



DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

OFFICE OF THE SECRETARY

AFMAN17-1202_AFGM2016-01

4 November 2016

MEMORANDUM FOR DISTRIBUTION C
MAJCOMs/FOAs/DRUs

FROM: SAF/CIO A6
1800 Air Force Pentagon
Washington DC 20330-1800

SUBJECT: Air Force Guidance Memorandum (AFGM) to Air Force Manual (AFMAN) 33-145,
COLLABORATION SERVICES AND VOICE SYSTEMS MANAGEMENT.

By Order of the Secretary of the Air Force, this Air Force Guidance Memorandum immediately changes Air Force Manual 33-145, *Collaboration Services And Voice Systems Management*, 6 September 2012. Compliance with this Memorandum is mandatory. To the extent its directions are inconsistent with other Air Force publications, the information herein prevails, in accordance with (IAW) AFI 33-360, *Publications and Forms Management*. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

As a result of the publication of AF Policy Directive (AFPD) 17-1 *Information Dominance and Cyberspace Governance and Management*, which supersedes AFPD 33-1, *Cyberspace Support*, dated 9 Aug 2012; AFMAN33-145 is hereby renumbered as AFMAN17-1202. This Memorandum also renumbers AFMAN33-145; the title and the rest of the content remain unchanged. I hereby direct the Office of Primary Responsibility (OPR) for AFMAN33-145 to conduct a special review in accordance with AFI33-360 to align its content with AFPD17-1. This will result in a rewrite or rescind action of AFMAN33-145.

This Memorandum becomes void after one year has elapsed from the date of this Memorandum, or upon rescinding or rewrite of AFMAN33-145, whichever is earlier.

WILLIAM J. BENDER, Lt Gen, USAF
Chief, Information Dominance and
Chief Information Officer

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE MANUAL 33-145

6 SEPTEMBER 2012



Communications and Information

**COLLABORATION SERVICES AND VOICE
SYSTEMS MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-publishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: AF/A3CP/A6CP

Certified by: AF/A3C/A6C
(Maj Gen Earl Matthews)

Pages: 22

Supersedes: AFI33-111, 13 May 2005

This Air Force Manual (AFMAN) implements Air Force Instruction (AFI) 33-115V1, *Network Operations (NetOps)* (to be published as AFI 33-115, *AF-GIG Services*) and DODI 8100.04, *DoD Unified Capabilities (UC)*. It establishes procedures and guidance for Collaboration Services including electronic collaboration and management of Video Teleconferencing (VTC) resources to include systems, equipment, personnel, time, and money and provides the directive guidance for Air Force VTC and voice systems management activities. This publication applies to all military and civilian Air Force personnel, members of the Air Force Reserve (AFRC) and Air National Guard (ANG), and other individuals or organizations as required by binding agreement or obligation with the Department of the Air Force regardless of Air Force Specialty Code (AFSC) (to include Department of Defense [DoD] civilian organizations). Direct questions or comments on the contents of this instruction through appropriate command channels to Cyberspace Operations, Cyberspace Policy Division (AF/A3CP/A6CP). Send recommended changes and conflicts between this and other publications, using Air Force (AF) Form 847, *Recommendation for Change of Publication*, to AF/A3CP/A6CP, with information copy to SAF/CIO A6, Policy and Compliance Division (SAF/A6PP). This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force *Records Disposition Schedule (RDS)* located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This is a total revision to replace and update AFI 33-111, *Voice Systems Management*. It incorporates and replaces voice systems management with coverage of DoD and Air Force enterprise collaboration services and the convergence of video, text, and voice into Unified Capabilities (UC). This manual was rewritten and must be completely reviewed.

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Chapter 1

GENERAL INFORMATION

1.1. Purpose. This manual implements the Collaboration Enterprise Core Service and Voice Systems Management NetOps Service described in AFI 33-115, *AF-GIG Services*. Specific procedures for Collaboration will be maintained in MPTO 00-33A-1110, *Collaboration and Messaging*. Specific procedures for Voice Systems Management will be maintained in MPTO 00-33A-1108, *Voice Systems Management*. This manual is for use by individuals responsible for implementation, acquisition, and management of electronic collaboration services, appliance Video-Teleconferencing (VTC) equipment, and telephone services that are converging under UC Real Time Services (RTS) establishing the basic guidance framework for Air Force personnel. The scope for this publication includes information on policy, standards, reporting, requirements, services, engineering, and systems management for use in complying with DoD and Air Force instructions for UC RTS including collaboration, VTC communications connectivity, and telephone services in the secure and non-secure interactive group environments. This manual assists action officers who implement collaboration services (voice, video, and/or data) to satisfy customer requirements and support the diverse major command missions. The use of Major Command (MAJCOM) in this document refers to US Air Force Major Commands, Field Operating Agencies (FOA), and Direct Reporting Units (DRU).

1.2. DoD Unified Capabilities (UC). UC is the integration of voice, video, and/or data services delivered ubiquitously across a secure and highly available network infrastructure, independent of technology, to provide increased mission effectiveness to the warfighter and business communities. The Air Force will integrate current with future network technologies to provide UC (i.e., any single or combination of information media (voice, video, and/or data), whether converged or non-converged) on Air Force and DoD networks.

1.3. Video-Teleconferencing (VTC). Legacy VTC capabilities are to be phased out with the implementation of UC RTS. VTC is an electronic form of video telecommunications (video/data/voice/imagery) which permits two or more people in separate geographic locations to engage in real-time, interactive, face-to-face, video/audio communications. In many situations, this electronic media can reduce the need for TDY travel to conduct face-to-face events such as staff or technical meetings, briefings, conferences, interviews, work groups, project management reviews, training, etc. Today's technology allows individuals to structure video equipment and systems to meet the many and varied needs of our customers. It can be secure or non-secure, terrestrial, or satellite transmission between two or more separate geographic locations. VTC operation is two-way video/two-way audio.

