CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

GLOBAL COMMAND AND CONTROL SYSTEM TRAINING MANAGEMENT

References (s): a. CJCSI 6721.01, 18 February 1995, "Global Command and Control Management Structure"
b. CJCSI 3500.02B, 1 May 1998, "Joint Training Master Plan 2000 for the Armed Forces of the United States"

1. <u>Purpose</u>. This instruction establishes responsibilities and a management structure for the Joint Staff, Services, Defense agencies, unified commands, and other organizations that provide or use Global Command and Control System (GCCS) Training. It supplements the references.

2. <u>Cancellation</u>. CJCSI 6721.02, 13 December 1996, "Global Command and Control System Training Management," is canceled.

3. <u>Applicability</u>. This instruction applies to the Joint Staff, unified commands, Services, and Defense agencies.

4. <u>Policy</u>.

    a. The management structure outlined in the enclosures provides oversight of GCCS training for the Joint Staff, Services, unified commands, and Defense agencies. The management structure is established to identify, review, prioritize, and validate GCCS training requirements and products, to resolve GCCS training issues, and to forward recommendations for GCCS training policy and procedures to the GCC Review Board.

    b. The Air Force is designated the Single Service Training Manager (SSTM) for GCCS. The SSTM is responsible for daily oversight of GCCS training management, to include guiding and assisting each

CINC/Service/agency (C/S/A) and GCCS working group in meeting the requirements of this CJCSI and coordinating with training providers and users on a daily basis. Specific responsibilities are delineated in Enclosure A.

   c. GCCS classroom training will be accomplished within existing Service and joint training infrastructures. In addition, GCCS training needs will be met by new initiatives, such as embedded training, for new applications and the Distributed Joint Training Initiative (DJTI).

   d. Automated, interactive, scenario-based simulation will provide immediate access to realistic, task-based training for future GCCS operators and support personnel. Successful GCCS training starts with Joint Core Competencies (Joint Core Competencies) taught by the Services and/or joint training organizations and is completed by C/S/A duty position training.

   e. GCCS training will be designed to make people proficient at using GCCS to accomplish their warfighting mission. All using organizations are responsible for providing some level of GCCS-related training.

5. <u>Definitions</u>

   a. <u>Global Command and Control System (GCCS)</u>. A comprehensive, worldwide network of systems that will provide the NCA, Joint Staff, combatant, and functional unified commands, Services, Defense agencies, joint task forces and their Service components, and others with information processing and dissemination capabilities necessary to conduct command and control (C2) of forces.

   b. <u>Global Command and Control System Training</u>. A comprehensive management structure and process designed to establish training requirements, develop and execute training solutions, and assess training against a command's capability to perform assigned missions.

   c. <u>Joint Training Requirements (JTR)</u>. Each GCCS working group is responsible for validating training requirements applicable to their assigned functional area. These requirements are documented using the JTR Matrix described in Enclosure C.

   d. <u>Joint Core Competency</u>. Joint Core Competencies are skills and knowledge considered fundamental to accomplishing stated capabilities and are a subset of GCCS working group-approved joint training requirements. The Training Working Group co-chairs formally coordinate Joint Core Competencies with C/S/As.

6. Responsibilities. GCCS training responsibilities are delineated in Enclosure A.

7. Summary of Changes. This update clarifies overall responsibilities to improve stakeholder expectation for training products and community-wide execution of training processes (see Enclosure A). The update identifies basic principles about GCCS training that form the foundation for the GCCS training management structure and process (see Enclosure B). It also provides additional detail concerning the phases of GCCS training development and implementation (see Enclosure C). It prescribes training products that deliver and guide GCCS training (see Enclosure D). Finally, it defines what level of knowledge or performance is expected of the trainee.

8. Releasability. This instruction is approved for public release; distribution is unlimited. DOD components (to include the combatant commands), other Federal agencies, and the public may obtain copies of this instruction through the Internet from the CJCS Directives Home Page—http://www.dtic.mil/doctrine/jel/cjcsd.htm. Copies are also available through the Government Printing Office on the Joint Electronic Library CD-ROM.

9. Effective Date. Upon Receipt.

For the Chairman of the Joint Chiefs of Staff:

C.W. FULFORD, JR.
Lieutenant General, U.S. Marine Corps
Director, Joint Staff

Enclosures:
A - GCCS Training Responsibilities
B - GCCS Training Principles
C - GCCS Training Management Process
D - GCCS Training Products
E - GCCS Training Proficiency Codes

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ENCLOSURE A

GCCS TRAINING RESPONSIBILITIES

1. The GCC Advisory Board is chaired by the Joint Staff Director for Operations (J-3), with membership by flag officers or flag-level representatives from all Joint Staff directorates, Services, combatant and functional unified commands, and DISA. This board approves GCCS joint training requirements after review and approval of the GCC Review Board. It also takes action on other unresolved GCC issues and recommendations forwarded by the GCC Review Board. Full responsibilities are identified in reference a.

2. The GCC Review Board is chaired by the Vice Director for Command, Control, Communications, and Computer Systems (DJ-6), and is the primary body charged with consolidating, validating, and directing the implementation of GCCS requirements consistent with OPR-approved development and implementation plans. This reviews GCCS joint training requirements from the originating GCCS working group and the GCCS Training Working Group. Issues requiring action are forwarded to the GCC Advisory Board with recommendations for resolution. Full responsibilities are identified in reference a.

