A-18 or Patriot, in a timely and lethal manner.” Additionally, when voice communications were lost, TC was the only method to cue Patriots for targeting. Without a chat capability, the missile sites would have gone into “self defense mode,” greatly increasing the chance for fratricide and decreasing the ability to accomplish the defense mission.

7. **Air Operations**

TC is commonly used to coordinate full spectrum air operations because it provides a fast and deliberate means to communicate information allowing aviation units to respond quicker to supported units. This is especially important when coordinating time critical aviation support for troops on the ground such as MEDEVAC, casualty evacuation (CASEVAC), CCA, and CAS.

a. There are many ways in which TC enhances air operations to include:

(1) Passing of critical requests for:

(a) 9-Line CAS requests.
(b) CCA Support.
(c) MEDEVAC requests.
(d) CASEVAC requests.

(2) Coordinating approval, coordination, and deconfliction of UAS, rotary-wing, and fixed-wing aircraft.

(a) UAS launch, handoff, operation, and recovery may be coordinated via TC primarily and voice secondary.
(b) Rotary or fixed-wing aircraft airspace can be coordinated via TC between TOCs, joint terminal attack controllers (JTACs) and TOCs, or TOCs and combined air operations centers (CAOCs)/air operations centers (AOCs).

(3) When an aircraft is on a JTAC frequency, TC can be used to coordinate:

(a) Lethal airspace (i.e., aircraft dropping munitions).
(b) Show of force.
(c) Climbs/descents.
(d) ROZ enforcement.
(e) Type 1, 2, or 3 control information.

(4) CAS coordination to include:

(a) Near-real-time management between ASOC and CRC/Airborne Warning and Control System (AWACS)/Joint Surveillance Target Attack Radar System (JSTARS) of air support requests (ASRs) and supporting aircraft.
(b) Troops in contact (TIC) declaration and response.
(c) Kill box activation and deactivation.

(5) Dynamic targeting (DT) coordination to include:

(a) Initial notification or tasking from CAOC/AOC to controlling agency.
(b) Target information/9-Line passed to ASOC/controlling agency/JTAC.
(c) Engagement authority.
(d) BDA determination.

(6) Alert scramble coordination to include:

(a) Request and authorization between tactical and operational assets.
(b) Air refueling coordination/management.
(c) Refueling track.
(d) Tanker and receiver status and locations.

(7) Airfield operations and weather information dissemination to include:

(a) Airfield divert status and alarm conditions.
(b) Current and forecasted weather.
(c) Arrival and departure status.

(8) Global strike coordination to include:

(a) Authorization of target designation.
(b) Scrambling of assets.
(c) Providing clearance to engage.

b. Examples of how TC enhances air operations are described in the following vignettes.

AIR SUPPORT REQUEST VIGNETTE

A JTAC was notified that a forward ground element was taking fire and was requesting CAS. The JTAC used the designated TC chat room to notify the ASOC that the forward element was taking fire and was requesting support. He immediately passed the grid location, threat details, and control frequency, and then followed up with a full "9-Line." Using TC to multitask, the ASOC, CAOC, and CRC/E-3 coordinated to get a flight of F-16s overhead. Through chat, these agencies were also able to quickly revise the aerial refueling plan to move a tanker into place to support the mission. The F-16 pilots then received the updated tasking, accurate 9-Line information, and revised refueling plan in a fraction of the time it would have required using more traditional communication methods (joint air request net and C2 coordination SATCOM [satellite communications nets]).

AIRSPACE COORDINATION VIGNETTE

During a recent deployment to OIF, the senior director of the CRC monitored six TC windows (ASOC, C2, CAOC Tanker Cell, TAOC/DASC, Radar Approach Control/Airspace, and Special Operations). This allowed near real time targeting communication between the ASOC and supported JTACs, various positions in the CAOC, special operations forces, all UAS operators, and other C2 agencies such as ATC facilities, the Marine TAOC, and the DASC. This configuration was especially helpful when airspace was requested by aircrews that straddled or flew across the areas of responsibility of multiple C2 agencies. All impacted players were up in a single chat room and could coordinate in seconds rather than minutes by radio or secure phone. This use of TC reduced traffic on three SATCOM nets increasing bandwidth for primary communications.

8. **Personnel Recovery**

Another mission area in which TC can be used is personnel recovery (PR). However, there is a danger using TC in a PR event due to the nature of the mission. Multiple users jumping into the chat room information flow can distract the primary recovery mission. It is critical, especially in the TC environment, to maintain good communications discipline. Once notification of isolated personnel is passed via TC, multiple units/resources are simultaneously notified saving time and redundant communications.

a. Several methods in which TC enhances personnel recovery include:

(1) Disseminating information on the location and condition of personnel.
(2) Authorizing and coordinating the support of ISR assets.
(3) Activating and deactivating ROZ as required.
(4) Integrating and synchronizing responding units.

b. The joint personnel recovery center (JPRC) uses TC to notify the TACS on all search and recovery operations, typically through a chat room monitored by most units in the operating environment. This allows responding units to have the same information to coordinate their efforts and synchronize a response to execute the recovery.

Chapter V

TC TROUBLESHOOTING

1. Troubleshooting

When a problem with TC is first detected by a user, the extent and nature of the problem must be quickly assessed to ensure minimum loss of critical information during the down time. Some problems may be quickly resolved by the users themselves. Other problems may require involvement by communications personnel. It is critical to record essential information in open chat rooms and document the time the system went down prior to resetting. This will help ensure continuity and determine the need to acquire information missed during the time TC was inoperable. This chapter identifies the immediate and follow-on actions of a user to ensure the fastest troubleshooting and remedy of common TC problems. Table 9 is a sample checklist for trouble shooting TC.

Table 9. TC Trouble Shooting Checklist

Immediate Actions. Use the following actions to restore or isolate faults with TC before reporting a problem to a Help Desk.	
1	Check local area network (LAN) connections. Some systems have lights to indicate connectivity.
2	Check power connections. Ensure battery, adapters, and outlets all work.
3	Scroll to bottom of chat room window. Users scrolled to the top will not see new message traffic and the screen will appear to be “locked up.”
4	Compare your workstation to other local workstations to determine if the issue is isolated to one system or a group of systems.
5	Determine if other systems using the same network have issues. Call other units with users in the chat room if necessary.
6	Close all non-essential applications.
7	Close all non-essential chat rooms.
8	Type a test message in the chat room to see if it posts in the window. Example “.”
9	If the faults are cleared by the above actions, then resume normal operations. If not, then continue to troubleshoot internally by resetting the system.
Follow-on Actions.	
1	Record essential data from the chat room window (times, locations, reports, etc.).
2	Disconnect and then reconnect to the TC server and check for connectivity.
3	Connect to an alternate TC server if available.
4	Restart TC application and check for connectivity.
5	Reboot entire system and check for connectivity.
6	If faults are cleared by any of the above actions, then resume normal operations. If not, assess whether you have lost all TC functionality, or if you have limited capability with an abnormal condition. Examples of abnormal conditions are: • Slow performance. • All or some of the usual room participants and observers are not present. This assessment will dictate the user’s next course of action.

Actions with no TC Functionality.	
1	Immediately proceed to alternate communications means identified during mission planning.
2	If possible, capture any important tactical data remaining in the chat room window (times, locations, tactical reports, etc.).
3	Initiate trouble ticket procedures with the Help Desk or communications personnel.
4	Track trouble ticket procedures until full capability is restored. Assist the Help Desk or communications personnel with a detailed description of the problem.
5	Discuss TC problems during shift change briefings.
Actions with Limited TC Functionality.	
1	Initiate trouble ticket procedure with the Help Desk or communications personnel.
2	Prepare for possibility of a total loss of TC capability by: • Testing secondary communications means identified during mission planning. • Capturing any important tactical data from the chat room window.
3	Track trouble ticket procedures until full capability is restored. Assist the Help Desk or communications personnel with a detailed description of the problem.
4	Discuss TC problems during shift change briefings.
Actions when TC is Restored.	
1	Contact the Room Owner to let them know you are back online.
2	Request Room Owner or participants “repost” important traffic missed during the outage. To avoid confusion and information saturation, reposting of missed information should not be done in primary rooms. Room Owners may create rooms for this purpose. If no room is available, a private chat may be used.

2. **TC Administration and Servicing**

TC administration and servicing will be accomplished by specific Service communications personnel at their respective levels. These specialists will ensure network hardware, software, and firmware are configured and maintained, data is recorded, and technical support is available to TC users. To ensure rapid technical support of TC operations, a Help Desk and/or trouble ticket process may be established with procedures outlined in the appropriate TC procedure documents (OPORD annex K, SPINS, or OPTASKCHAT).

3. **Troubleshooting Matrix**

The troubleshooting matrix depicted in figure 18 can be used as a quick reference for TC users. Having this form near a computer terminal that is using TC in support of operations will facilitate the immediate response of a user to a problem and avoid time wasted seeking out communications personnel.