1.4. Planning, Programming, Budgeting and Execution (PPBE). The requiring unit, or its MAJCOM, is responsible for the PPBE process for acquiring and maintaining legacy appliance based VTC solutions and unique collaborative service not provided by Defense Information Systems Agency (DISA) or the Air Force enterprise. Equipment and systems shall be justified, validated, funded, and installed in accordance with this Air Force Manual (AFMAN).

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Secretary of the Air Force, Office of Warfighting Integration and Air Force Chief Information Officer (SAF/CIO A6).

2.1.1. Overall responsibility to develop, implement and enforce policies, standards, strategies, and procedures to ensure the Air Force executes the most effective and efficient acquisition, integration, application, and management of information and information technology assets. Further, as the Air Force Chief Information Officer, SAF/CIO A6 is the responsible official for Air Force owned and operated information systems.

2.1.2. Develops and publishes policy and programs to integrate warfighting and combat support capabilities, and oversees implementation of enterprise information, information resources, and data management capabilities for Joint, Coalition and Air Force warfighters.

2.1.3. In coordination with SAF/AQ, AFSPC, and AFMC establishes and maintains a target baseline (consisting of technical standards, protocols, guidelines, and implementation constraints) for the desired future state of the AF-GIG Services including Collaboration and Voice Systems Management. The target baseline must be developed in compliance with DoD policy and guidance. The Air Force Consolidated Enterprise Information Technology Baseline (AF CEITB) Configuration Control Board (CCB) is charged with AF CEITB configuration management of the target baseline.

2.1.4. Establishes and maintains a target architecture that will guide the evolution of UC RTS providing Collaboration Services and Voice Systems, in accordance with AFI 33-401, *Air Force Architecting*.

2.2. Air Force Space Command (AFSPC).

2.2.1. Performs Lead Command responsibilities for UC RTS including collaboration services, Telephone/Voice Systems (e.g., Defense Switched Network (DSN), Defense Red Switch Network (DRSN), Public Switched Telephone Network [PSTN], Federal Telecommunications System [FTS], FTS-2001 or its designated replacement), Information Transport System(ITS), Voice Switching System (VSS) and AFNet.

2.2.2. Develops enterprise UC RTS including collaboration services and voice network enhancement initiatives in conjunction with the 38th Cyberspace Engineering Installation Group (38 CEIG) and documents these initiatives in the Cyberspace Infrastructure Planning System (CIPS) (reference TO 00-33D-3003). Acts as guidance and standards adjunct to SAF/CIO A6.

2.2.3. Addresses applicable manpower issues. Identifies future funding requirements, to include sustainment, and prepares the Program Objective Memorandum (POM) submission in coordination with SAF/CIO A6. Collects all UC RTS requirements including collaboration services and voice system requirements from MAJCOM, field operating agencies (FOA), direct reporting units (DRU), and functional communities, e.g., medical for inclusion into the Air Force POM.

2.2.4. Develops applicable guidance for implementation of UC RTS including collaboration services and voice systems according to SAF/CIO A6 policy and standards. Documents and tracks implementation activities in CIPS in conjunction with the Cyberspace Systems Integrators (CSI) (former Systems Telecommunications Engineering Managers [STEM]).

2.2.5. Develops performance, operational standards, policies, and procedures for UC RTS including collaboration services and voice systems.

2.2.6. Maintains the UC RTS strategy document, monitors overall compliance, identifies deviations to appropriate organizations, and initiates an annual review.

2.2.7. Participates in Air Force and DOD configuration control boards, conferences, and forums for voice systems and networks (e.g., UC RTS, Defense Switched Network, Defense RED Switched Network, and Voice over Internet Protocol [VoIP]).

2.2.8. Facilitates the establishment of Inter-Service Support Agreements (ISSA) with other military departments and Department of Defense (DOD) activities. Seeks reimbursement of Air Force costs associated with established ISSA's and other DOD and Air Force guidance.

2.2.9. Validates all voice systems waivers and Interim Certificates to Operate (ICTO) requests for interoperability and migration request for Information Assurance (IA) accreditation for the DSN network connectivity. Submits and advocates all Air Force approved waiver or IA migration requests to the appropriate authority.

2.2.10. Maintains a central repository in AFSPC/ 38 CYRS of all voice systems and related assets in the Air Force inventory as a part of the operational baseline.

2.2.11. Interacts with ITS, AFNet, VSS and Theater Deployable Communications Program Offices at the Electronic Systems Center (ESC).

2.2.12. Develop standard technical solutions in conjunction with the 38 CEIG for e911 services.

2.2.13. Provides enterprise-level metrics and situational awareness for the Air Force Enterprise Network--which includes key voice networks (e.g., DSN, DRSN, PSTN, FTS, FTS-2001 or its designated replacement). Metrics will include but not be limited to systems availability, tech refresh status, customer service levels, available capacity, intrusions, and vulnerabilities.

2.2.14. Develops options and operational requirements for UC RTS including wireless Personal Electronic Devices providing voice access to Defense Information Systems Network (DISN) services. Develops limitations and constraints on the use of such devices.

2.2.15. Defines and maintains an operational baseline for AF-GIG Services including Collaboration Services and Voice Systems Management converging under UC RTS. The operational baseline is the set of components of the Implementation Baseline appropriately configured and deployed across the topology of the AF IT infrastructure that implements the architecture, standards and protocols and guidelines specified in the Target Baseline and provides the required warfighter capabilities and performance. It specifies the exact laydown and configurations of hardware and software within all facilities in the AF infrastructure topology.

