

**CJCSI 3151.01A
19 January 2003**

**GLOBAL COMMAND AND
CONTROL SYSTEM COMMON
OPERATIONAL PICTURE
REPORTING REQUIREMENTS**



**JOINT STAFF
WASHINGTON, D.C. 20318**

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CHAIRMAN OF THE JOINT CHIEFS OF STAFF INSTRUCTION

J-3

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References: See Enclosure H

1. Purpose. This instruction establishes reporting policies, responsibilities and other activities required to initiate and maintain the Global Command and Control System (GCCS) Common Operational Picture (COP) for the combatant commands, Services, Defense agencies and the Joint Staff. This instruction follows the guidance and organization of the Joint Reporting Structure outlined in reference a. This instruction also addresses general policies for the GCCS system, as it exists. Although the general policies in this instruction provide a framework for standardization, commanders at all levels must determine specific detailed implementation procedures that meet the intent of this instruction. Also, commanders will ensure local procedures comply with the joint technical architecture (JTA) (reference b). Specific policy and procedures for standardized unit identification codes and a Global COP Fusion Center (GCFC) are under development and not included in this instruction.

2. Cancellation. CJCSI 3151.01, 10 June 1997, is canceled.

3. Applicability. This instruction applies to the Military Services, Joint Staff, combatant commands, and those activities and agencies reporting to the Chairman of the Joint Chiefs of Staff. The term "Military Services" refers to the Army, Navy, Air Force, Marine Corps, and Coast Guard (when assigned to the Navy). Commanders of forces operating as part of a multinational (alliance or coalition) military command should follow US COP reporting procedures as well as multinational reporting instructions and procedures ratified by the United States. For reporting instructions and procedures not ratified by the United States, commanders should

evaluate and follow the multinational command's intent on reporting and procedures, where applicable.

4. Policy. GCCS offers the combatant commands and joint force commanders (JFCs) the ability to rapidly provide military information to the National Military Command Center (NMCC), the Joint Staff, as well as other supporting commands in accordance with reference a. GCCS COP is a distributed data processing and exchange environment for developing a dynamic database of objects, allowing each user to filter and contribute to this database according to the user's area of responsibility and command role. It is a key tool for commanders in planning and conducting joint operations and in monitoring execution and coordinating joint operations across combatant commands. The COP enhances the flow of information among the Secretary of Defense, Joint Staff, and combatant commanders, both supplementing and amplifying theater commander's situation reports (SITREPs), operations reports (OPREPs), and other reports outlined in reference a. The COP is a tool for sharing critical standing and situation dependent information across combatant commands to achieve success in the spectrum of operations. It is not the intent of this publication to provide procedures or requirements that restrict the authority or flexibility of the JFC from executing the mission in a manner that the JFC deems appropriate to ensure successful mission accomplishment. Regional combatant commanders, the Services, and agencies will identify relevant COP data requirements and help develop automated COP data feeds to reduce manual track management tasks.

a. Secretary of Defense and Joint Staff. The COP provides necessary and vital battlespace information for the appropriate decision makers to provide strategic direction for combatant commanders in accordance with references a and c. It also provides situational awareness (SA) to enable the Joint Staff to answer questions from the senior military leadership with minimum impact on the operational commanders.

b. Standardized Procedures. Standard procedures and conditions for transmitting the COP to the NMCC and supporting commanders are necessary to facilitate situation reporting. These procedures must incorporate not only the management of tracks resident within the track management services functions of the COP, but also the maintenance of data residing within the integrated imagery and intelligence (I3) servers (intelligence shared data services (ISDS) and imagery transformation servers data). Standardized procedures are necessary for the Military Services to provide combatant commanders with personnel adequately trained in COP management and reporting procedures. The use of the COP should become a standard reporting and display tool for the full spectrum of any US force engagement and at all levels of exercises,

operations and war. Examples include conditions warranting the establishment of joint task forces (JTFs), crisis situations to include humanitarian relief and noncombatant evacuation operations, joint field exercises, and normal daily operations. The COP must become an integral facet of the command and control process. Therefore, use of the COP on a daily basis, as well as for JTF exercises, is necessary to ensure proficiency and continued development.