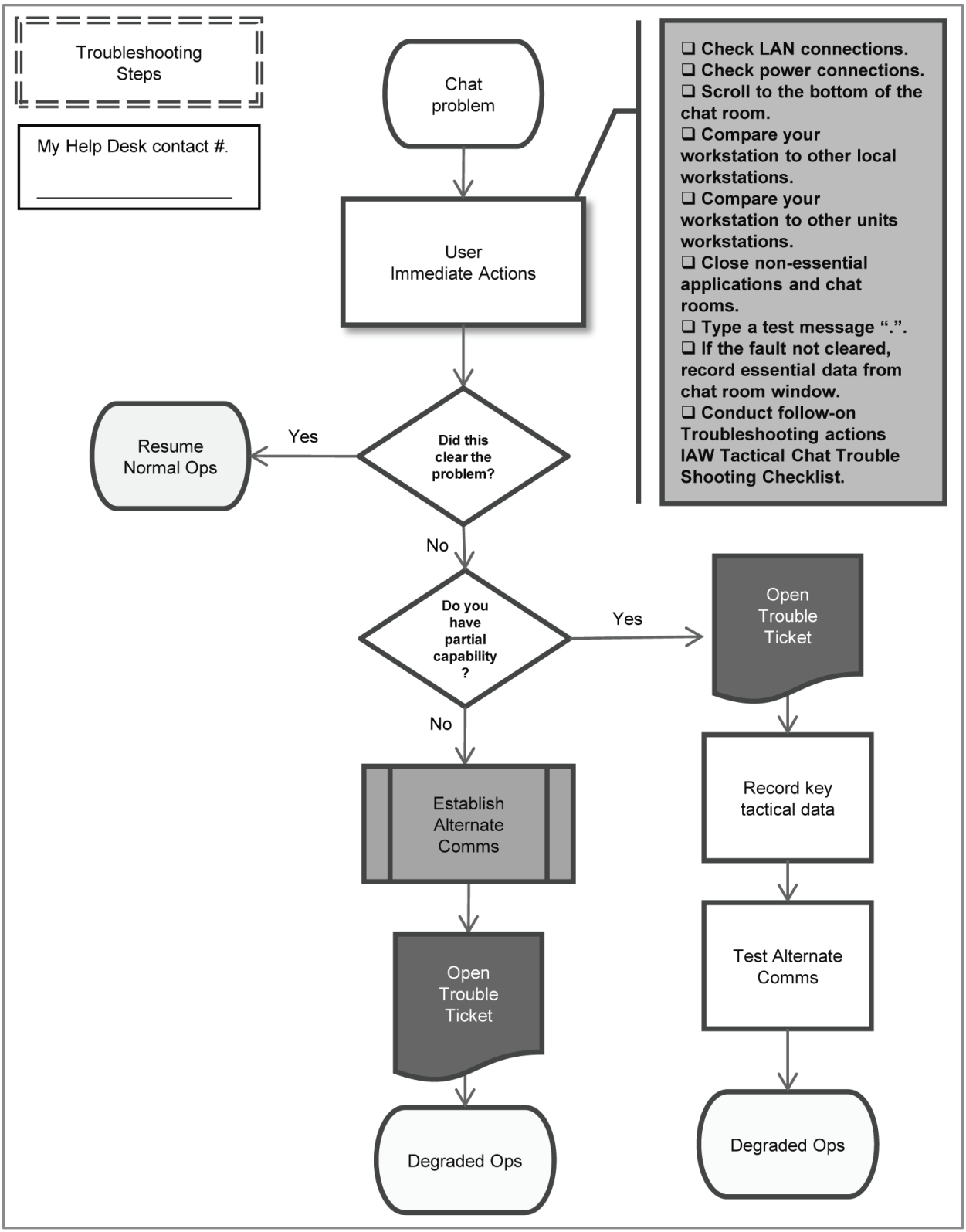

Figure 18. Tactical Chat Troubleshooting Matrix

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Appendix A

EXAMPLES OF TC TERMS AND ABBREVIATIONS

Term or Abbreviation	Meaning
abn	airborne
arr	arrived
a/c	aircraft
a/f	as fragged or airfield depending on context
affirm	affirmative
afk	away from keyboard
appr	approved
aar	after action review
a/s	airspace
ata	actual time of arrival
atd	actual time of departure
att	at this time (use 'now')
bolo	be on the lookout for
c	copy (acknowledgment of receipt)
ck	check
cip	come in please (generally used when initiating whispers)
Clr	clear
clrd	cleared
canx	cancel
comm	communications
consol	consolidate
c/s	call sign
dc	disconnected
decon,	deconflict or decontaminate depending on context
decond	deconflicted
dep	departed
d/o	drop off
dz	drop zone
enrt	en route
eom	end of mission
eta	estimated time of arrival
etd	estimated time of departure
fc	frequency change
fl	flight level (altitude in hundreds of feet)
ff	flight following
ftr	failed to radio
g2w	good two way communication
gt	good test (reply to a "t" ((test)) connectivity check request)
hc	how copy
hvt	high value target
i+	(air refueling) instantaneous fuel available
ib	Inbound
IFE	in flight emergency
ifr	instrument flight rules or in flight report depending on context
imm	immediate
iso	in support of

ivo	in vicinity of
lnd	landed
lkp	last known position
lz	landing zone
max ord	maximum ordnance altitude
mc	mission complete
msn	mission
mt	mis-tell (posted info in wrong room)
Mx or maint	maintenance
neg	negative
nstr	nothing significant to report
ob	outbound
o/c	on channel
o/n	operations normal
o/s	on station
osr	operating outside ROZ
o/t	on tank (air refueling)
pls	please
poi	point of injury/impact
poo	point of origin
pos	position
pri	priority
rcvr	aircraft receiving air refueling
rhr	ROZ hot request
rip	relief in place
rqst	request
rgr	roger
rp	release point
rnds	rounds
ron	remain overnight
roz	restricted operating zone
rtb	return to base
rtd	return to duty
rtn	routine
r/r	radar/IFF contact and radio communication established
rx	receive
sod	safe on deck
stby	standby (does not imply “working”)
SIPR	Secret Internet Protocol Relay (secure network)
sof	special operations forces
sp	start point
s/f	show of force
sfc	surface
t	test (request for a connectivity check)
thx	thank you
TIC	troops in contact
t/o	takeoff
tn	datalink track number
tot	time on target
TST	time sensitive target
tx	transmit
unk	unknown
urg	urgent

urgsurg	urgent surgical
VFR	visual flight rules
w/d	wheels down
wkg	working (standby implied)
wrt	with regard to
wspr	Whisper
w/u	wheels up
wx	Weather
yw	you're welcome
* (single asterisk)	used to make an immediate correction to previous posting
*** (three asterisks)	used to denote a VIP onboard a specific a/c
. (period)	used to check server connectivity; no reply is required

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Appendix B

TC PLANNING CHECKLIST

Deliberate planning for TC operations will enhance a unit's communications capability at home while helping them better prepare for the use of TC during tactical operations. The following serves as a guide for unit preparation to ensure they have the right equipment and connectivity prior to deployments, and alleviates the need for a major train-up upon arriving in theater to relieve another unit.

Planning for TC operations requires expertise in many subject areas including:

- TC applications and procedures.
- Communications networks and connectivity.
- Equipment requirements.
- Communications requirements and priorities.
- Standard TC operating procedures.

Table 10 is a TC planning checklist divided into the following critical planning phases:

- Identify the mission.
- Develop a communications plan.
- Determine TC communications requirements.
- Establish TC communications.
- Develop standard operating procedures.
- Train TC operators.
- Conduct precombat checks.

Table 10. TC Planning Checklist		
Identify the Mission.		
1	Obtain all required operational and tactical level orders and necessary documents:	
	a	Operational Plans (OPLANS).
	b	OPORDs.
	c	ATO/ACO/SPINS.
	d	OPTASKCHAT.
	e	Standard operating procedures (SOPs).
2	If preparing for a deployment, obtain theater-specific orders:	
	a	OPLANS.
	b	OPORDs.
	c	ATO/ACO/SPINS.
	d	OPTASKCHAT.
	e	SOPs.
3	If replacing a unit, obtain necessary documents to facilitate the relief-in-place:	
	a	TC SOPs.
	b	TC lessons learned and TTP.
Develop a Communications Plan.		
1	Determine the communications requirements necessary to support the mission:	
	a	Voice & TC networks needed to monitor required communications (figure 19).
	b	If replacing a unit, the networks they are using to monitor communications.
	c	If replacing a unit, the TC applications they are using to conduct chat.
2	Develop a communications plan that supports the mission:	
	a	Determine what functions will be communicated using voice only.
	b	Determine what functions will be communicated using TC only.
	c	Determine what systems of record will be used.
	d	Determine what communications will be augmented using TC (SOR, voice).
3	Create TC Degradation Plan:	
	a	Establish medium for primary communications (i.e. TC for DCN net).
	b	Establish medium for secondary communications. (i.e. SATCOM for DCN net).
	c	Establish medium for tertiary communications. (i.e. STE for DCN net).
	d	Develop communications cards to facilitate degradation procedures.
	e	Establish procedures for using a secondary TC server if available.
4	Establish TC documentation and record keeping procedures:	
	a	Method to keep log TC communications as official records.
	b	Method to back up logs to avoid a computer failure that induces a loss of data.
5	Define Help Desk support and Procedures.	
Determine TC Communications Requirements.		
1	Determine Equipment requirements (see figure 9 for example TOC chat layout):	
	a	Number of computers required to perform TC IAW the Communications Plan.
	b	Supporting communications equipment required to facilitate TC connectivity.
	c	Backup computers and equipment to facilitate TC logistical requirement.
	d	Number of TC systems current unit in theater will leave behind for use.
	e	Printer requirements to create hardcopy documents of TC communications for historical records.