3. Joint Staff. The Director for Operations (J-3), Joint Staff, is the Office of Primary Responsibility (OPR) for GCCS, as noted in reference a. J-3 is responsible for development of the GCCS concept of operations, policy, and functional oversight. The Director for Command, Control, Communications, and Computer Systems (J-6), Joint Staff, assists J-3 by technical oversight for all C2 systems development and implementation. The Director for Operational Plans and Interoperability (J-7) has oversight responsibilities for military education and joint exercise and contingency training.

   a. J-33 Command Systems Operations Division (CSOD) oversees functional training for GCCS. J-33, along with J6V, co-chairs the GCCS Training Working Group, which reports to the GCC Review Board under the GCC management structure.

   b. J-6V Systems Integration Division oversees technical training in support of GCCS, and with J33, co-chairs the GCCS Training Working Group.

   c. J-7/JETD Division oversees the Distributed Joint Training Initiative led by USJFCOM.

A-1

4. GCCS Working Groups (WG). Permanent Working Groups (WG) are established in those areas that are routinely involved with GCCS. Joint Staff Directorates will provide the WG chair(s) and be responsible for providing required support to ensure the group can accomplish its assigned and implied taskings. Current functional WGs include Common Operating Picture (COP), Intelligence, Force Projection, Force Employment, and Readiness. Current cross-functional WGs include Training, Technical Support, Security, System Integration, and Combined Interoperability. Voting membership normally includes representatives in the grade of O-5 or equivalent GS/civilian and below from Joint Staff directorates, Services, unified commands, Defense agencies, and the Single Service Training Manager (USAF XOCE). All WGs are organized similarly; responsibilities include, but are not limited to:

a. Developing and maintaining a functional area plan for developing GCCS requirements.

b. Developing functional area requirements and identifying best-of-breed applications to satisfy those requirements.

c. Ensuring operational user input is obtained while developing and refining GCCS strategies, objectives, requirements, and priorities, and providing users feedback concerning identified requirements.

d. Developing and validating joint training requirements (including joint core competencies) and presenting them to the GCCS Review Board.

e. Coordinating joint training requirements with other WGs when appropriate.

f. Recommending joint priorities when faced with competing requirements.

g. Approving final training products.

5. GCCS Training Working Group (TWG). This WG is the GCC management structure focal point for all GCCS training, reporting to the GCC Review Board. It is co-chaired by J-33 and J-6V. Voting membership includes representatives in the grade of O-5 or equivalent GS/civilian and below from Joint Staff directorates, Services, unified commands, Defense agencies, the Single Service Training Manager (USAF XOCE), the Air Education and Training Command (AETC), the Joint Operations Planning and Execution System (JOPES) Training Organization (JTO) and DISA's GCCS Program Management Office.

Observer participation is extended to additional organizations that provide or support GCCS-related training. The TWG:

a. Reviews training requirements for GCCS as provided by the functional area experts (represented in functional working groups such as the COP Working Group). Overall GCCS requirements are submitted to the OPR, J-3.

b. Determines and facilitates availability of resources for GCCS training.

c. Formulates, reviews, and forwards training procedures or issues to the GCC Review Board.

d. Monitors Service implementation of Joint Core Competency training solutions.

e. Conducts liaison with other GCCS WGs as needed.

f. Coordinates formal C/S/A approval of joint training requirements (including Joint Core Competencies) prior to review by the GCC Review Board.

6. Single Service Training Manager (SSTM). Air Force responsibilities as the SSTM include, but are not limited to:

a. Providing daily oversight of GCCS training management activities.

b. Acting as single point of access for GCCS training related issues for GCCS users, training developers, application developers, and GCCS working group members.

c. Facilitating crossflow of information between users, developers, and working groups.

d. Providing a representative to the TWG.

e. Maintaining close contact with GCCS user commands and training providers.

f. Providing responses to training-related queries from users.

g. Providing regular updates to the GCCS community on training progress.

h. Chairing GCCS training panels as required to review current GCCS training curricula and products and to exchange information. Each GCCS Training Panel focuses on a specific functional community or application suite and is normally scheduled to build off momentum from GCCS working group meetings. Joint Staff, Services, Defense agencies, unified commands, and training organizations will be represented at each GCC Training Panel.

i. Distribution of all training information, points of contact, current events, lessons learned, and feedback to users and trainers will be posted to GCCS news groups and maintained on the GCCS web page or on additional web pages on the NIPRNET/SIPRNET. For security reasons, training materials and feedback capability will be restricted to the SIPRNET.

j. Facilitating crossflow of feedback received via the web between users, developers, and working groups.

k. Acting as focal point for creative training alternatives and ensuring that GCCS users are provided optimum training from all available sources.

l. Acting as point of contact for the joint community concerning day-to-day GCCS training issues.

7. Services. The Services' responsibilities include, but are not limited to:

a. Providing personnel to CINCs that are capable of performing Joint Core Competencies at an initial qualification level of proficiency.

b. Incorporating GCCS Joint Core Competency training into Service training strategies.

c. Fulfilling all executive agent responsibilities as defined below when sponsoring an application into GCCS or sponsoring maintenance of an existing GCCS application.

d. Providing education and training guidance to their representatives at GCCS working groups, training panels, review boards, and advisory boards.

e. Appointing an OPR as the primary Service point of contact for liaison with the SSTM.

f. Keeping the SSTM and joint training community apprised on the status of GCCS-related training efforts.