2.2.16. Serves as the approval authority for UC RTS including collaboration, voice systems and associated peripherals (e.g., Voice Mail, Enhanced 911 [E911]), upgrades, expansions, and modifications to base-level architecture.

2.2.17.1. Ensures all UC RTS that connect to the DSN network are certified by the Joint Interoperability Test Command (JITC) for interoperability and IA certification and accreditation, unless a waiver is granted for interoperability in accordance with CJCSI 6215.01C and DoDI 8100.3. Also, an IA migrating strategy may be required in addition to the waiver. Voice systems and associated peripheral devices, to include, but not limited to, voice messaging/mail system, automatic call distribution systems and future technologies, that originate or terminate DSN calls, require certification. All certified and IA accredited UC RTS are listed in the DISA approved products list (<https://aplits.disa.mil/>).

2.2.17.1.1. Sponsors UC RTS equipment vendors to the JITC for testing. Shares lessons learned and test report for JITC System Under Test with Lead Command.

2.2.17.1.2. Seek interim “certificates to operate” for uncertified equipment in the enterprise. Process all interim “requests to operate” as required. The approval authority for all waiver requests is the DoD Chief Information Officer (DoD CIO).

2.2.17.2. Ensures all UC RTS and associated peripheral devices have been certified and accredited for use across the Air Force enterprise according to DODI 8510.01, *DOD Information Assurance Certification and Accreditation Process (DIACAP)* and AFI 33-200, *Information Assurance (IA) Management*.

2.2.18. Develops options and directs configuration changes, information operations condition (INFOCON) changes, and changes to security postures in response to vulnerabilities and incidents, USCYBERCOM direction, and cross-MAJCOM outages, that affect the preponderance of the enterprise, or are time critical in nature.

2.2.19. Directs actions related to UC RTS and legacy voice network defense.

2.2.20. Evaluates and responds to Air Force UC RTS and legacy voice network intrusions and malicious logic events.

2.2.21. Develops countermeasures to UC RTS and legacy voice network vulnerabilities and disseminates to applicable voice network operations organizations.

2.2.22. Assists base-level personnel with network attack damage control and recovery procedures.

2.2.23. Establishes a UC RTS security assessment program to test and assess UC, voice, and related platforms for vulnerabilities.

2.2.24. Provides UC RTS and legacy voice network threat awareness, analysis, and intelligence support.

2.2.25. Develops tactics, techniques, and procedures for applicable UC RTS and legacy voice related platforms.

2.2.26. Provides assistance to MAJCOMs by conducting network vulnerability assessments and exercise red team support.

2.2.27. Conducts formal testing and evaluation of network defense weapon systems for their impact and defense of UC RTS and legacy voice systems.

2.3. Air Force Material Command (AFMC).

2.3.1. Develops, manages, and sustains the implementation baseline. The implementation baseline is the associated baseline of acquisition selected products and their target baseline informed/allowed configurations that implement the architecture, standards and protocols and guidelines specified in the Target Baseline. The Implementation Baseline informs the Operational Baseline of the acquisition selected products and how they are to be configured to support deployment of user applications across the infrastructure topology.

2.3.2. Works with SAF/CIO A6 and AFSPC to procure, develop, and deploy AF-GIG Services including UC RTS under the Collaboration enterprise core service and Voice Systems Management service in accordance with the implementation baseline.

2.4. Major Commands (MAJCOM). Each MAJCOM will:

2.4.1. Provide support for legacy collaboration and voice system capabilities that have not migrated to AFSPC or DISA managed enterprise core services.

2.4.2. Ensure installations under their command complete annual physical inventories of all leased voice services and equipment used on the installation.

2.4.3. Advise and assist the base communications and legal offices on telecommunications issues.

2.4.4. Ensure installations under their command follow voice systems security procedures detailed in MPTO 00-33A-1108, *Voice Systems Management*.

2.4.5. Ensure installations under their command review applicable base DSN and long distance monthly service records for anomalies to identify billing errors or misuse.

2.4.6. Plan for future voice system requirements through the Fiscal Year (FY). Submit prioritized POM input requirements to AFSPC lead command for consideration by Air Force corporate structure.

2.4.7. Establish a Government Emergency Telephone System (GETS) point of contact (POC). Ensure wings/bases establish a GETS POC.

2.4.8. MAJCOM voice focal points should forward voice policy and guidance to subordinate units at the fixed base level and elsewhere, when appropriate.

2.4.9. Support the AFSPC/38 CYRS central repository of all voice systems and related assets in the Air Force inventory by responding to 38 CYRS Voice Systems data calls. This provides status for reporting annually to the DSN Single Systems Manager on installed Air Force operational baseline configurations, contracting for sustainment of systems, upgrading/modernization efforts for the AF enterprise architecture, and UC RTS Voice Systems migration strategy.

Chapter 3

UNIFIED CAPABILITIES

3.1. DoD Unified Capabilities (UC). UC shall be developed, operated, and provided to DoD and non-DoD authorized users in accordance with DoDI 8100.04, *DoD Unified Capabilities (UC)* and DoD directives and instructions providing requirements for interoperability, supportability, and information assurance including DoDI 4630.8, *Procedures for Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)*; DoDI 8500.2, *Information Assurance (IA) Implementation*; and DoDI 8510.01, *DoD Information Assurance Certification and Accreditation Process (DIACAP)*.

3.1.1. Products that support UC on Air Force-owned networks shall be tested pursuant to the Unified Capabilities Requirements (UCR), and are UC certified for interoperability by JITC and for IA by the Air Force designated accrediting authorities (DAAs) in accordance with AFI 33-210, *Air Force Certification and Accreditation (C&A) Program (AFCAP)*.

3.1.2. The UC Approved Products List (APL) shall be used for acquisition and operation of products that provide UC on DoD Component-owned networks.