2	Determine connectivity requirements.	
	a	Determine the chat application to use for TC operations.
	b	Obtain and install the appropriate chat application on computers.
	c	Identify the communications infrastructure need to connect to TC servers.
	d	Determine if there are multiple servers in use: Server/domain names. IP addresses.
	e	Determine cryptographic requirements: Firewall configurations. Layered security measures that may affect hardware/software requirements.
3	Determine TC operator manning requirements.	
Establish TC Communications.		
1	Setup TC network at home station for training and functions checks:	
	a	Conduct internal functions check.
	b	Conduct functions checks with higher headquarters and across units.
	c	Conduct functions checks with unit being replaced if deploying.
2	Maintain connectivity and integrate TC into daily operations and training.	
Develop TC Standard Operating Procedures (SOPs)		
1	Ensure SOP includes at a minimum:	
	a	Standard chat rooms used by the unit.
	b	Room names and descriptions.
	c	Access controls.
	d	TC user assignments and responsibilities.
	e	Communication Priorities.
	f	Usernames.
	g	Use of audio and visual cues on the TC application.
	h	File transfer procedures.
	i	Rules on use of private chat.
	j	Battle rhythms.
	k	Shift change procedures.
	l	Network maintenance.
	m	Archiving and backup procedures.
	n	Communications standards.
	o	Help desk procedures.
	p	Alternate communications plans.
Train TC Operators (see Appendix C)		
1	See Appendix C.	
Conduct Precombat Checks		
1	Conduct preventive maintenance checks and service on all TC equipment.	
2	Ensure TC operators have all required equipment, SOPs, and documents.	
3	Ensure equipment is clean, operational and secured as appropriate for shipping.	
4	Ensure packing list includes all equipment necessary to conduct TC operations.	
5	Ensure backup equipment is packed to facilitate redundancy.	

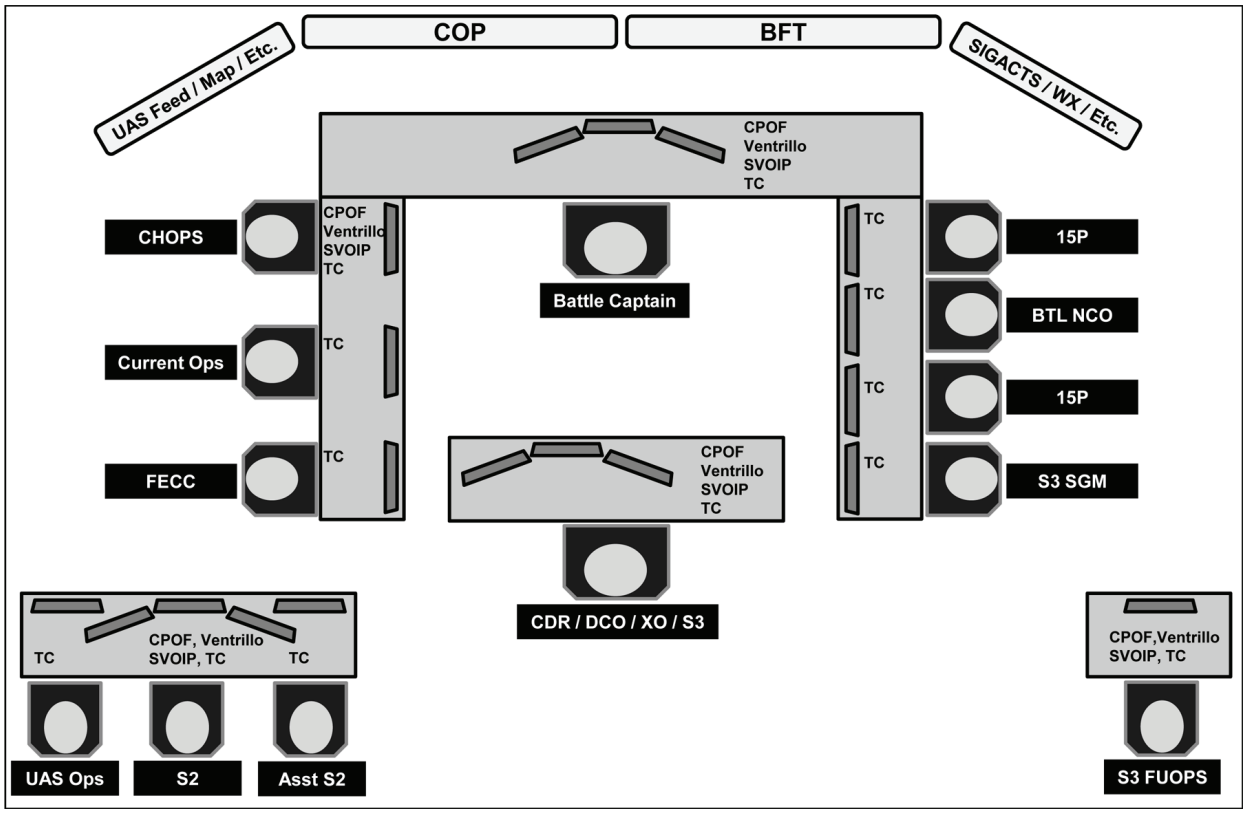

Figure 19. Example TOC Chat Layout

Appendix C

TC TRAINING CONSIDERATIONS

Training is critical to the effective use of TC as a communications system. Incorporating frequent TC training opportunities during home station operations allows for operators to gain and maintain the knowledge needed to effectively utilize TC in a combat environment. There are several things to consider prior to, during, and after conducting TC training.

1. Considerations when Planning TC Training:

- Ensure the unit possesses all of the TC hardware, applicable software, and a sufficient training area to accurately duplicate tactical operations.
- Ensure time is made available on the training calendar for dedicated basic TC training prior to incorporating TC into daily operations.
- Provide an appropriate number of client workstations to train selected individuals.
- Establish an approved local area network or intranet solely for training.
- Assign a “white cell” to operate as the TC host server, room owner, and chain of command as necessary.
- Assign operators with advanced computer skills to the more demanding TC workstations.
- Ensure TC communications are compatible with subordinate elements, supported units, and higher headquarters.
- When conducting predeployment TC training in which the unit will occupy a fixed site or conduct a transfer of authority with another unit, conduct a detailed site survey to define TC systems in use, communications requirements, and compatibility.

2. Considerations when Conducting TC Training:

- Start with a basic TC network setup focused on individual user tasks and gradually build up to collective training.
- Basic TC training should teach users how to effectively develop a scan pattern, use audio and visual cues properly, and establish room management skills to avoid task saturation using TC.
- Configure collective training to mirror field operations centers in form and function.
- If possible, convert a conference room into a facsimile of the operation centers and use SOPs, to include the correct faces, places, systems, and displays.

- For realism, use actual TC call signs, room names, and training scenarios whenever possible. Request copies of TC logs from rooms being used in theater to facilitate scenario development.
- Follow a set battle rhythm and conduct shift change briefings.
- Design realistic and rigorous training. If possible, connect via SIPRNET to the unit's deployment operational area. This practice enables units to coordinate, fuse lessons learned with TTP, and conduct rehearsals in their future operational areas.
- Publish and follow realistic OPORDs and use annex K, SPINS, or OPTASKCHAT to govern TC use during the training.
- Conduct network rehearsals over both a wide area and local network. Talk through critical portions of an operation over TC in a sequence established by the trainer and practice battle tracking and information coordination.
- Ensure all means of primary, secondary, and tertiary communications are used in training to avoid dependency on TC systems.
- Validate TC training with a culminating training event prior to deployment. Integrate TC operations into a training exercise that involve higher, lower, and adjacent units all communicating with TC.
- If conducting training in theater, and separate training chat rooms are not feasible, preface all posts with the word "EXERCISE."
- Provide a mechanism for capturing and sharing significant training activities.
- Enforce TC network discipline and conduct troubleshooting procedures.

3. Considerations upon Completion of TC Training:

- Conduct after-action reviews of TC training by unit, staff section, and function.
- Use TC logs and recordkeeping as a debriefing tool.
- Assess how well the unit conducted TC operations and how it contributed to the overall situational awareness and mission accomplishment of the group.
- Capture all lessons learned and newly developed TTP for incorporation into the SOP and future training events.
- Establish a method to incorporate TC into daily operations.
- Conduct reoccurring training to ensure all operators are confident in their ability to conduct TC in the tactical environment.

Appendix D

SPINS EXAMPLE AND FORMAT FOR OPORDS

The following example shows an appendix from SPINS detailing theater TC procedures. This format may also be used as supporting documentation to OPORD annexes.

A.1.1 **OVERVIEW**

A.1.1.1 Purpose. To establish guidance for using tactical chat (TC) for command and control of CFACC assets. These rules apply only to CFACC controlled TC windows.

A.1.1.2 Overview. TC is a useful tool for maintaining situational awareness and exercising Command and Control of assets in real time. It disseminates secure information quickly and provides a written log. TC users must use caution to avoid inadvertently spreading inaccurate or misleading information. It is vital to smooth operations within the AOR that these systems are running in an efficient and uninterrupted manner. Different players will access and use TC traffic in various ways: to direct, to execute, to monitor, to assess, and to manage.