8. Unified Commands (CINCs). The CINCs' responsibilities include, but are not limited to:

   a. Appointing a GCCS training representative to attend the GCCS Training Working Group.

   b. Providing subject matter experts (SME) at the GCCS functional working groups and training panels.

   c. Providing on-site training to meet specific mission and position requirements.

   d. Implementing mission qualification proficiency training.

   e. Providing operational refresher training as needed.

   f. Appointing an OPR as the primary CINC point of contact for liaison with the SSTM.

   g. Keeping the SSTM and joint training community apprised on the status of GCCS-related training efforts.

9. Defense Information Systems Agency (DISA). DISA's responsibilities include, but are not limited to:

   a. Appointing an OPR to serve as the DISA GCCS Training Manager (GTM). GTM responsibilities include, but are not limited to:

      (1) Serving as the DISA voting representative to the Training Working Group and training panels.

      (2) Being the single point of contact within DISA for all GCCS training issues.

      (3) Coordinating internal DISA GCCS training issues.

      (4) Implementing approved GCCS training policies and decisions.

      (5) Assist GCCS training developers in identifying the best solutions to meet training requirements.

   b. Providing initial training for Defense Information Infrastructure Common Operating Environment (DII COE) upgrades.

   c. Developing embedded training for COP operators.

d. Providing developers with embedded training standards to ensure that future embedded training on all GCCS applications has a common look and feel.

e. Ensuring embedded training is present in DISA-developed applications prior to release.

f. Developing GCCS/DII COE standard embedded training tools similar to the capability developed for COP.

g. Ensuring all embedded training, regardless of developer, meets established technical guidelines.

h. Providing mobile trainers for contingency and exercise training not covered by the JTO.

i. Providing technical advice to trainers and developers as needed.

j. Ensuring training organizations have advance releases of new software, training tools, and documentation.

k. Providing training to civil servants and contractors. Note: In all cases, the Government agency responsible for civil servants and contractors must ensure training requirements are clearly documented in contractual agreements and provide funds to cover training-related costs.

10. JOPES Training Organization (JTO). JTO develops and provides process and functional procedures training on JOPES mission applications and their relationship to the joint planning system, to include the various echelons of command in the joint planning system. This training is open to all CINCs, Services, agencies and civil servants. Note: In all cases, the Government agency responsible for civil servants and contractors must ensure training requirements are clearly documented in contractual agreements and provide funds to cover training-related costs. JTO responsibilities include, but are not limited to:

a. Providing a representative to the TWG and Training Panel.

b. Providing host support for classroom training at Ft. Eustis, Virginia/Scott AFB, Illinois, and mobile training teams for JOPES and related training. JTO homepage is https://ustcweb1.safb.af.mil:802/, it provides course information and points of contact.

   c. Developing needed curricula and updates as needed. Provide training via formal classroom instruction, interactive courseware (ICW) and distance learning products.

   d. Developing and promulgating a yearly training schedule to meet user needs.

   e. Integrating joint deployment training into JTO curriculum.

   f. Providing exercise and contingency support as required.

11. Air Education and Training Command (AETC). AETC develops and provides GCCS technical support training. This training is open to all CINCs, Services, agencies and civil servants. Note: In all cases, the Government agency responsible for civil servants and contractors must ensure training requirements are clearly documented in contractual agreements and provide funds to cover training-related costs. AETC responsibilities include, but are not limited to:

   a. Providing a representative to the TWG and Training Panel.

   b. Providing host support for classroom training at Keesler AFB, Mississippi, and mobile training teams to meet CINC technical support training requirements on site.

   c. Maintaining a detachment of trainers within the NCR to support and provide training.

   d. Developing needed curricula and updates as needed.

   e. Providing access to course materials online via SIPRNET.

   f. Developing and promulgating training schedules to meet user needs.

12. GCCS Training Panels. GCCS training panels are chaired by the SSTM. Training panels are convened to perform a detailed review of training products and courses by C/S/A-identified subject matter experts. Training panels are normally scheduled around corresponding GCCS working group meetings to leverage momentum generated during those meetings. Training panel voting membership includes representatives from the Joint Staff, DISA, Services, Defense agencies, unified commands, and the SSTM. Training panel responsibilities include, but are not limited to:

a. Meeting as required or directed by each GCCS working group chair.

b. Reviewing curricula and training methods and materials, exchanging information and identifying new requirements.

c. Recommending changes to current and projected training products and courses to the appropriate GCCS working group for approval.

d. Considering alternative methods of training that could provide more efficient or effective learning.

13. GCCS user organization responsibilities include, but are not limited to:

a. Complying with established policy and procedures.

b. Actively supporting the training processes and participating in GCCS working groups and the GCCS Training Panel.

c. Identifying appropriate personnel and making them available for training, ensuring their attendance, and assigning them appropriately following training in order to meet CINC and Service requirements.

d. Keeping the SSTM and joint community apprised of current training initiatives and activities.

e. Identifying training requirements through appropriate forums.

f. Providing feedback on training products and courses through appropriate forums.