3.1.3. The DISA UC directory, addressing, and numbering schemas shall be used to ensure standardization and interoperability across DoD networks.

3.2. DoD Collaboration Services. DoD-wide common information technology solutions are defined as DoD Net-centric Enterprise Services (NCES) providing DoD Collaboration Services as the primary means for conducting collaboration sessions within the DoD environment. DISA's (NCES) Defense Connect Online (DCO) is the designated DoD Collaboration Services providing Internet Protocol (IP)-based conferencing with audio and video over IP conferencing with shared desktop and text chat on NIPRNET and SIPRNET.

3.3. Intelligence Activities. Intelligence activities requiring Sensitive Compartmented Information (SCI) secure VTC capability will process their requirement through their MAJCOM-level or equivalent A2 office for validation and appropriate Intelligence Community (IC) solution source.

3.4. Air Force VTC and UC RTS. Effective collaboration across the DoD enterprise requires consolidation and standardization of VTC services to ensure interoperability in the Net-centric Enterprise and align VTC services for migration to UC RTS.

3.4.1. VTC solutions that may be used to meet Air Force needs are as follows:

3.4.1.1. The designated (NCES) collaboration tool.

3.4.1.2. UC RTS or IP based VTC solutions (H.323 and SIP-compliant).

3.4.1.3. ISDN based VTC service-Defense Information Systems Network-Video Services Global (DVS-G) (H.320). Legacy ISDN capabilities must be upgraded to a UC capability.

3.4.2. When evaluating VTC solutions, organizations should take into consideration available video capabilities included in online, DoD-approved collaboration tools. DISA's

(NCES) Defense Connect Online (DCO) video collaboration capability is a DISA provided, certified and accredited service that is available on both NIPRNET and SIPRNET.

3.4.3. The use of a webcam, in support of DCO or other online video collaboration services, requires the Information Assurance Manager (IAM) to comply with the following C&A measures:

3.4.3.1. Webcam must be passive USB plug & play device with no internal memory.

3.4.3.2. Webcam must be Air Force Standard Desktop Configuration (SDC) compliant.

3.4.3.3. IAM must review DODI 8500.2 IA controls PEDI-1 and PRTN-1.

3.4.4. If the webcam requires any additional software or drivers above what is provided by FDCC, then this software must undergo C&A. Compliance with *DISA Video Tele-Conferencing STIG* is mandatory for all VTC solutions.

3.5. VTC Maintenance and Training. Regardless of the VTC solution, a follow-on continual need to program for operations, maintenance, and training support is necessary.

3.5.1. Operations involve scheduling usage with on and off-site personnel and network central control offices; setup/tear down, initialization, and testing; operating room equipment during and between calls; maintaining usage records; troubleshooting and spares replacement.

3.5.2. Equipment maintenance is usually provided by service agreements with the equipment vendor or by the enclave network service provider. The number of maintenance vendors used should be minimized to optimize support efficiencies.

3.5.3. Both operator and user training is required and must include how to plan and control effective VTC sessions and the use of multimedia (graphics, recorded media, and live presentations) services. Training may be acquired from the VTC equipment vendor or from Government organizations with similar equipment. DISA provides VTC facilitator training by desktop tutorial (Level 1). On-site training is available at a DISA facility in Williamsburg VA (Level 2). For assistance contact parent MAJCOM, FOA, or DRU UC point of contact.

3.6. Accountability. Accountability of UC RTS and legacy VTC systems and equipment, including studio, portable, and desktop appliance UC RTS and legacy VTC systems and equipment, will be established according to AFI 23-111, *Management of Government Property in Possession of the Air Force*, and AFI 33-112, *Information Technology Hardware Asset Management*.

3.7. Requirements. MAJCOMs plan, program, budget, fund for local UC RTS or VTC requirements not fulfilled by enterprise capabilities. Air Force organizations will not procure deployable or fixed base VTC equipment without a validated technical solution for their requirements and conformance with UC interoperability requirements and integration with UC RTS. Organizations will coordinate all requirements (to include upgrades, modifications and expansion) to the MAJCOM for review and approval, and to the CSI-B according to AFI 33-150, *Management of Cyberspace Support Activities*, and TO 00-33-D-3003 for inclusion in the CIPS blueprint.

3.7.1. VTC Requirements. Every VTC requirement document contains basic elements such as the functional definition of the requirement, justification of the requirement, and the

technical solution and alternatives with associated costs. The solution should take into account acquisition, maintenance, updates, and disposition. For large appliance based solutions an initial capabilities document (ICD) should be created. VTC requirements planning and engineering require trade-offs (exchanging of some things for others as they are evaluated against each other). A specific solution for a VTC requirement depends on:

- 3.7.1.1. Site/system specific functional/collaboration requirements.
- 3.7.1.2. Communications connectivity requirements for existing and future sites.
- 3.7.1.3. Available transmission media.
- 3.7.1.4. International, Federal, and Military standards.
- 3.7.1.5. Available equipment, services, and communications contracts.
- 3.7.1.6. Available funds (for personnel, maintenance, training).
- 3.7.1.7. Security requirements.

3.7.2. VTC systems used for Command and Control (C2) shall be programmatically identified, accredited, and managed as a C2 system or a component of a C2 system. VTC systems used for C2 may also be used for general VTC requirements.

- 3.7.2.1. Units must ensure system compliance with all DoD and AF C2 governing documentation, and shall provide the Assured Services Features from UCR 2008, Section 4.3.1.
- 3.7.2.2. VTC systems used for C2 cannot be certified as a component of an installation enclave and must obtain an independent Approval To Operate (ATO) for a C2 System.
- 3.7.2.3. The most important consideration for implementing new technology is the impact on mission requirements. Implementing any such technology must first and foremost not degrade the C2 services currently being provided.