A.1.1.3 TC System Considerations. The system, like any electronic networking system, is vulnerable to outages of one component, where a critical node of the network is cut off from the link with no indication to the remaining agencies that they have dropped out of the network. Because there is no positive indication that a message has been received, it is dependent on the receiving agency to acknowledge receipt and indicate closure. More importantly, critical, time-sensitive information may be lost in fast-paced operations with multiple agencies inputting data into the same window. Many operators sample numerous windows, and a key piece of information occurring in a single window may be lost in the volume of message traffic.

A.1.1.4 Text Data.

A.1.1.4.1 TC deals with text data and the passage of written messages between participating agencies. TC also has the capability to send electronic files between users and platforms. Any player with access to the network may post into individual windows and may view message traffic. Text data has the advantage of being easy to understand, can be expanded or contracted as needed to convey information, and has many standard abbreviations available to speed deliver and receipt of messages.

A.1.1.4.2 Entry of data into the TC window can be a laborious process; depending on operator proficiency, it may take minutes to enter detailed, involved, or complicated data, and even longer until the message is processed and understood by its intended receivers. If a text message is not understood by the receiving participant, more text messages are required to explain the original posting. Care should be taken to fully and succinctly phrase messages for maximum utility and brevity.

A.1.1.4.2.1 Where possible, abbreviations should be used to quickly pass standard phrases.

A.1.1.4.2.2 Where possible, standard formatting for various message traffic should be used (ROZ activation, joint tactical air strike request, CAS 9-lines, TIC activation, SALUTE Reports, etc.)

A.1.1.4.2.3 Capitalization and Highlight Usage. Capitalization and Highlighting of plain English terms is used for emphasis that would have otherwise been conveyed by tone of voice over a radio. Use of highlighted or all capitalized words or phrases will be kept at a minimum and only be used to emphasize critical communications or FLASH TRAFFIC.

A.1.2 **CHAT ROOM PROCESSES AND PROCEDURES**

A.1.2.1 TC traffic is divided among a number of topic-oriented windows (called chat rooms), each dealing with one or more aspects of battle management. A list of current chat rooms (known as channels by some TC programs) is available in a pop-up menu. These chat rooms are server and system dependent.

A.1.2.2 New Chat Room Creation. Creation of a new chat rooms can be official (permanent) or unsanctioned (temporary). The primary difference between official and unsanctioned chat rooms is that the official rooms will not be automatically deleted by the server when not occupied. Official chat rooms affecting CFACC players will need to be approved by requesting a SPINS change to this document in which the requested channel will then be published. Unsanctioned chat rooms will not need specific approval but should only be used for a specific reason and for a short period of time.

A.1.2.2.1 Chat Room Name Changes. The current software does not allow for name changes. Therefore, when a name change for a chat room is needed, a CFACC daily banner will be posted a few days prior to the actual change taking place. The Room Owner of the old chat room will also post a notification of when the new room takes effect in the topic heading.

A.1.2.3 CFACC TC Chat Rooms. CFACC chat rooms are organized into two general types, C2 chat rooms and information/coordination chat rooms.

A.1.2.3.1 C2 Chat Rooms. C2 chat rooms are for command and control and are used to issue orders. The other channels should be used to exchange information, coordinate, and solve problems at lower levels.

A.1.2.3.1.1 C2 Chat Room Participation. The C2 chat rooms belong to the C2 agencies and decision makers. They are used for coordination and decision-making. Others may monitor for situational awareness, but generally should not use C2 chat rooms unless asked for their input.

A.1.2.3.1.2. Information/Coordination Chat Room Entries. Information/Coordination chat rooms are used solely for sharing useful information. Only accurate and timely information should be shared. No personal messages, derogatory comments, jokes, etc. are permitted.

A.1.2.4 Chat Room Topic Headings. All chat room topic headings must be mission related and enhance situational awareness of the users. Some examples of proper topic headings include: the posting of major frequency changes, time critical information, and operational status. The Room Owner will remove topics containing non-mission essential phrases promptly. The Room Owner must approve all topic headings.

A.1.2.5 Exercise Inputs. To the max extent possible, no exercise injects will be made on any operational chat room unless “exercise” is prefaced in the channel name. Additionally, the word “exercise” in the topic heading will not meet the requirement to discuss exercise inputs in a real world chat room. In certain situations where separate exercise chat rooms are not possible, all exercise inputs will be prefaced with “exercise” and precoordinated with all agencies within the particular chat room.

A.1.2.6 Time hack and time stamp orders. In order to facilitate real time information, time stamping entries is critical, and every entry in a chat room holds a time stamp in Zulu. In cases where this is not possible, the user must ensure that they tell other users of the time discrepancy. Time is a critical element of events, and a time hack is necessary for correct and timely transmission. Users should type a manual time hack on all orders and anytime information is being forwarded that is time critical.

A.1.2.7 Call Sign Abbreviations. Messaging may use abbreviations for call signs. Call sings should be simple, easy to understand, and consistent. The first and last letter of the call sign, in conjunction with the number, will be used to referenced (Ex. Eagle 01 – ee01). In the event someone in the room becomes confused by the message traffic, type it out completely.

A.1.2.8 Call Sign Usage. When addressing a specific participant, the user will type the call sign of the user they are addressing prior to the message. The addressee of a message will acknowledge the text immediately by “c”, “stby”, “wkg”, or other appropriate responses. It will be important to respond to any message directed to you since an unacknowledged text may not have been received by the intended participant.

A.1.2.9 Private Chat. The private chat, or “whisper” feature is very useful for protracted agency-to-agency coordination and keeps information out of the main window. Users should not post materials non-germane to the window topic.

A.1.2.9.1 Whispers should involve coordination issues between two agencies where discussions in the main window is inappropriate.

A.1.2.9.2 Whispers which involve information that will likely be need by more than one or two participants should be moved back to the main window for coordination.

A.1.2.9.3 Users utilizing whisper need to be cognizant that their situational awareness of the communications in the main chat rooms may be reduced.

A.1.2.10 Room Owner Responsibilities. The CAOC will empower individuals to direct communication in each chat room. They will report, log, and correct any unauthorized coordination within their room. The Room Owners responsibilities include but are not limited to:

A.1.2.10.1 Provide real-time guidance regarding TC integration into planning, operations, execution, and review.

A.1.2.10.2 Monitor participant involvement with window chatter to evaluate window effectiveness, proposing movement of conversations to whisper when appropriate.

A.1.2.10.3 Have full control over their chat room topic heading. Normal users will not be permitted to change the topic headings.

A.1.2.10.4 Monitor etiquette and discipline to ensure all subordinates are chatting IAW TC policies and procedures.

A.1.2.10.5 Cease all unrelated transmissions. Misuse of an TC window must be immediately identified, corrected, and reported by the Room Owner. If an offender is making non-critical entries during a time-critical event, that user should be told to cease transmissions or ejected from the chat room.

A.1.3 **ID/CALLSIGNS**

A.1.3.1 Each computer logged into the TC system will have an associated TC call sign that identifies the user. These call signs should be associated with unit/aTCraft call sign and/or be descriptive of the user’s organization or function and duty position.

A.1.3.1.1 Regular users of chat should not excessively deviate user call signs to ensure continuity over time. Changes of names should indicate unit swaps rather than personnel shifts.

A.1.3.1.2 Some TC users are associated with particular aTCraft, units, or JTACS. These callsigns may vary depending on the particular aTCraft, unit, or JTAC call sign through the same computer may be used. This is acceptable, as it provides user information simplifying identification and contact information.

A.1.3.1.3 Alternate identifiers for the same individual occupying a different computer and/or position should be clearly identified. When there is more than one position utilizing the same chat room, numbers should be used to follow the appropriate call sign (CCO1 or CCO2).

A.1.4 **AIR OPERATIONS**

A.1.4.1 Section used to detail air operations procedures and communications using TC.

A.1.5 **C2 TC ABBREVIATIONS**

A.1.5.1 Section used to show approved abbreviations commonly used in TC.

