### TRAINING

The number one priority best practice for optimizing VTC performance and improving user experience, is to ensure trained and certified facilitators and administrators support VTC systems and calls. **Regardless of the tech**nology the Army uses, trained experts in networking, VTC, and Unified Capabilities are imperative to ensure leaders can conduct Mission **Command effectively.** Contact 7th SC(T) training representatives for training opportunities.



# IMPORTANT CONTACT INFORMATION

Enterprise Service Desk:	1-866-335-2769
93d Signal Brigade VTC:	(757) 878-0533
(Eastern US)	(757) 878-0539
106th Signal Brigade VTC:	(210) 221-9281
(Western US)	(210) 808-0226
Regional Cyber Center—Conus (RCC-C) 1-800-305-3036 In Call Troubleshooting (520) 533-8154 E-Mail: usarmy.huachuca.2rcc-	

wh.mbx.operations-center@mail.mil and @mail.smil.mil

7th SC(T) VTC: (CONUS Theater) (706) 787-8291
(706) 787-7856
(706) 787-7858

DISA DISN Customer Contact Center (DCCC) (Global Video Services) (844) 347-2457 (614) 692-0032 Choose "Option 2"

E-Mail: disa.scott.conus.mbx.dccc@mail.mil Or disa.scott.conus.mbx.dccc@mail.smil.mil

#### FOR MORE INFORMATION

Regional Cyber Center—Conus: <u>https://army.deps.mil/NETCOM/</u> <u>sites/2rcc/teamsites/uc/ucvisitors/</u> <u>SitePages/Vi</u> deo.aspx

#### 7th Signal Command (Theater) "One Team, One Network"



ATTN: G3, Network Engineering Branch Chief

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### U.S. ARMY HEADQUARTERS 7<sup>TH</sup> SIGNAL COMMAND (THEATER)



## VIDEO TELECONFERENCE BEST PRACTICES

## VTC Best Practices

7th SC(T) mandates these VTC best practices:

#### SYSTEM CONFIGURATION

The Network Enterprise Centers and the Regional Cyber Center—Conus (RCC-C) will work to ensure networks, VTC end-points, and Multi-Point Control Units (MCU) operate on 7th SC(T) standard configura-tions for optimal security & performance.

- $\Rightarrow \text{ Connect all end-points and MCUs directly to} \\ \text{RCC-C gatekeepers for optimal security,} \\ \text{reliability, performance, and failover} \\$
- ⇒ Connect to RCC-C VTC element management tools and receive rights to manage your end-points and MCUs and to ensure Secure Technical Implementation Guide (STIG) compliant configurations
- ⇒ Ensure STIG compliant separation of classified and unclassified operations through separate end-points for each classification level or approved periods processing solutions to sanitize systems when levels switch
- ⇒ VTC is the most sensitive sensor to find suboptimal network configurations; work closely with NEC & RCC experts to optimize networks; Check CODEC user interfaces for call statistics, jitter, latency, and packet loss.
- $\Rightarrow$  Ensure infrastructure supports the latest software or firmware, and traffic is properly segregated with adequate network capacity
- ⇒ When connecting to a Cisco switch with a Gigabits per second (Gbps) capable interface, then configure it for auto-negotiation. For 100 Megabits per second (Mbps) interfaces, then hard code the interface for full-duplex
- ⇒ Optimize lighting for visibility, use pre-sets, & zoom camera on senior participant(s)
- ⇒ It is preferred to use Domain Name Service (DNS) records for gatekeeper registration failover and not a single IP. SRV record for Cisco and A records for Polycom equipment.

- ⇒ Set Maximum Transmission Unit (MTU) size on VTC systems to 1200; Set TACLANE device "Do Not Fragment" settings to "Set" instead of "Clear"
- $\Rightarrow$  Ensure conference rooms, offices, and cubicles present a professional appearance, and configure them in accordance with the STIGs and according to classification level.

### **CALL COORDINATION**

- ⇒ A single trained call coordinator is responsible for leading scheduling, facilitation, & troubleshooting each call; they gain leadership support to strictly enforce standards, best practices, & reporting
- ⇒ Call via 7SC(T) standard network & VTC settings such as standard IP addresses & H.264 protocol
- ⇒ Call into a single host MCU (Supported Command, NEC, RCC, or DISA GVS operated); Do not dial MCUs into other MCUs as it reduces performance and prohibits effective troubleshooting
- ⇒ Establish an in-call and out of band troubleshooting net via Defense Collaboration Service (DCS), Chat, or teleconference bridge (TELECON)
- ⇒ For critical VTCs, coordinate a Primary, Alternate, Contingency, & Emergency (PACE) means of communications such as a primary and backup host MCU, DISA Global Video Services, DCS, TELECON, & wireless to ensure mission accomplishment. Use the 7th SC(T) PACE checklist.
- $\Rightarrow \ \ {\rm Connect \ to \ calls \ one \ hour \ prior \ to \ sit-down}$
- ⇒ Units should strive to minimize the numbers of participants in calls and reduce the complexity of calls in terms of numbers of MCUs, gatekeepers, vendors, & types of VTC technology in each call
- ⇒ *TEST! TEST! TEST!* Schedule test calls for critical calls, when calling new end-points, following any network change or authorized service interruption, following configuration changes, & any connections to new or multivendor technology

- ⇒ When speaking, speak in a clear and audible voice, at a moderate pace, and directly into the microphone from 12 18 inches away.
- $\Rightarrow$  Coordinators ensure facilitator points of contact standby to support distant end-points
- ⇒ Do not use unclassified audio, video, phone, or wireless devices in vicinity of classified VTCs
- ⇒ Avoid unnecessary and abrupt movement, shuffling of papers or turning pages, typing, sidebar conversations, and other background noises. Mute microphones when not in use.
- ⇒ Do not discuss classified information on an unclassified VTC or with unauthorized participants. Know the classification and any caveats of your meeting, and the corresponding clearances of your participants.

#### **TROUBLESHOOTING**

- ⇒ Log all calls and note anomalies to inform after conference reviews and incident reports. Log system make and model information for all participants, classification level, protocols and configurations used by all participants, time, places, senior participant(s), call host, and incidents experienced such as audio, video, or connection challenges. Cut and paste from logs into reports and trouble tickets.
- ⇒ Call RCC-C immediately for in-call troubleshooting, connection problems, one-way video, network, or firewall incidents
- $\Rightarrow \text{ The call coordinator leads deliberate in-call troubleshooting efforts via the out of band troubleshooting net (DCS, Chat, TELECON)}$
- $\Rightarrow$  Call the Host MCU operator immediately for audio, video, or performance challenges
- $\Rightarrow$  Follow-up with an incident report
- ⇒ *REPORT! REPORT! REPORT!* Reporting all incidents large or small to the NEC or Army Enterprise Service Desk helps to not only engage the right expertise to mitigate them, but it also allows the 7th SC(T) to track and analyze trends, fix chronic challenges, pursue sufficient resourcing, & provide better service
- ⇒ All incidents involving a General Officer or Flag Officer must be treated as a 7th SC(T) Commander's Critical Information Requirement (CCIR) & briefed daily to 7th leadership