Chapter 4

LEGACY VOICE SYSTEMS

4.1. Requesting Telephone and Telephone-Related Service.

4.1.1. The Communications and Information Services Officer (CSO) will:

4.1.1.1. Accept base telephone service workorders and process these workorders in a timely manner to establish, add, change, or delete voice services according to established local policy.

4.1.1.2. Submit major voice system requirements, to include upgrades, modifications, and expansion, as well as requirements that cannot be solved at the host-base to the MAJCOM for review and approval, and to the CSI-B according to AFI 33-150 and TO 00-33D-3003 for inclusion in the CIPS blueprint.

4.1.1.3. Establish a competitive contract through the applicable contracting office using AF IMT 9, *Request for Purchase*, or Communications Service Authorization (CSA) using AF IMT 1218, *Request for Communications Service*. A CSA is needed in areas where a public utility commission requires tariffed or regulated services (e.g., central office trunking, business lines, foreign exchange [FX] service). Ensure funds are available and certified prior to contract award. Use AF IMT 1218 to establish new CSAs or to submit changes to existing CSAs. Reference TO 00-33D-2002, *Engineering Installation Activities Management*, for 38 CEIG services.

4.1.1.4. Solicit and obtain competitive bids or proposals through designated and appropriate procurement channels for all voice services.

4.1.1.5. Ensure that the special telephone and voice requirements for people with disabilities are addressed according to 36 Code of Federal Regulations (CFR) 1194.23 of the Electronic and Information Technology Accessibility Standards, document, December 21, 2000 (<http://www.access-board.gov/sec508/508standards.htm>).

4.1.2. MAJCOMs will:

4.1.2.1. Establish procedures ensuring new or changes to existing CSAs are consistent with the Defense Federal Acquisition Regulation Supplement (DFARS). Plan and schedule timely establishment and/or renewal of telephone service contracts with required agencies and the contracting officer (DFARS Part 239, Acquisition of Information Technology, Subpart 239.74, Telecommunications Services).

4.1.2.2. Monitor CSAs under their control for adequate funding authority and to ensure that decentralized reporting of expenditures is accomplished as prescribed by the contracting officer.

4.1.2.3. Follow procedures and fulfill additional roles and responsibilities for voice systems defined in MPTO 00-33A-1108, *Voice Systems Management*.

4.2. Competitive Long Distance Voice Service. When FTS-2001 (or its designated replacement) service is not available (e.g., certain locations outside the continental United States), follow the guidelines in AFI 33-116, *Long-Haul Telecommunications Management*, to

request competitive long distance voice service. MAJCOMs may provide flat rate, long distance, non-reimbursable voice service to tenants authorized Class A-1 service if the host base also uses this service. When the host base does not require flat rate, long distance service, such a service is a special requirement and the tenant must pay for it.

4.3. Official Telephone Service in Personal Quarters.

4.3.1. Title 31, United States Code (U.S.C.), Section 1348 (31 U.S.C. 1348), Money And Finance; The Budget Process; Appropriations; Limitations, Exceptions, And Penalties; Telephone installation and charges, permits certain officials to have government-assigned telephones installed and maintained in their quarters, if necessary for national defense purposes. Limited telephone service for official use may be provided to those officials. Do not delegate the authority to designate these personnel to members below wing commanders or equivalent levels. Base such designations on functional position and mission impact.

4.3.1.1. See Attachment 2 for conditions and arrangements for official telephone service in quarters if DSN on netting and call forwarding universal for off netting does not meet requirements as the preferred technical solution.

4.3.1.2. Personnel authorized official telephone service in quarters must provide separate personal telephone service at his or her own expense from the local commercial telephone company or the government-furnished exchange (Class B service).

4.3.1.3. When local, unofficial service is not available or the waiting period for service is unacceptable, the MAJCOM/A6 (or equivalent) may waive requirements to permit dual usage of the official telephone. The user must pay:

4.3.1.3.1. The one-time cost, if any, for conversion to this service.

4.3.1.3.2. A monthly service charge equal to the charge for Class B service.

4.3.1.3.3. The cost of toll calls or other charges for unofficial use.

4.3.2. Flexiplace/Telecommunicating Support to Alternative Work Sites. Public Law (PL) 104-52, *Treasury, Postal Service, and General Government Appropriations Act of 1996*, Section 620 (Title 31 U.S.C., Section 1348 note), provides that appropriated funds may be used to install telephone lines and necessary equipment, and to pay monthly charges in any private residence or private apartment of a federal civilian employee who is authorized to work at home in accordance with guidelines issued by the Office of Personnel Management. The head of the department, division, bureau, or office must certify that adequate safeguards against private misuse exist, and that the service is necessary for direct support of the agency's mission.

4.3.2.1. Unit commanders, in coordination with the local personnel office, may authorize federal civilian employees to work at an approved flexiplace location. Unit commanders may also authorize the installation of a personal computer, applicable software, modems, fax machines, and data lines to support access at the alternate work location (PL 104-52). Unit commanders should work with the supporting communications unit to identify the necessary support requirements and restrictions.

4.3.2.2. The unit commander authorizing the alternate work location must:

4.3.2.2.1. Determine government-provided communications service is necessary for direct support of the agency's mission.

4.3.2.2.2. Fund necessary equipment and phone lines needed to support the mission.

4.3.2.2.3. Make sure the alternate work location is an economical option to having the individual work in the office.

4.3.2.2.4. Authorize payment for installation and monthly recurring charges.

4.3.2.2.5. Certify that adequate monitoring capability and safeguards against private misuse exist. Such certification should accompany a signed federal civilian employees flexiplace agreement.