A.1.6 **CFACC TC CHAT ROOMS**

A.1.6.1 Theater Specific Chat Rooms

ROOM NAME	ROOM OWNER	PURPOSE
C2 Chat Rooms (used by decision-makers to issue orders)		
Information/Coordination Chat Rooms (used to discuss/coordinate/problem solve)		
CAOC Chat Rooms		
C2 Platforms Chat Rooms		
ISR Chat Rooms		
JPRC Chat Rooms		
Counter-IED Reporting Chat Rooms		

Appendix E

OPTASKCHAT EXAMPLE

```
FM CSG/ESG COMMANDER
TO CSG/ESG
INFO RHHMHAA/COMPACFLT PEARL HARBOR HI//N6//
RHVSQUE/COMTHIRDFLT//J6//
RHVSQUE/COMTHIRDFLT//J6//
RUWFEAA/COMNAVAIRPAC SAN DIEGO CA
RUWFEAA/COMNAVAIRPAC SAN DIEGO CA
RHMFISS/COMNAVSURFPAC SAN DIEGO CA
RHMFISS/COMNAVSURFPAC SAN DIEGO CA
RHVEZPC/COMSTRKFORTRAPAC
RHMFISS/COMAFLOATRAGRUPAC SAN DIEGO CA
RHMFISS/TACTRAGRUPAC SAN DIEGO CA
RHMFISS/NCTAMS PAC HONOLULU HI//JFTOC/N34/N35/TACPLANS//
RHHMUNE/JFMO PAC HONOLULU HI
RHMFISS/NAVCOMTELSTA SAN DIEGO CA
RHOSHJE/COMCARSTRKGRU THREE
RHOVZFF/COMCARSTRKGRU FIVE
RHOVABE/COMCARSTRKGRU NINE
RHOVMTZ/COMCARSTRKGRU ELEVEN R
HOVJQI/COMCARSTRKGRU SEVEN
RHOVJQI/COMCARSTRKGRU SEVEN
BT

UNCLAS //NO2482//
MSGID/GENADMIN/COMCSG/ESG//
SUBJ/CSG / ESG OPTASK CHAT//
REF/A/GENADMIN/PREVIOUS OPTASK CHAT/DTG// REF/B/GENADMIN/COMTHIRDFLT/WORLD-WIDE OPTASK CHAT//
REF/C/NAVY WIDE OPTASK IM GUIDANCE/FROM C3F CAS WEBSITE//
REF/D/GENADMIN/COMSEVENTHFLT/301052ZMAY05//
NARK/REF A IS CSG/ESG OPTASK CHAT SUPP. REF B IS NAVY-WIDE OPTASK CHAT. REF C IS NAVY-WIDE OPTASK
IM. REF D IS C7F OPTASK TLAM.//
POC/COMMO/LCDR/CSG/ESG/LOC:/TEL:111-222-3333/ EMAIL:COMMO(AT)CSG/ESG.NAVY.SMIL.MIL//
RMKS/
1. THIS OPTASK CHAT SUPERCEDES PREVIOUS EDITIONS. CANCEL REF A. IAW REFS B-D THIS OPTASK CHAT
SUPPLEMENT
ESTABLISHES THE GENERAL ARCHITECTURE, OPERATING PROCEDURES AND ADMINISTRATIVE GUIDANCE FOR ALL
CSG/ESG-RELATED CHAT COMMUNICATIONS. THIS OPTASK APPLIES TO UNITS ASSIGNED TO THE CSG/ESG AND
OTHER UNITS PARTICIPATING IN STRIKE GROUP ESTABLISHED CHAT ROOMS. AMPLIFICATION AND ADDITIONAL
GUIDANCE WILL BE PROVIDED IN OPTASK CHAT MODS OR DAILY INTENTIONS MESSAGE.
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2. PERIOD EFFECTIVE: UPON RECEIPT UNTIL FURTHER NOTICE.
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3. CHAT OVERVIEW:
CHAT HAS BECOME A SIGNIFICANT, NEAR REAL-TIME, TWO-WAY COMMUNICATIONS PATH AMONG STRIKE GROUP
STAFFS, SHIPS, WATCH STANDERS, AND FLEET STAFFS ASHORE. THE PROFESSIONAL AND DISCIPLINED USE OF
CHAT CAN GREATLY ASSIST IN THE MANAGEMENT OF ALL ASPECTS OF STRIKE GROUP OPERATIONS.
A. RULE OF THUMB: COMMAND BY VOICE, COORDINATE VIA CHAT.
B. THE PRIMARY CHAT APPLICATION FOR IT-21 AFLOAT UNITS IS MICROSOFT (MS) CHAT. SAMETIME CHAT IS A
SECONDARY CHAT APPLICATION THAT IS
ALSO USED FOR COORDINATION PURPOSES WITH AFLOAT AND ASHORE UNITS.
C. CHAT NAMES SHALL INDICATE SHIP BY UNIT ABBREVIATION AND WATCH/POSITION, SUCH AS CSGIESG BWC,
CSG/ESG COMMO, OR WARFARE COMMANDER TWO-LETTER CALL SIGN SUCH AS RB, RP, RZ, ETC. EXCEPTIONS ARE
TO BE KEPT TO A MINIMUM AND USED ONLY WITH WARFARE COMMANDER APPROVAL.
D. WHEN THE STRIKE GROUP OPERATES IN A COALITION ENVIRONMENT, THE PRIMARY CHAT COMMUNICATION
SERVICES BETWEEN COALITION PARTNERS WILL RESIDE ON CENTRIXS. EACH CENTRIXS ENCLAVE WILL HAVE A
UNIQUE CHAT SERVER ACCESSIBLE WITHIN THAT ENCLAVE HUB.
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4. CHAT SERVERS:
A. FLEET CHAT SERVER INFORMATION GOES HERE.
B. CONTINGENCY CONNECTIVITY INFORMATION GOES HERE.
D. LOGIN DIRECTION GOES HERE.
E. FLEET SIPR CHAT SERVER ADDRESS/IP'S GO HERE.
F. FLEET CENTRIXS CHAT SERVER ADDRESS/IP'S GO HERE. AVAIL)
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S. CHAT COMMUNICATIONS:
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A. WITHIN THE CSG/ESG, CHAT ROOMS WILL BE USED IN BOTH TACTICAL AND ADMINISTRATRATIVE SUPPORT ROLES.
(1) TACTICAL CHAT ROOMS - TACTICAL CHAT ROOMS SHALL BE USED FOR REPORTING AND COORDINATION, AND WILL BE STRICTLY MANAGED BY THE NECOS. THEY WILL BE USED AS THE PRIMARY MEANS OF COORDINATING TACTICAL AND OPERATIONAL EFFORTS THAT COULD OTHERWISE OVERWHELM A COMMAND RADIO CTCUIT. THE GUARDING OF TACTICAL CHAT ROOMS IS REQUIRED AS OUTLINED IN WARFARE COMMANDERS GUIDANCE AND IN THE CHAT MATRIX DESCRIBED HEREIN. CHAT ROOMS ARE THE PREFERRED METHOD OF COMMUNICATING LENGTHY INFORMATION EXCHANGES BECAUSE TEXT IS EASIER TO READ AND UNDERSTAND WHEN COMPARED TO BROKEN, ATTENUATED, OR GARBLED RADIO TRANSMISSIONS. THE NECOS MAY PROVIDE ADDITIONAL CHAT ROOM GUIDANCE IN THEIR OPTASK. TACTICAL CHAT ROOMS ARE NOT THE PLACE TO DISCUSS ADMINISTRATIVE ISSUES.
(2) ADMINISTRATIVE CHAT ROOMS - MAY BE ESTABLISHED TO PROVIDE A VIRTUAL FORUM WHEREIN INDIVIDUALS WITH SIMILAR RESPONSIBILITIES, OR WORKING WITHIN THE SAME FUNCTIONAL AREAS, CAN MEET FOR DISCUSSION, COORDINATION, PLANNING, PROBLEM SOLVING, AND TROUBLESHOOTING. ADMINISTRATIVE CHAT ROOMS WILL NOT HAVE AN ASSIGNED NECOS. ITS USE IS BY MUTUAL AGREEMENT OF PARTICIPANTS.
B. EACH WARFARE COMMANDER, COORDINATOR, OR ADMINISTRATOR MAY ESTABLISH ADDITIONAL CHAT ROOMS THAT REQUIRE MONITORING OR CAN BE USED FOR COORDINATION. INDIVIDUAL WARFARE OPTASKS OR SUPPS WILL ADDRESS REQUIREMENTS FOR ADDITIONAL ROOMS, IF NECESSARY, ESTABLISHING SPECIFIC RULE SETS FOR THEIR USE.
C. TEMPORARY CHAT ROOMS - USERS MAY ESTABLISH TEMPORARY (NON-STANDING) CHAT ROOMS IF REQUIRED, BUT SHOULD LIMIT USE OF THESE TEMPORARY CHAT ROOMS TO SPECIFIC PURPOSES, OPERATIONS OR TIMEFRAMES.
D. BENEFITS OF CHAT MUST BE WEIGHED AGAINST THE LOSS OF SITUATIONAL AWARENESS THAT RESULTS IF "CHATTING' DISTRACTS WATCH STANDERS FROM TACTICAL DISPLAYS. EACH CHAT ROOM IS THE EQUIVALENT OF ANOTHER VOICE CTCUIT THAT MUST BE GUARDED, SO THE NUMBER OF ESTABLISHED CHAT ROOMS SHOULD BE MINIMIZED.
E. CHAT PROGRAMS THAT USE THE TACTICAL CHAT (TC) PROTOCOL, SUCH AS MICROSOFT CHAT (IT-21) AND ZTCON (GCCS-M) CHAT, WILL BE USED IN ALL TACTICAL AND ADMINISTRATIVE CHAT ROOMS. SINCE BOTH OF THESE CHAT PROGRAMS USE THE TC PROTOCOL, AN INDIVIDUAL ON A STANDARD IT-21 WINDOWS MACHINE CAN CHAT WITH AN INDIVIDUAL ON A
GCCS-M MACHINE AND VICE VERSA.
F. POINT TO POINT CHAT PROGRAMS LIKE SAMETIME CAN NOT BE USED IN CONJUNCTION WITH TC PROTOCAL CHAT PROGRAMS. IT IS DESIGNED FOR COMMUNICATIONS BETWEEN TWO OR MORE INDIVUIDUALS IN A SHARED WORKSPACE.
---
6. EXAMPLE DEFINITIONS AND ACRONYMS:
- CCSG7 COMMANDER CARRIER STRIKE GROUP SEVEN
- CVW14 COMMANDER AIR WING FOURTEEN
- CDS7 COMMANDER DESTROYER SQUADRON SEVEN
- RRSG RONALD REAGAN STRIKE GROUP
- RGN USS RONALD REAGAN
- CHV USS CHANCELLORSVILLE
- DEC USS DECATUR
- GRD USS GRIDLEY
- HOW USS HOWARD
- THA USS THACH
- BFEM (BATTLE FORCE EMAIL): US-TO-ALLIED HIGH FREQUENCY SHIPS EXCHANGE NETWORK.
- MICROSOFT (MS) CHAT: AN OPEN FORUM COMMUNICATIONS APPLICATION USED AS A COLLABORATIVE TOOL BETWEEN VARIOUS UNITS. ENHANCES STRIKE GROUP INFORMATION DISSEMINATION BY ENABLING TRANSMISSION OF TEXT AND FILE ATTACHMENT IN A MS CHAT WINDOW.
- NECOS (NET CONTROL STATION): UNIT RESPONSIBLE FOR MAINTENANCE AND PROPER USAGE OF A RADIO CTCUIT OR CHAT ROOM.
- FLEET NOC (NETWORK OPERATIONS CENTER): PROVIDES IP MANAGEMENT, NETWORK ENGINEERING, SOFTWARE SUPPORT FUNCTIONS, AND NIPRNET AND SIPRNET CONNECTIVITY TO AFLOAT FORCES.
- PERSISTENT CHAT (PCHAT):
- PRNOC (PACIFIC REGION NETWORK OPERATION CENTER): LOCATED IN PEARL HARBOR, HAWAII.
- SAMETIME CHAT: A COMMUNICATIONS APPLICATION DESIGNED FOR POINT TO POINT COMMUNICATIONS BETWEEN TWO OR MORE INDIVIDUALS WHICH ALLOWS FOR SHARED WORKSPACE FUNCTION IN A MEETING CENTER.