14. Executive Agents (EAs), as assigned by OSD, must bring the agreed upon warfighting capability to the warfighters. This includes initial and sustainment joint training solutions to enable successful employment and execution of the implemented software. EA responsibilities include, but are not limited to:

a. Seeking approval of training solutions through appropriate GCCS working groups and SSTM.

b. Providing draft training products for field evaluation prior to submission of application to DISA for testing.

c. Implementing GCC Advisory Board and/or GCC Review Board-approved training solutions.

d. Including C/S/A training as part of installation team, if required.

e. Responding to field feedback after training solutions are implemented.

f. Developing training products in accordance with GCCS guidelines and military standards.

g. Ensuring the mission application is fully compatible with, and takes full advantage of, the capabilities available in standard DII/COE GCCS embedded training tools, when available.

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ENCLOSURE B

GCCS TRAINING PRINCIPLES

1. The GCCS Training Management Process is based on the following principles. These principles, along with the responsibilities identified inEnclosure A, provide the foundation for ensuring GCCS training effectively prepares personnel to use GCCS to support militaryoperations. The GCCS management structure, from a training perspective, is depicted in Figure B-1 below:
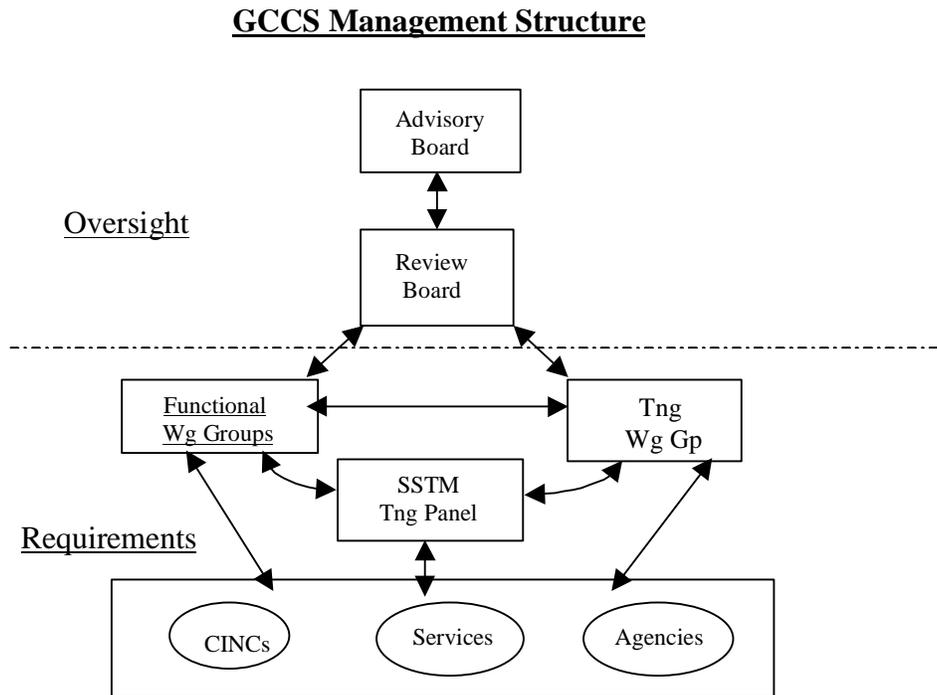
GCCS Management Structure

Figure B-1

2. <u>CINCs Require Warfighting Capabilities</u>. Achieving military victory does not happen because we build a new aircraft, ship, or tank, or because we field new GCCS functionality. Victory is only achieved through effective use of the capability that these weapon systems can bring to bear on the enemy. An aircraft without trained pilots, maintainers, munitions experts, etc., is just hardware. GCCS functionality without the communications infrastructure trained operators and support personnel is just software. CINC requirements must be viewed as complete mission capabilities identified in a Joint Mission Essential Task List (JMETL) or the Universal Joint Task List (UJTL). The GCCS Training Management Process must identify all training needed to ensure full utilization of GCCS tools to support

warfighting capability. Training must be considered an operational requirement that should be managed and funded as a critical piece of the required mission capability.

3. <u>GCCS Working Groups Represent the Joint Warfighters</u>. The process described in this instruction enforces the concept that users (functional and technical), represented by C/S/A members of GCCS working groups, identify and validate all requirements, including training. As the consolidated voice of the warfighters, GCCS working groups develop joint training requirements. Subsets of these requirements are identified as joint core competencies. C/S/A GCCS working group representatives must be prepared to present and defend their list of competencies and measurement criteria. Although the GCCS training community sets minimum standards for training products (i.e., embedded tools and/or ICW), the GCCS working group must determine user priorities when faced with valid competing requirements. GCCS working groups have oversight over those applications assigned to them through the GCC Management Structure.

4. <u>C/S/As Support the GCCS Working Groups</u>. C/S/As must view the GCCS working groups as their avenue into the joint GCCS community. C/S/As should apply the full resources of their respective organizations to assist their GCCS working group member present and defend their requirements. Each Service has a training command that should provide support and advice to their representatives. CINCs and DOD agencies should utilize the resources at their disposal to determine and defend their training requirements.