4.3.2.2.6. Account for government-provided equipment on a hand receipt and inventory annually.

4.3.2.3. After approval, base communications units will work with the requiring activity to establish the service and required safeguards.

4.3.2.4. Because of the restrictions pertaining to the use of appropriated funds to support telephone service in private quarters, requesting unit commanders must certify that support requested under this provision is for an approved flexiplace location as defined by Air Force personnel guidance. Certification must accompany the communications and information systems requirement and be retained by the communications office as long as service or equipment is provided to the flexiplace location.

4.4. Air Force Guidance on Voice Mail/Messaging Systems.

4.4.1. When procuring new or replacement stand-alone Voice Mail/Messaging Systems (VMS), installations will integrate with either the base voice system or the telephone service provider until voice mail services are available to the base from UC RTS.

4.4.2. Communications units should evaluate the base-wide requirement for voice mail and plan for a centralized solution compliant with the transition to UC RTS.

4.4.3. When evaluating options for satisfying user needs, the analysis must examine service and total cost of ownership to acquire, install, and sustain the system over its expected life cycle.

4.4.4. The MAJCOM/A6 (or equivalent) can approve a waiver to purchase new or expand existing stand-alone VMS when the mission and business case is compelling and documented to be the best value to the Air Force.

4.5. Air Force Guidance on Music on Hold.

4.5.1. Any primary broadcast of music (e.g., music played directly from tape, compact disc, or other source) into a voice system must comply with licensing and copyright requirements under applied Federal, state, and local laws.

4.5.2. The use of royalty-free music is highly recommended. However, broadcasts from the Air Force News Agency are the preferred solution wherever possible. The Air Force News Agency provides an "Air Force Radio News on Hold" service that can feed into most Air Force switches. Please contact Air Force News, AFNEWS/NSOE, DSN 945-1363, for further information concerning the Air Force Radio News broadcasts.

4.5.3. Prior to approving rebroadcast of music into a voice system, the installation commander should consider the potential for complaints of preferential treatment or implied endorsement by the Air Force based upon the choice of radio station, and the potential for negative public reaction to broadcasts that may contain controversial, offensive, or political content.

4.6. Air Force Instruction on Lead Telecommunications Cables. The following applies:

4.6.1. For Commercial Telephone Company-Owned Cables:

4.6.1.1. Do not accept “abandoned” cables from any commercial telephone company without first consulting your base legal office, base civil engineering environmental flight, installation bio-environmental engineer, the environmental management office, and MAJCOM. Abandoned cables often contain materials (i.e., lead) which are environmental hazards. Accepting ownership may make the Air Force responsible for its removal and liable for any damages caused by the hazardous materials.

4.6.2. For Government-Owned Cables:

4.6.2.1. Coordinate with base civil engineering environmental flight or environmental management office, and the installation bio-environmental engineer before repairing, excavating, or removing cables suspected of containing lead. The environmental engineering team can offer advice on how to minimize health risks and Air Force liability.

4.7. Air Force Instruction on Malicious Call Trace (MCT) or Customer Originated Trace.

4.7.1. The host CSO will establish local MCT procedures to address harassing, prank, bomb threat, 911 hang-ups, or other emergency type calls that need to be identified.

4.7.2. Procedures should be clearly published in the base telephone directory if available and on appropriate visual aid forms posted next to the AF Form 440, Bomb Threat Aid.

4.7.3. The host CSO must work with the local security forces, Air Force Office of Special Investigations, and Staff Judge Advocate, to ensure responsibilities are outlined and appropriate equipment (e.g., line printers) are installed in designated places.

4.7.4. For standardization purposes from base-to-base, all sites will utilize the access code feature *57 to initiate a MCT. If an existing voice switch already has *57 assigned for another feature, reassign the existing feature a new access code and ensure *57 when MCT is used.

4.7.5. When a MCT is activated by an end user on base and the originating calling number is not displayed or unknown, applicable law enforcement personnel should immediately contact the telephone maintenance office for additional assistance. When contacted by law enforcement, these personnel can utilize other tools (e.g., voice protection system [VPS], TMS, switch logs, etc.) to help trace calls that are either still on-line or have hung up.

4.8. Voice Service for Geographically Separated Units. Small off-base units, such as Reserve Officers’ Training Corps detachments, get voice services through the commander of a host support base. The host support base communications unit activity processes bills using a fund citation provided by the parent MAJCOM.

4.9. Unofficial Commercial Telephone/Voice Service.

4.9.1. In Air Force-Owned Facilities Other Than Quarters:

4.9.1.1. Subscribers install and maintain new wiring for unofficial service consistent with their organizational policy and instruction.

4.9.1.2. The subscriber must acquire authorization to install telephone equipment (see AFI 32-9003, *Granting Temporary Use of Air Force Real Property*), where non-Air Force-owned wiring exists in or on Air Force real property.

4.9.1.2.1. The base CSO coordinates all such requests.

4.9.1.2.2. Unless specifically approved, the authorization is a permit for DOD subscribers and a revocable license for non-DOD subscribers.

4.9.1.3. Unless modified by the real estate document (e.g., lease, outgrant, etc.) or contract, the base CSO maintains all permanently installed building wiring that existed in the facility before occupancy by the subscriber.

4.9.2. Non-Government-Owned Facilities on Air Force Property. These facilities include self-sustaining banks, credit unions on CONUS bases, and other commercial activities. The subscriber installs, repairs, and maintains all outlets and associated wiring.

4.9.3. General Unofficial Commercial Telephone/Voice Service:

4.9.3.1. The subscriber funds all costs.

4.9.3.2. The base communications activity handles repairs when government-owned or -leased facilities or equipment are part of the circuitry.