- SIPRNET (SECRET INTERNET PROTOCOL ROUTING NETWORK): DOD GENSER SECRET AND BELOW NETWORK. USED AS PRIMARY SECURE IP COMMUNICATION PATH FOR OPERATIONAL AND TACTICAL COMMUNICATION, COORDINATION, AND PLANNING. THE PROPER OPERATION AND MAINTENANCE OF SIPRNET CONNECTIVITY ARE CRUCIAL.
- WEBMASTER: INDIVIDUAL GRANTED AUTHORIZATION TO ADMINISTER CERTAIN ASPECTS OF THE CAS II NETWORK AND WEB SITE. ADMINISTRATORS ARE RESPONSIBLE FOR MAINTAINING THEIR SHIP'S DOMINO SERVER AND THE ADMINISTRATOR/EDITOR ACCOUNTS. ADMINISTRATORS WILL ALSO HAVE THE CAPABILITY TO ADD (POST), EDIT, OR DELETE CONTENT WITHIN THEIR SECTION OF THE RRSG WEB SITE AND APPROVE NEW USER ACCOUNT REQUESTS.
- WEB CONTENT PROVIDER: INDIVIDUAL WHO HAS BEEN GRANTED
AUTHORIZATION TO, AND IS REQUIRED TO, EDIT AND MAINTAIN CERTAIN AREAS OF THE OPERATIONAL CAS II WEBSITES.
- ZTCON CHAT: CHAT SOFTWARE USED WITH UNIX BASED SYSTEMS THAT IS COMPATIBLE WITH MICROSOFT CHAT, BUT NOT SAMETIME CHAT.
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7. CHAT ROOM POLICIES.
A. COMMUNICATION BETWEEN CHAT ROOM PARTICIPANTS WILL REMAIN PROFESSIONAL AT ALL TIMES. USE OF PROFANITY, SLANG, ETC., IS PROHIBITED.
B. NECOS IS RESPONSIBLE FOR ENSURING THAT ROOM MEMBERS ARE PROPERLY IDENTIFED AND THAT THE ROOM IS BEING USED FOR ITS STATED PURPOSE.
C. TACTICAL ORDERS WILL CONTINUE TO BE PROMULGATED VIA VOICE AND-OR MESSAGE TRAFFIC AND BACKED UP OR AMPLIFIED VIA CHAT.
D. USE CHAT TO SEND PERIODIC SITREPS. KEEP A TEXT TEMPLATE IN A WORD PROCESSING PROGRAM SUCH AS MICROSOFT WORD OR NOTEPAD AND USE COPY AND PASTE TO INSERT INTO THE APPROPRIATE CHAT ROOM. INFORM PARTICIPANTS OVER THE ASSOCIATED VOICE CTCUIT THAT THE SITREP IS AVAILABLE. THIS WILL REDUCE VOICE CTCUIT USAGE AND MINIMIZE THE POSSIBILITY OF ERRORS IN TRANSMISSION.
E. DO NOT ENTER TEXT USING ALL CAPITAL LETTERS. FACILITATE EASE OF READING BY USING UPPER AND LOWER CASE LETTERS WHERE APPROPRIATE.
F. KEEP ENTRIES CONCISE AND TO THE POINT.
G. AVOID USING CHAT TERMS/ACRONYMS SINCE SOME PARTICIPANTS MAY NOT BE FAMILIAR. THE USE OF PROWORDS FROM THE RADIO USERS MANUAL IS ENCOURAGED TO MAINTAIN BREVITY AND CLARITY.
H. IF TEMPORARILY USING SOMEONE ELSE'S LOGON IN A CHAT ROOM, SUCH AS XO CHATTING UNDER A TAO LOGON, COMMON COURTESY REQUIRES THAT THE NEW USER IDENTIFY HIMSELF TO OTHER ROOM MEMBERS.
I. CHAT ROOM PARTICIPANTS MUST BE VIGILANT AGAINST UNAUTHORIZED ATTEMPTS TO MONITOR, SPOOF OR EXPLOIT CHAT ROOM COMMS. CHALLENGE ANY CHAT ROOM PARTICIPANT YOU FEEL MAY BE A THREAT. CONTACT YOUR COMMAND COMPUTER NETWORK DEFENSE REPRESENTATIVE IF YOU FEEL THE CHAT ROOM HAS BEEN EXPLOITED. ACTIONS TO CONTAIN THE PENETRATION WILL BE COORDINATED IN THE CND CHAT ROOM. NOTE: UNOFFICIAL PARTIES MONITORING CHAT COMMUNICATIONS MAY BE CHALLENGED BY CHAT ROOM PARTICIPANTS AND ASKED TO LEAVE.
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8. CHAT FORMAL TASKING AND ORDERS: A. SPECIFIC GUIDANCE FROM THE STRIKE GROUP COMMANDER GOES HERE.
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9. CHAT ROOM NAMES:
THE FOLLOWING TACTICAL AND ADMINISTRATIVE CHAT ROOMS HAVE BEEN ESTABLISHED AND WILL BE GUARDED AS REQUIRED (EXAMPLE).

CHAT ROOM	USE	NECOS MSGID/GENADMIN/COMRRSTRKGRU//
#RRSG CWC	BWC, SHIP TAO, WARFARE CDRS	CCSG7
#RRSG SCC	SGWO, SHIP TAO, WARFARE CDRS	CDS7
#RRSG ADC	SGWO, SHIP TAO, WARFARE CDRS	ADC
#RRSG IWC	IWC, SHIP CTT	IWC
#RRSG CTP	ALL UNITS	CTPM
#RRSG COMMS	ALL UNITS, CCSG7, CDS7	RGN
#RRSG METOC	STRIKE GROUP METOC	CCSG7
#RRSG INTEL	SUBPLOT, SESS	FIWO
#RRSG LINK	ALL UNITS IN LINK	CHV
#RRSG MIO	AS REQUIRED	SCC
#RRSG TLAM	TLAM UNITS, LAC AS REQ D	CWC
#RRSG ASW	SCC AND UNITS UNDER SCC CONTROL	SCC
#RRSG FPC	FORCE PROTECTION COORD	CCSG7
#RRSG_	FIRESIDE_CHAT AS REQ	CCSG7
#RRSG LOG	AS REQ	CCSG7
#RRSG CND	IAM COORDINATION	CCSG7

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10. CHAT ROOM PARTICIPANTS:
A. ALL PARTICIPANTS SHALL ESTABLISH STANDARDIZED NAMING CONVENTIONS FIRST WITH THE COMMAND ABBREVIATION FOLLOWED BY AN N-CODE IDENTIFIER OR WATCH POSITION WHICH CLEARLY IDENTIFIES THE POSITION OF THE PARTICIPANT.

NAME ID	USER
CCSG7_N(CODE)	COMMANDER CARRIER STRIKE GROUP SEVEN STAFF MEMBER (EX. CCSG7-N31)
RB_BWC	STRIKE GROUP BATTLE WATCH CAPTAIN, TACTICAL FLAG COMMAND CENTER
CDS7_N(CODE)	COMMANDER DESTROYER GROUP SEVEN STAFF MEMBER (EX. CDS7_N3)
RZ_STAO	COMMANDER DESTROYER GROUP SEVEN STAFF TACTICAL ACTION OFFICER
SHIP_CO	SHIP COMMANDING OFFICERS (EX. DEC-CO)
SHIP_XO	SHIP EXECUTIVE OFFICERS (EX. HOW_XO)
SHIP_TAO	SHIP TAO'S (EX. RGN-TAO)
SHIP_COMM	SHIP COMM CENTERS (EX. RGN_COMM)
SHIP_ADP	SHIP ADP CENTERS (EX. RGN_ADP)

B. ALL OTHER CHAT NAMES SHOULD INDICATE SHIP/COMMAND NAME AND POSITION (I.E. RGN-OPSO, CHV_CICWO, ETC.).
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11. PASSWORD PROTECTION:
TEMPORARY PASSWORD PROTECTED CHAT ROOMS MAY BE ESTABLISHED AS REQUIRED BY THE WARFARE COMMANDER. PASSWORD PROTECTED CHAT ROOMS AREESTABLISHED TO PREVENT OTHERS NOT HAVING A NEED TO KNOW FROM GAINING ACCESS TO MISSION SPECIFIC INFORMATION. THE DESIGNATED NECOS SHALL BE A RRSG WARFARE COMMANDER AND WILL BE RESPONSIBLE FOR ENSURING ACCESS IS RESTRICTED TO ONLY THOSE PERSONNEL OR ENTITIES REQUIRING ACCESS. PASSWORD SCHEMES SHOULD BE A MINIMUM OF 7 CHARACTERS AND UTILIZE AT LEAST 1 SYMBOL AND 1 UPPER CASE CHARACTER.
---
12. WHISPER SESSION:
THE USE OF WHISPER BOXES SHALL BE KEPT TO A MINIMUM IN TACTICAL CHAT ROOMS. WHISPER BOXES DETRACT FROM THE OVERALL SITUATIONAL AWARENESS OF CHAT ROOM PARTICIPANTS AND REDUCE THE COLLABORATIVE BENEFIT OF THE CHAT TOOL. WHISPER SESSIONS ARE ACCEPTABLE FOR COMMUNICATING NON PERTINENT INFORMATION WHICH WOULD NOT TAKE AWAY FROM THE SITUATIONAL AWARENESS OF OTHER MONITORING UNITS. WHISPER USERS MUST REMEMBER THAT ANY INFORMATION OR AGREEMENTS REACHED IN WHISPER MODE THAT EFFECT OTHERS MUST BE RETRANSMITTED IN THE OPEN CHAT ROOM OR THROUGH OTHER (VOICE/MSG) MEANS.
---
13. POINTS OF CONTACT:
A. CCSG7 N60 LCDR LEE 123-456-7890 EMAIL: STEVEN.LEE (AT)CCSG7.NAVY.(SMIL).MIL
B. CCSG7 N61 ITC OILOB 456-789-1230 EMAIL: BRIAN.OILOB(AT)CCSG7.NAVY(.SMIL).MIL
C. CCSG7 N621 IT1 AEKS 922-335-0000 EMAIL: ZETTE.AEKS(AT)CCSG7.NAVY(.SMIL).MIL// DELL/-/-
/INST:Xl//
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Appendix F

CHAT ROOM MANAGEMENT EXAMPLE

1. For this training example, the chat system of record (SOR) is mIRC. Applicable rooms and guard chart for the AOC dynamic effects cell (DEC) are shown below. The purpose of each room is described in short form by the title. Owners, full-time participants, and matrix (part-time) participants are shown in the guard chart. Detailed descriptions of room use and business rules are noted by room in section. Applicable rooms and guard chart for the AOC DEC are shown below:

TREX 09-1 Tactical Chat Guard Chart

Blue Force Tactical Chat Rooms	SIDO	C2 Duty Officer	DEC Chief	DEC Deputy Chief	Conv Ops Coordinator	Target Duty Officer	Irregular Warfare Coord	IO Targeteer	IO Duty Officer	DEC SOLE Rep	DEC BCD Rep	White Force Players	Exercise Director	JOC JCE (JTF Controller)	BCD Fires (JTF Controller)	TLAMDO (JTF Controller)	NALE (JTF Controller)	IDO (Intel Controller)	ISRD Tgts (Intel Controller)	DTRA (Intel Contoller)	NTM (Intel Controller)	(IO) IO Controller	(ST) IO Controller	CCO (AirLand Controller)	SODO (Airland Controller	EWCC (Airland Controller)	CASDO (Airland Controller)	ASOC (Airland Controller)	SOLE Dir (SOF Controller)	JSOTF (SOF Controller)	Mojo SD (C2WSPTT Controller)	DkStr SD (C2WSPTT Controller	Active Room Users	Matrix Participants	Room Observers
JADOCS Stakeholder / Observer	*s*	*s*	*o*	*s*	*s*	*o*	*s*	*o*	*o*	*s*	*s*			*s*	*o*	*o*	*s*	*s*				*s*	*o*	*s*	*s*	*o*	*o*		*s*						