5. <u>Services Provide Joint Core Competency Trained Personnel to CINCs</u>. As stated in Enclosure A, Service will incorporate Joint Core Competencies into their respective training strategies in order to provide Joint Core Competency-trained personnel to the CINCs. In the absence of GCCS working group-approved Joint Core Competencies, there will be no standard level of expected competency among the Services. Services choose the most effective and appropriate method of training their personnel. In some cases, one C/S/A may rely on training offered by another C/S/A to meet its Joint Core Competency training requirements (e.g., the Air Force providing technical training at Keesler AFB and the JOPES Training Organization providing all JOPES-related functional training).

6. <u>Executive Agents Build Initial Joint Training</u>. The executive agent responsible for developing an application has an acquisition program responsibility to develop training to support fielding of the system. They must build products that meet minimum requirements of the GCCS working group and satisfy identified joint training requirements. After

initial developer training, each C/S/A is responsible for utilizing the training products in the manner that best fits the needs of the organization.

7. Capabilities Must be Measurable. Commanders must be able to measure the capability of assigned personnel to use GCCS to accomplish their mission. Measurement criteria must be made available to the application and training developers as early as possible to ensure the developed capability effectively and efficiently satisfies mission needs.

8. The SSTM will Assist C/S/As and GCCS Working Groups. The SSTM will guide and assist each C/S/As and GCCS working group to meet the requirements of this process and serve as the OPR for daily oversight of GCCS training. The SSTM will attend GCCS working groups, work with C/S/As to identify their training needs, and monitor development of training products and delivery methods. This requires support from each C/S/As and GCCS working group to keep the SSTM apprised of scheduled meetings, training initiatives, and related activities.

9. Feedback is Essential to Maintain Currency of Training Products. All parties involved in the use and/or training of GCCS capabilities are responsible for identifying improvements to training solutions. The GCC management structure is responsible for reviewing and acting upon field feedback. Normally, course and/or product changes are approved at the working group level. The SSTM is responsible for fielding a web-based feedback capability, monitoring field comments, and coordinating appropriate actions through the designated working groups.

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ENCLOSURE C

GCCS TRAINING MANAGEMENT PROCESS

1. Overview. The GCCS training management process covers activities designed to identify all GCCS-related training requirements. Services are responsible for providing any prerequisite training required to enable their personnel to successfully complete Joint Core Competency initial qualification training. Executive agencies are responsible for developing embedded tools, ICW, and Plan of Instruction (POI) to accompany their applications. GCCS working groups identify and validate the types and content of training products developed by the executive agency. This process covers joint capabilities and requirements as determined by the GCCS working groups. C/S/A-unique requirements should follow a similar process. C/S/A must keep the GCCS working groups and SSTM apprised of training development efforts to promote leveraging of each other's efforts. The GCCS training management process is depicted in figure C-1 below:
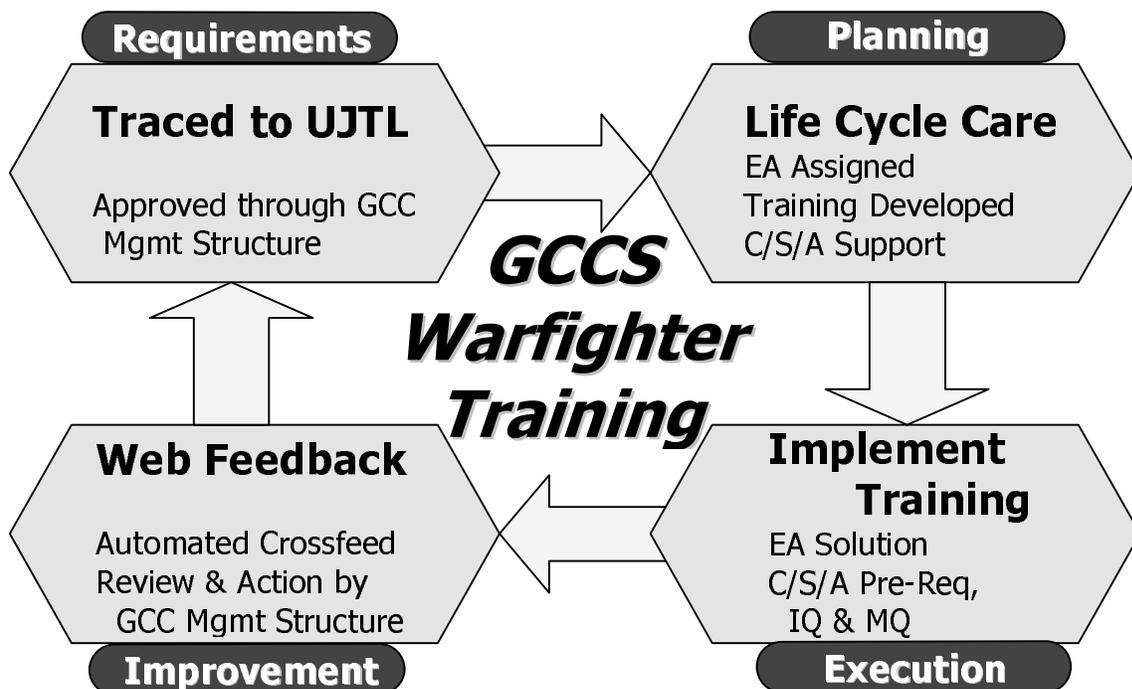

Figure C-1

2. <u>GCCS Training Management Phases</u>. The GCCS training management process prescribes steps required to manage GCCS training requirements and product development. This process is the preferred method of identifying GCCS training requirements and implementing GCCS training solutions and is completed in four phases: identify GCCS training requirements, plan/develop a training solution, execute the training plan, and training improvements.