4.10. Class of Telephone/Voice Service. Classes of official telephone service are:

4.10.1. Class A. Telephone lines accessing central offices, toll trunks, government voice systems and services, and DSN. Class A service has four billing categories:

4.10.1.1. Class A-1. Telephone lines for transacting official Air Force business.

4.10.1.2. Class A-2. Telephone lines for transacting official business of other military services or other government agencies (except the United States Postal Service) that directly support the Air Force installation, other activities furnishing service to or supporting Air Force installations, quasi-governmental agencies such as the American Red Cross (ARC) or morale, welfare, recreation, and services (MWRs) activities.

4.10.1.3. Class A-3. Telephone lines for transacting official business for any executive department, independent activity, or other government agency, except the Armed Forces, that is not supporting or servicing an Air Force installation.

4.10.1.4. Class A-4. Telephone lines for transacting official business in DOD commissaries.

4.10.2. Class B (Unofficial Telephone Service). Telephone service provided by a DOD component when used for personal or unofficial purposes is known as Class B telephone service. This includes telephone services provided by government-owned or government-leased facilities, or procured under contract or implied agreement, with a commercial communications company. These services are made available primarily in overseas locations, but there is limited use also in the United States. When you obtain these services from the

government, the subscriber pays all charges according to Title 10 U.S.C., Section 2686, Armed Forces; General Military Law, Service, Supply, and Procurement; Real Property; Related Personal Property; And Lease Of Non-Excess Property; Utilities and services: sale; expansion and extension of systems and facilities; DOD criteria; and this instruction. Offer Class B service only when an installation cannot reasonably obtain commercial service for its unofficial needs. Class B subscribers can access commercial telephone central offices and toll trunks (except where restricted). Class B service does not have direct in-dial or out-dial access to DSN and other government private line services. Class B service has the following categories:

4.10.2.1. Class B-1. Telephone lines in government-owned and government-leased quarters for family or personal use including telephone lines in unaccompanied personnel housing, visiting officers' quarters, family housing, and hospital suites.

4.10.2.2. Class B-2. Telephone lines at a military location for activities such as public schools, ARC, motion picture services, Army and Air Force Exchange Service (AAFES) services and their concessionaires, credit unions, noncommissioned officers' (NCO) and officers' open messes, youth activities (e.g., Boy Scouts and Girl Scouts), nurseries, thrift shops, commercial contractors, and other profit or non-profit organizations, service clubs, and other businesses operating on behalf of DOD, if they are on or near a DOD installation.

4.10.3. Class C. Telephone lines for transacting official government business on Air Force installations. It does not provide direct-dial access to off-base trunk lines (toll trunks, DSN). Class C lines can receive calls from off base and have access to the switchboard operator. Classes C-1 through C-4 services have the same billing categories as Class A service.

4.10.4. Class D. Telephone lines for official government business. Restrict use of these lines to special services such as fire, sentry, and crash alarms. See AFI 32-2001, *Fire Emergency Services Program*, for information on operating fire-reporting telephones.

4.11. Voice Over Internet Protocol (VoIP) Instruction. Air Force organizations considering VoIP tests or operational implementation are directed to submit an AF Form 1067 via TopVue (<https://wbgtac1p.hill.af.mil/topvue-afnic/index.aspx>). An AF Form 1067 is needed to capture VoIP capability that will be implemented at a base or for a MAJCOM if all bases within a MAJCOM are implemented using the same architecture, equipment, etc. Supporting documentation must be included identifying architectural changes to the voice system baseline, list of equipment (model), and projected cost.

4.12. Enhanced 911 (e911). Per DoDI 6055.17, *DoD Installation Emergency Management (IEM) Program*, e911 is defined as a telephone system consisting of network, database, and enhanced 911 equipment that uses the single three-digit number "911" for reporting police, fire, medical, or other emergency situations to a central location, while automatically associating a physical address with the calling party's telephone number.

4.12.1. AF installations will establish a single phone number to satisfy all A4/7 emergency response requirements (e.g. police, fire and medical) and ensure both Automatic Number Identification and Automatic Location Identification information is provided to the Emergency Communications Center (ECC).

4.12.2. Air Force installations located within the Continental United States (CONUS) with a government-owned and operated emergency dispatch are required to have e911 services with recording capability.

4.12.2.1. These CONUS installations are required to route all Emergency Service Number calls originating on the installation to the ECC.

4.12.2.2. CONUS installations receiving e911 emergency response from State and Local authorities must codify the support for these services in a Memorandum of Agreement or Understanding with the service provider.

4.12.3. Installations located Outside Continental United States (OCONUS) should provide “e911-like” services on the installation or receive similar services through agreements with the host nation.

4.12.4. Oversight for CONUS and OCONUS agreements, along with the operational use of e911, rests with the A4/7 community.

4.12.5. Technical solutions leveraging VoIP must include the capability to support e911 services. While current technology limits e911 services for cellular telephone users, future technical solutions must provide for this capability once the technology matures.

MICHAEL J. BASLA, Lt Gen, USAF
Chief, Information Dominance and
Chief Information Officer

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DODI 6055.17, *DoD Installation Emergency Management (IEM) Program*, 13 January 2009

DODI 8100.04, *DoD Unified Capabilities (UC)*, 9 December 2010

DODI 8510.01, *DOD Information Assurance Certification and Accreditation Process (DIACAP)*, 28 November 2007

AFFD 33-1, *Information Resources Management*, 27 June 2006

AFI 23-111, *Management of Government Property in Possession of the Air Force*, 7 January 2011