TBMCS Stakeholder / Observer	*o*	*o*	*o*	*o*	*o*	*o*	*o*	*o*	*o*	*o*	*o*			*o*	*o*	*s*	*o*	*o*				*o*	*o*	*o*	*s*	*s*	*s*	*s*	*o*						
F_CAOC_COD_Leader_Coord	P	P															P							R	P				P				6		
F_CAOC_C2_Coord_Command		R	P	P	P	O			P				O									O	O								P*	P*	7		4
F_CAOC_SIDO_Coord	R					P		P	P									P	P	P		O	O										7		2
F_CAOC_ISROPS_Coord	P					P		P	P									P*			P*							P					7		
F_CAOC_COD_Offensive_Coord			P	P	O												P								R	P*	P*	P*					7		1
F_CAOC_DEC_Joint_Coord			R	P	P		O		O	O	O		O	P*																			4		5
#_IED_Hotline_Reports	P		P	R						P	P			P																			6		0
F_CAOC_DEC_LA_Planning			O	P	R	P*				P	P				P	P*						O		P		M	M	M					8	3	2
F_CAOC_DEC_NLA_Planning			O	P			R	P*	O	P	P											P	P			M							7	1	2
F_CAOC_IO_Coord_Command	O	P	P	P			P	P	R				O								P	P*	P*											9		3
F_CAOC_COD_SOLE_Coord										P*																			R	P			3		
F_CAOC_COD_BCD_Coord											P*				R													P	P				4		
F_CAOC_COD_All_Gen_Info	P	O	P	O	P	O	P	O	O	O	O		O		P		P	P				P		P	P				P		O	O	11		8
White Force mIRC Rooms																																			
WF_TREX_Controller_Coord													R	P				P				P		P							P	P	6		
WF_TREX_Constructive_Coord													P					P						P							R	P	3		
Room Ownership	1	1	1	1	1		1		1				1		1									1	1				1						
Active Participation	4	1	5	6	3	3	2	3	2	3	3		1	3	3	1	3	4	1	1	1	4	2	5	2	1	2	2	2	1	3				
Matrix Participation																										2	1	1							
Observing for SA	1	2	2	1	1	2	1	2	3	3	3		4									3	2								1				

R - Room owner.

P* – Participant that has no room ownership (indicates the primary room monitored).

P – Participant (when also a room owner the owned room is assumed primary room monitored).

M – Room user who leaves a room minimized until called in to participate in a collaborative planning or coordination session.

O – Observer for situation awareness (SA) only. No active participation is expected or desired.

2. The DEC will interact with the listed rooms in accordance with the TC rules for the specific room. When a room is designated internal coordination to a team or group, it shall be understood that NO observer or participant will assume a lawful order has been issued or will be issued by virtue of the content of this room. The only rooms that will transmit lawful orders outside the AOC will have the term COMMAND in the room name.

a. **F_CAOC_COD_Leader_Coord** —This room is a coordination space internal to the AOC for the chief of combat operations and his operations team leads. Other AOC operations; planning; strategy; Intelligence, Surveillance, and Reconnaissance Division (ISRD); and Air Mobility Division (AMD) users may monitor this room for SA. The primary participants are the CCO, Senior Air Defense Officer (SADO), Senior Intelligence Duty Officer (SIDO), Senior Operations Duty Officer (SODO), C2 Duty Officer (C2DO), AOC Commander, and combined forces air component commander (CFACC).

b. **F_CAOC_C2_Coord_Command** —This room is the mIRC parallel of AC-1 secure voice. The C2 Duty Officer will use this space to coordinate status and health of the tactical air control squadron (TACS) with mIRC-equipped TACS platforms as well as transmit AOC-directed commands to air forces in the AO. Commands on this channel will follow the 10-line J28.2 compatible format for dynamic target tasking, or will begin with —CFACC directs. For TACS coordination issues the C2DO is assumed to be the senior C2 liaison in the combat operations division (COD) and will have the authority to adjust TACS. TACS platforms will use this room to report critical INFLTREPS of dynamic tasking to include dynamic targeting (DT) and personnel recovery. This room will NOT be used for INFLTREPs of immediate CAS or ASRs. TACS will report ASR results to their supported ASOC.

c. **F_CAOC_COD_Offensive_Coord**—This room is a coordination space for the SIDO and his subordinates to include the DEC, air interdiction (AI), electronic warfare / suppression of enemy air defenses (SEAD), CAS, combat search and rescue duty officer (CSARDO), etc. Other AOC operators may monitor this room; however, no lawful orders outside the SODO‘s team will be transmitted in this room. The purpose of this room is to allow the SODO to direct actions with his/her team and to allow subordinates to raise issues to the SODO requiring cross-cell coordination and SODO approval.

d. **F_CAOC_SIDO_Coord**—This room is a coordination space for the senior intelligence duty officer and his ISRD support team in the combat ops division. It is used to coordinate and pass information with the ISRD specialty teams and target duty officers assigned to the DEC. Only intelligence personnel participate in this room. All observers should take note that information in this room is not fully vetted or valid or ready for operational mission planning.

e. **F_CAOC_DEC_Joint_Coord**—This room is the coordination space for all joint fires elements and the CAOC DEC. The DEC chief and deputy will interact with the joint operations center joint coordination element and all Service component dynamic targeting functions. The primary function of this room is to coordinate assignment of DT planning and execution to the most capable system through its fires planning cell. Decisions for joint transfer will be discussed in this room; however, the authoritative source for decisions will be the Joint TST Manager in JADOCS. Discussions between CAOC leadership and the DEC may also occur here for assigned DT missions;

however, the authoritative source for decisions and status will be the Intra-AOC Target Manager/Dynamic Targeting List in JADOCS.

f. **#_IED_Hotline_Reports**—This theater-level room provides joint visibility and reporting of significant targetable information directly to the DEC chief IAW IED TTP. This room has deliberate reporting criteria and limited participants to maintain fast linkage to the DEC. This is a reporting room only. No deliberation or coordination will take place except to acknowledge receipt of the report. The DEC chief or deputy will vet the information through appropriate channels to determine required actions. If actions are deemed appropriate, the DEC chief or deputy will respond with the report timestamp, disposition, and whether the authoritative mission data can be found in JADOCS (to include manager) or other persistent collaborative targeting tools in the ASOC or another component.

g. **F_CAOC_DEC_Lethal_Attack_Planning**—This room is a collaborative planning space for lethal attack planning led by the DEC attack coordinator (AC). Upon assignment of a mission planning task, the AC will post a matrix organization participation requirement remark in the JADOCS DTL manager Target Data tab. This list will include COD offensive duty officers and unit liaison officers as directed by the AC and intelligence duty officers as directed by the TDO. The room name will be posted as the final line of the remark to allow rapid assembly. The AC will post the same remark in CAOC_COD_All_Gen_Info and voice to the floor in the COD_All voice channel that a lethal attack mission planning task is posted. All operations duty officers (ODOs) and liaison officers (LNOs) will check the list and join if named. Planning coordination will proceed in the room until the AC produces a mission task message. At that time the AC will dismiss the planners until the next event requiring their interaction.