   a. Identify GCCS Training Requirements

	Action
1	C/S/A identify mission capability requirements (traced to UJTL or JMETL requirements)
2	GCCS working group validates mission capability requirement
3	C/S/As complete internal Initial Training Assessments to support the required mission capability
4	GCCS working group develops a draft joint Initial Training Assessment
5	SSTM coordinates draft joint Initial Training Assessment with GCCS cross functional working groups (e.g., Technical Support Working Group (TSWG), Training Working Group (TWG))
6	GCCS working group approves final coordinated joint Initial Training Assessment
7	GCCS working group presents mission capability requirements to GCC Review Board
8	GCC Review Board reviews all program criteria (including training information), approves mission capability requirement, and forwards to GCC Advisory Board
9	GCCS Advisory Board reviews all program criteria, approves requirement, and recommends an executive agent (EA)
10	Joint Staff coordinates with OSD ASD (C3I) to formally appoint the EA
11	C/S/As recommend functional and cross functional joint training requirements, including Joint Core Competencies (Joint Core Competencies), through appropriate working groups
12	Training working group chairs formally staff proposed joint training requirements through C/S/A action officers for preliminary concurrence.
13	SSTM coordinates cross flow of draft requirements between working groups
14	GCCS working group proposes final functional and cross functional joint training requirements and Joint Core Competencies
15	SSTM coordinates cross flow of final requirements between working groups

16	GCCS working group approves final functional and cross functional joint training requirements and Joint Core Competencies (documented via Joint Training Requirements Matrix)
17	Training working group chairs formally staff working group-approved joint training requirements through C/S/A planners for final concurrence.
18	SSTM posts approved joint training requirements on Web-based format.

   b. Plan/Develop Training Solution

	Action
1	OSD ASD (C3I) appoints an EA to develop and sustain training to support the approved GCCS capability
2	EA proposes training plan to GCCS working group and applicable cross functional working groups (includes details on training media, scheduling, funding impacts, pre-requisite skills, etc.)
3	GCCS working group and applicable cross functional working groups review proposed EA training plan
4	SSTM coordinates cross flow of comments on proposed EA training plan between working groups
5	GCCS working group approves EA training plan
6	EA develops preliminary versions of approved training solutions
7	GCCS working group and applicable cross functional working groups review preliminary EA training solutions
8	SSTM coordinates cross flow of comments on EA training solutions between working groups (This process is repetitive and continues until the final training solution is approved by the GCCS working group and applicable cross functional working groups)
9	Services plan how to meet Joint Core Competency pre-requisite and Initial Qualification training requirements, inform SSTM of on-going status
10	CINCs plan how to meet Joint Core Competency Mission Qualification training requirements, inform SSTM of on-going status
11	SSTM monitors and tracks C/S/A preparations and ability to conduct pre-requisite, Initial Qualification, and Mission Qualification training

   c. Execute Training Plan

	Action
1	EA conducts training tests (e.g., pilot/validation courses, guided use of on-line product, etc.)
2	SSTM posts all training products on Web-based format.
3	GCCS capability fielded

4	Services implement Joint Core Competency pre-requisite and Initial Qualification training
5	CINCs implement Mission Qualification training
6	EA implements approved training solutions

d. Training Improvement

	Action
1	Field users, supervisors, trainers, etc., use Web-based format to provide training comments on specific applications or courses
2	CINCs collect metric information based on capability to perform mission, report via Web-based format *(future implementation)*
3	SSTM WWW site automatically forwards comments to appropriate GCCS working group reps, training developer, C/S/A rep, etc.
4	GCCS working group evaluates feedback and metrics
5	SSTM evaluates feedback, recommends course of action to GCCS working group
6	GCCS working group evaluates feedback and recommendations and approves action to improve training capabilities
7	SSTM monitors progress of training improvements and informs GCCS working groups
8	SSTM forwards status of training efforts to GCCS TWG
9	TWG forwards status of training efforts to GCCS Review Board and GCCS Advisory Board

3. Training Management Products. The following sections describe training documents utilized during the GCCS training management process and development of standards and education/training requirements for embedded tools and ICW, two products considered essential to successful implementation of GCCS applications.

a. Initial Training Assessment. This is the initial look at training requirements associated with a proposed capability. Ideally, it is developed in conjunction with the determination of required joint operational capabilities identified during the Identify Mission Capability Requirements phase. For our purposes, joint requirements are requirements a GCCS working group determines are common to and, required by, the joint community. Similar documentation should be established to cover C/S/A-unique GCCS requirements. The following is a sample format for a training assessment:

(1) Operational Requirements - Recap GCCS working group-approved joint mission capability requirements.