AFI 32-2001, *Fire Emergency Services Program*, 9 September 2008

AFI 32-9003, *Granting Temporary Use of Air Force Real Property*, 19 August 1997

AFI 33-112, *Information Technology Hardware Asset Management*, 7 January 2011

AFI 33-115V1, *Network Operations (NetOps)*, 24 May 2006

AFI 33-116, *Long-Haul Telecommunications Management*, 17 April 2002

AFI 33-150, *Management of Cyberspace Support Activities*, 30 November 2011

AFI 33-200, *Information Assurance (IA) Management*, 23 December 2008

AFI 33-210, *Air Force Certification and Accreditation (C&A) Program (AFCAP)*, 23 December 2008

AFI 33-401, *Air Force Architecting*, 17 May 2011

AFMAN 33-363, *Management of Records*, 1 March 2008

TO 33A-1108, *Voice Systems Management*

TO 33A-1110, *Collaboration and Messaging*

TO 33D-2002, *Engineering Installation Activities Management*

TO 33D-3003, *Managing the Cyberspace Infrastructure with the Cyberspace Infrastructure Planning System (CIPS)*

Prescribed Forms

AF IMT 1218, *Request for Communications Service*

Adopted Forms

AF IMT 9, *Request for Purchase*; AF Form 440, *Bomb Threat Aid*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1067, *Modification Proposal*.

Abbreviations and Acronyms

AF—Air Force

AFNIC—Air Force Network Integration Center

AFI—Air Force Instruction

AFOSI—Air Force Office of Special Investigations

COI—Community of Interest

CSO—Communications and Information Services Officer

DISA—Defense Information Systems Agency

DISN—Defense Integrated Services Network

DoD—Department of Defense

DSN—Defense Switched Network

DVS-G—Digital Video Services – Global (DISN Video Services – Global)

FTR—Federal Telecommunications Recommendation

FTS-2001—Federal Telecommunications System 2001

I-NOSC—Integrated-Network Operations and Security Center

JWICS—Joint Worldwide Intelligence Communications System

MAJCOM—Major Command

NCES—Net-Centric Enterprise Services (DoD)

POC—Point of Contact

PPBE—Planning, Programming, Budgeting and Execution Process

SCI—Sensitive Compartmented Information

STE—Secure Terminal Equipment

CSI—Cyber Systems Integrators (reference Tech Order 33D-2002)

CSI-B—CSI-Base level

TDY—Temporary Duty Assignment

VTC—Video Teleconferencing

Terms

Certification—For the purpose of this Instruction, a comprehensive evaluation and validation of a DoD IS to establish the degree to which it complies with assigned IA controls based on standardized procedures. (DODI 8510.01)

Conferencing—Programs and meetings can be presenting and exchanging information, comparing views, learning, planning, and decision-making. Conferences can be held in one location or conducted simultaneously at multiple locations and linked together by telecommunications systems.

Information Assurance—Measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and nonrepudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. Also called IA. (JP 3-13)

Integrated Services Digital Network (ISDN)—Access channels include a Basic Rate Interface (BRI) two 64 Kbps "B" channels plus a 16 Kbps "D" channel, and a Primary Rate Interface (PRI) twenty-three 64 Kbps "B" channels and one 64 Kbps "D" channel.

Net-Centric Enterprise Service (NCES)—Capabilities-based infrastructure for secure ubiquitous access to timely decision quality information out in the field. DoD-wide common information technology solutions.

Planning, Programming, Budgeting, and Execution (PPBE)—The Planning, Programming, Budgeting, and Execution (PPBE) process is the Department of Defense (DoD) internal methodology used to allocate resources to capabilities deemed necessary to accomplish the Department's missions. One output of the PPBE process is the funding proposed to be included in the President's Budget (PB) submitted to Congress; the ultimate objective is to provide Combatant Commanders (COCOMs) with the optimal mix of forces, equipment, and support attainable within established fiscal constraints.

Video teleconferencing (VTC)—Two-way (video/audio) form of telecommunications that permits two or more people at different locations to engage in face-to-face audio and visual communications. Meetings, work groups, and conferences are conducted using VTC as if all of the participants are in the same room.

Attachment 2

CONDITIONS FOR OFFICIAL TELEPHONE SERVICE IN PERSONAL QUARTERS

A2.1. Commanders and limited key members of their staff whose positions require immediate communications access in support of the exercise of Command and Control may be provided official communications services in their personal quarters. This access will be strictly limited to individuals in command positions, and those in staff positions, whose informed advice is critical to supporting the commander. A written justification will be supplied to the CSO for each qualifying individual. Justifications based on an individual's rank or claim of convenience will not be sufficient. Each request should be accompanied by a business case which clearly demonstrates the calamitous security consequences which could result from failure to provide the occupant with such communications support. If the request is approved, this documentation will be maintained by the base CSO until such time as the occupant changes position or vacates the quarters.

A2.2. Communications Support:

A2.2.1. All communications support provided in accordance with paragraph A2.1 are to be used only for official purposes. The support can include, but is not limited to: direct lines with access to both the base telephone switch and commercial connectivity (Class A), DSN, data (NIPRNET/SIPRNET) and STE. Occupants who qualify for this funded communications support to their quarters are responsible for providing separate telephone service, at their own expense, for personal use (see paragraph A2.3.2 below).

A2.2.2. Personnel not covered by Paragraph A2.1 are not authorized Class A telephone service that provides local off-base or commercial long distance telephone service. If justified, these personnel may receive official service with either direct lines to the base telephone switchboard or Class C Lines, and DSN access if mission essential.

A2.3. You may use multi-line instruments to terminate official and unofficial lines in approved quarters.

A2.3.1. The serving communications unit provides this service.

A2.3.2. The occupant of the quarters bears any cost for the multi-line instrument that exceeds the cost of providing approved official service.

A2.3.3. Use a government-owned instrument when it provides the lowest cost to the government.

A2.3.4. In calculating lowest cost, consider the costs of reworking cable, removing and replacing instruments, purchasing instruments, etc., for current and future occupants.