h. **F_CAOC_DEC_Non-Lethal_Attack_Planning**—This room is the non-lethal equivalent of the lethal attack planning room and will be led by the irregular warfare duty officer (IWDO). Upon assignment of a mission planning task, the IW will post a matrix organization participation requirement remark in the JADOCS DTL manager Target Data tab. This list will include COD offensive duty officers and unit liaison officers as directed by the IW and intelligence and IO duty officers as directed by the IOT. The room name will be posted as the final line of the remark to allow rapid assembly. The IW will post the same remark in CAOC_COD_All_Gen_Info and voice to the floor in the COD. All voice channel that a non-lethal attack mission planning task is posted. All intelligence and information operations duty officers (IODOs) will check the list and join if named. Planning coordination will proceed in the room until the IW produces a mission task message. At that time the IW will dismiss the planners until the next event requiring their interaction.

i. **F_CAOC_IO_Coord_Command**—This room is the information operations duty officer‘s coordination space and command channel to IO forces. The IODO will coordinate information with the DEC IOT and other IO nodes in the AOC as well as reachback agencies. Non-lethal attack mission commands will be published in this room.

j. **F_CAOC_COD_SOLE_Coord**—This room is the information sharing and coordination space between the JSOTF and AOC special operations liaison element (SOLE). The DEC SOLE representative will monitor this room for information relating to DEC mission analysis or tasking. The DEC SOLE representative may interact (with SOLE Director delegated authority) with the joint special operations task force and other United States Special Operations Command (USSOCOM) agencies to gather critical mission planning or analysis information.

k. **F_CAOC_COD_BCD_Coord**—This room is the information sharing and coordination space between the corp TOC and the AOC battlefield coordination detachment (BCD). The DEC BCD representative will monitor this room for information relating to DEC mission analysis or tasking. The DEC BCD representative may interact (with BCD director delegated authority) with corps TOC or other LCC agencies to gather critical mission planning or analysis information.

l. **CAOC_COD_All_Gen_Info**—This room is used by team leads to post temporary information that is relevant and significant to a large audience in the combat operations division. Information relating to small audiences or that is better suited for a collaborative tool (such as INFLTREPs, mission reports, battle hit assessment, etc.) will be posted in appropriate locations such as persistent collaborative tools, shared drives, or AOC portal web pages. DEC operations requiring immediate attention of varied ODOs and LNOs will both be posted and voiced in this room. All COD players should have this room displayed.

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AFDD 2-8, *Command and Control,* 1 June 2007.

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GLOSSARY

ABBREVIATIONS AND ACRONYMS	
A	
ACO	airspace control order
ADA	air defense artillery
AC	attack coordinator
AFTTP	Air Force tactics, techniques, and procedures
AI	air interdiction
ALSA	Air Land Sea Application Center
AMD	air mobility division
AO	area of operations
AOC	air operations center
AOR	area of responsibility
ASOC	air support operations center
ASR	air support request
ATO	air tasking order
B	
BCD	battlefield coordination detachment
BCT	brigade combat team
BDA	battle damage assessment
BFT	blue force tracker
C	
C2	command and control
C2DO	command and control duty officer
CAC	common access card
CAOC	combined air operations center
CAS	close air support
CASEVAC	casualty evacuation
CFACC	combined forces air component commander
CJTF	coalition joint task force
CCA	close combat attack
CCDR	combatant commander
CCO	central control officer
COD	combat operations division
COP	common operational picture
CCSG	commander, carrier strike group
CFACC	combined force air component commander
CSARDO	combat search and rescue duty officer
CSG	carrier strike group
D	
DCA	defensive counterair
DEC	dynamic effects cell
DSN	Defense Switched Network

DT	dynamic targeting
DTL	dynamic targeting list
E	
ESG	expeditionary strike group
F	
FARP	forward arming and refueling point
FM	field manual
FRAGORD	fragmentary order
FSE	fire support element
G	
GCC	Geographic combatant commander
I	
IAW	in accordance with
IDN	initial distribution number
IED	improvised explosive device
INFLTREPS	In-flight reports
IO	information operations
IODO	information operations duty officer
IP	internet protocol
ISRD	intelligence, surveillance, and reconnaissance division
IT	information technology
IWDO	Irregular warfare duty officer
J	
J-3	operations directorate of a joint staff; operations staff section
J-6	communications system directorate of a joint staff; command, control, communications, and computer systems staff section
JADOCS	joint automated deep operations coordination system
JFC	joint force commander
JOA	joint operations area
JP	joint publication
JPRC	joint personnel recovery center
JSTARS	joint surveillance target attack radar system
JTAC	joint terminal attack controller
JTF	joint task force
L	
Lemay Center	Curtis E. LeMay Center for Doctrine Development and Education
LNO	liaison officer
LAN	local area network
M	
MCCDC	Marine Corps Combat Development Center
MCRP	Marine Corps reference publication
MEDEVAC	medical evacuation
MND-B	Multinational Division-Baghdad
MTI	moving target indicator

MTTP	multi-Service tactics, techniques, and procedures
N	
NECOS	net control station
NL	non-lethal
NIPRNET	non-secure internet protocol router network
NTTP	Navy tactics, techniques, and procedures
NWDC	Navy Warfare Development Command
O	
ODO	operations duty officer
OEF	Operation ENDURING FREEDOM
OIF	Operation IRAQI FREEDOM
OPLAN	operation plan
OPORD	operation order
OPTASKCHAT	operation task chat
P	
PCHAT	persistent chat
PID	positive identification
POI	point of impact
POO	point of origin
PR	personnel recovery
R	
RO	room owner
ROE	rules of engagement
ROZ	restricted operations zone
S	
S-3	battalion or brigade operations staff officer (Army; Marine Corps battalion or regiment)
S-6	communications staff officer
SADO	senior air defense officer
SALT	size, activity, location, time
SALUTE	size, activity, location, unit, time, and equipment
SATCOM	satellite communications
SEAD	suppression of enemy air defenses
SIDO	senior intelligence duty officer
SIGACT	significant activity
SIPRNET	secret internet protocol router network
SITREP	situation report
SODO	senior operations duty officer
SOLE	special operations liaison element
SOP	standard operating procedure
SOR	system of record
SUA	special use airspace
T	
TACS	tactical air control squadron
TAOC	Tactical Air Operations Center

TC	tactical chat
TIC	troops in contact
TOC	tactical operations center
TRADOC	United States Army Training and Doctrine Command
TST	time-sensitive targeting
TTP	tactics, techniques and procedures
U	
UAS	unmanned aircraft system
UJTL	Universal Joint Task List
UNTL	Universal Naval Task List
US	United States
USSOCOM	United States Special Operations Command
V	
VOSIP	voice over secure internet protocol

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NTTP 6-02.8
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7 July 2009

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