(2) Joint Operational Environment

    (3) Target Audience

        (a) Service specialty identification

        (b) 1-deep position

        (c) Usually accomplished by augmentees, reserve forces, other

    (4) Existing Training

        (a) Joint training centers/products

        (b) Service training centers/products

        (c) CINC training centers/products

        (d) Commercial training centers/products

    (5) Joint Training Concept

        (a) Description of concept

            <u>1</u> Single joint course or multiple C/S/A courses (if required)

            <u>2</u> Need for scalability

            <u>3</u> Automated products on live system or stand-alone

        (b) Training Assumptions

            <u>1</u> Prerequisite skills

            <u>2</u> Service specialties

            <u>3</u> Availability of training facilities

            <u>4</u> Availability of trainers

    (6) Projected/desired use of emerging technologies

    (7) Measurement requirements

   b. Joint Training Requirements Matrix. The purpose of this matrix is to identify all approved training requirements, associated initial and mission qualification proficiency levels, proposed training solutions, and

status of training efforts. The initial effort must ensure accurate training requirements are identified. After joint acceptance of the training need, training solutions are identified. A separate matrix is usually required for each application. Consolidated matrices may be developed for sets of applications that are closely related (e.g., COP and intelligence, imagery and information (I3), JOPES products). Multiple levels of proficiency with different training solutions may be required for a single training requirement if the GCCS working group identifies multiple user categories.

Placement of a proficiency code under the Joint Training heading indicates the level of training required for the specified user category. Placement of a proficiency code under a training solution heading (e.g., Operator course, Embedded Tools, etc.) indicates the desired training solution for that requirement. A symbol will be placed next to the proficiency code (under the training solution heading) to indicate the current capability of the selected method to provide the required training:

◆ Meets or exceeds requirements
❖ Task/subject covered, but not to required level
☐ Task/subject not covered

In addition to GCCS-specific training requirements, this matrix can be used to identify basic prerequisite skills and knowledge that Services are responsible for providing (task 1.1.4 below). The following table is a sample Joint Training Requirements Matrix. The paragraphs following the table describe each area in more detail. The training option headings are examples only and should be tailored to the specific options required by the using community.

Task #	JCC	Task Title	Track	Training Options									
				Joint Training		Operator Course		Online Tools		Service Provided		CINC Provided	
				IQ	MQ	IQ	MQ	IQ	MQ	IQ	MQ	IQ	MQ
1		**Overarching GCCS-COP Capabilities**											
1.1		GCCS C2 concept											
1.1.1	*	Recognize the GCCS applications relevant to the COP and identify those that represent migrations from legacy systems.	1	A								A◆	
			2	A									
			3	A	B	A◆			B❖				
			4	A		A◆							
1.1.2	*	Describe how COP relates to other parts of GCCS	1	A				A◆					
			2	A	B			A◆					B❖
			3	B	C	B☐							C☐
			4	B		B☐							

1.1.3		Describe the basic system architecture on which CHART is built	1	A									A◆
			2	A	B				B□				A◆
			3	B	C	B❖			C□				
			4	B		B❖							
1.1.4	*	Understand differences between levels of war.	1	B					B◆				
			2	B					B◆				
			3	B					B◆				
			4	B					B◆				

     (1) Task #. Numerical indicator used to identify a task.

     (2) Joint Core Competency. An asterisk identifies this requirement as a JCC.

     (3) Task Title. This is a short synopsis of the task, including any conditions and standards applicable to the performance of the task.

     (4) Track. This column will be included in the matrix when the functional community identifies categories of users. In this example, the COP FWG approved four categories of personnel requiring COP training. A clear explanation of the categories must be included as part of the matrix if user categories are used.

     (5) Training Options. This area consists of multiple columns, each representing a desired training solution identified by the GCCS working group. Each column is divided into initial and mission qualification columns explained below. The left-most column, entitled Joint Training reflects the overall initial and mission proficiencies identified by the functional community.

       (a) Initial Qualification. The proficiency level identified in this column indicates the minimum requirement to be considered initially qualified to perform the task. When the task is identified as a Joint Core Competency, this column identifies the minimum proficiency level Service personnel must attain prior to arrival at a joint assignment. See Enclosure E for a description of proficiency codes, (A, B, C, D).

       (b) Mission Qualification. This column identifies the desired level of proficiency for personnel to be considered fully qualified to perform the task. The difference between initial qualification and mission qualification will determine the scope of training to be completed

within the warfighters domain. This will be accomplished primarily via on-the-job training (OJT) using the system's embedded tools, standard OJT products, and accompanying ICW. For complex technical tasks Mobile Training Teams (MTT) and/or classroom training may be required. See Enclosure E for a description of proficiency codes, (A, B, C, D).

ENCLOSURE D

GCCS TRAINING PRODUCTS

1. <u>Training Products</u>. Our current environment dictates that we find more efficient methods of training our people. We can no longer afford the costs of standing up classrooms (instructors, equipment, and facilities) and sending people away from their units to attend classes (PERSTEMPO, OPSTEMPO, travel costs). One solution is to ensure validated training products and associated support material is readily accessible from within the operational environment whenever practicable. Classroom instruction should be reserved for complex, lab-intensive requirements where it is impractical to train in a live, real-world environment. As a start, every GCCS application must be fielded with a minimum level of help products. Task-based ICW must be considered for those functions that require an increased level of interactivity and/or simulation. GCCS working groups, assisted by the SSTM, will determine the requirement for development of these products, text-based lesson plans, and standard OJT materials. All products must be in compliance with DISA GCCS standards documents. All automated products must be web browser based. For our purposes, help products are launched from within an application and include system help, performance support, and tutorials. ICW is more complex, could be separate from the application, and measures the performance of the trainee. Use of WWW browser technology will enable training products to be platform independent. Both products should also be executable independent of the application, allowing training to occur outside the GCCS operational environment.

2. <u>Help Products</u>. These products fall into three categories: system help, performance support, and tutorials. Each is described below.

    a. <u>System Help</u>. This includes the normal help functions available in most commercial Windows applications. Help topics will cover terms, screens, fields, and generic system processes.

    b. <u>Performance Support</u>. Performance support is designed to eliminate the need for recall of information or processes associated with the performance of a task. It can be checklists, descriptions of tasks or processes, screen references, etc. Performance support must be task based, describe steps required to accomplish a task, allow for local modification to incorporate local procedures, and identify changes from previous software versions.

    c. <u>Tutorial</u>. Tutorials must be task based, launched from the application, and include a demonstration capability (i.e., graphically

demonstrate how to perform a task). Tutorials should also include an interactive demonstration mode that provides feedback to the operator.

3. <u>Interactive Courseware</u>. ICW is an integral piece of the long-term vision for GCCS training. At a minimum, ICW products must capture student progress/scores using DII COE-compliant standards, be segmented into logical blocks of instruction, provide bookmark capability, measure trainee learning through tests and simulation exercises, be developed IAW DII COE and GCCS style guides, be task/scenario based, and allow local modifications. The following paragraphs describe different ICW interactivity levels:

   a. <u>Level I - Basic Presentation</u>. This is the lowest level of ICW development. Level I lessons are linear (one idea after another), and are used primarily for introducing an idea or concept. There is little interaction other than the student touching the screen or using a keystroke or mouse click to continue. The media used are primarily text and graphics (not complex).

   b. <u>Level II - Medium Simulation Presentation</u>. This presentation level involves the recall of more information than a basic Level I presentation and allows the student to have increased control over lesson presentation; that is, there is more interaction, such as using a light pen to rotate a switch. Computer Managed Instruction (CMI) is used in Level II lessons to track and analyze student performance. Level II normally combines audio, video, text, graphics, and animation.

   c. <u>Level III - High Simulation Presentation</u>. This level involves aspects of both Level I and Level II while using the full abilities of ICW. Level III may present onscreen interaction similar to that used in an aircraft simulator. This level provides a high degree of interactivity, extensive branching capability, maximum remediation opportunity (supports multiple levels of errors), real-time event simulation with minor equipment limitations, capability to interface with other output devices, and thorough CMI capability.

ENCLOSURE E

GCCS TRAINING PROFICIENCY CODES

To assist in deciding the verbiage of behavioral statements, it is helpful to look at the level of knowledge or performance expected of the trainee. There are three basic types of proficiencies reflected on this key, Figure E-1. The higher the number or letter, the more proficiency is required.

Task Performance Levels – This numerical indicator reflects the desired level of performance that needs to be successfully demonstrated as a result of the training. It ranges from *extremely limited* (Level 1: Can do simple parts of the task. Needs to be told or shown how to do most of the task) to *highly proficient* (Level 4: Can do the complete task quickly and accurately. Can tell or show others how to do the task).

Task Knowledge Levels – This lower case alphabetic indicator reflects the desired level of task knowledge that needs to be successfully demonstrated as a result of the training. All tasks require some level of knowledge that must be learned either in conjunction with or prior to demonstrating the performance. It ranges from *nomenclature* (Level A: Can name parts, tools, and simple facts about the task.) to *advanced theory* (Level D: Can predict, isolate, and resolve problems about the task.) While it is possible to learn the knowledge aspects of a task without actually performing the task, it is not possible to perform a task without some level of task knowledge. For this reason, you may assign a task knowledge letter code without a task performance level number, but never the other way around. An example of this is in air traffic control. A student must learn much about the task of directing the landing of an aircraft in an emergency situation, but will not actually do that task for some time.

Subject Knowledge Levels – This upper case alphabetic indicator reflects the desired level of knowledge that needs to be successfully demonstrated as a result of the training. This is information necessary to perform the task that does not require performance (knowing the theory behind radar, for example, without requiring an individual to build or test a radar system). Terms and definitions are often necessary to provide a foundation for later performance, and are classified as subject knowledge. The levels range from *facts* *(Level* A: Can identify basic facts and terms about the subject.) to *evaluation* (Level D: Can evaluate conditions and make proper decisions about the subject.)

Proficiency Code Key		
	Scale Value	**Definition: The individual**
Task Performance Scale	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (extremely limited)
	2	Can do most parts of the task. Needs only help on hardest parts.
	3	Can do all parts of the task. Needs only a spot check of completed work.
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (highly proficient)
Task Knowledge Scale	a	Can name parts, tools, and simple facts about the task. (nomenclature)
	b	Can determine step by step procedures for doing the task. (procedures)
	c	Can identify why and when the task must be done and why each step is needed.
	d	Can predict, isolate, and resolve problems about the task. (advanced theory)
Subject Knowledge Scale	A	Can identify basic facts and terms about the subject. (facts)
	B	Can identify relationship of basic facts and state general principles about the subject.
	C	Can analyze facts and principles and draw conclusions about the subject.
	D	Can evaluate conditions and make proper decisions about the subject.

Explanations
➢ The task performance level is always used in conjunction with a task knowledge level to identify an overall task performance requirement.
➢ A task knowledge scale value may be used alone or with a task performance scale to define a level of knowledge for a specific task. (Example: b and 1b)
➢ A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task or for a subject common to several tasks.

Fig E-1