c. Maintaining the COP. Combatant commanders, functional commanders, and JFCs will maintain the COP according to the policies in this instruction. Combatant commanders, functional commanders and JFCs will establish standing and situation dependent mission event reporting requirements. This information will be used to maintain an accurate and timely COP. It is key that the operational community retains the responsibility for the quality of the information contained in the COP. COP data integrity is both an operational and a technical responsibility.

d. Exercising Judgment. The COP provides commanders the ability to share critical information in a secure, distributed data network, reinforced by commonly understood procedures, training and policy. The establishment of standing and situation dependent COP reporting requirements promotes the ability to maintain reliable, accurate and timely exchange of information essential for mission success. The COP is an evolving system and the information requirements for a commander's COP are situation dependent; hence, procedures will need modification as the system changes. As outlined in reference c, commanders will exercise judgment in applying joint procedures while still meeting the intent of joint instructions. This means that reporting policies, such as contained in this instruction, cannot possibly cover all operational situations. These procedures provide a baseline that is adaptable to the situation at hand driven by the importance of the information to the commander, the force level needing to be observed, and the response being exercised. Manual input of data may overburden reporting cells. Combatant commanders must determine necessary information for the mission at hand and allow track managers to maintain the COP at the appropriate level. Commanders have the flexibility to tailor reporting criteria if the situation warrants while striving to meet the intent of this instruction. Commanders should recommend any changes to reporting procedures in this document based on the use of COP in operational situations.

e. Value of Battlespace Situational Awareness (BSA). BSA is essential to the commander's ability to plan, execute and assess the mission. Complete BSA includes not only the knowledge of all aspects of friendly and threat forces, but also of the land, ocean, air and space

environment in which they operate. Incorporating all critical information needed to achieve BSA into a well-maintained COP provides the warfighter several battlefield advantages. This policy provides guidance based on current technology and is designed to provide the warfighter the appropriate view of the battlespace for any situation. The value of the COP is the ability to display battlespace information using a standard set of integrated, linked tools and services that provide ready access to operational and intelligence information on a graphical display that is tailored for the operator. COP combines the vast resources of the tactical, operational and national information derived from static and dynamic data sources on a common visual display. A properly managed COP:

- (1) Reduces the degree of operational uncertainty.
- (2) Allows commanders to create and control the battlespace dynamics and not react to them.
- (3) Gives commanders more control of the operational tempo of coalition and US forces.
- (4) Shared awareness reduces decision-making time, thereby dominating the opponent's decision cycle.
- (5) Gives commanders the ability to identify, focus and control operations against the enemy's center of gravity.
- (6) Allows commander to monitor the execution phase of an operation and assess how well the operation is progressing in accordance with the plan.
- (7) Provides commanders with shared situational battlespace awareness to coordinate joint operations.

5. Definitions. See Glossary.

6. Responsibilities. Refer to Enclosure E.

7. Summary of Changes. Changes in this instruction clarify and refine COP reporting responsibilities for more effective utilization of capabilities fielded in GCCS.

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>. Copies are also available through the Government Printing Office on the Joint Electronic Library CD-ROM.

9. Effective Date. This instruction is effective upon receipt.



JAMES A. HAWKINS
Major General, USAF
Acting Director, Joint Staff

Enclosures:

- A -- COP Reporting Requirements
 - Appendix A -- Air Tasking Order Reporting Requirements
- B -- Data Management
- C -- COP Operational Architecture and Data Exchange Formats
- D -- Personnel and Training Requirements
- E -- Responsibilities
- F -- Combatant Commanders CONOPS Checklist
- G -- COP OPTASK Request/Reply Messages
- H -- References
- GL -- Glossary

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The following is a list of effective pages for. Use this list to verify the currency and completeness of the document. An "O" indicates a page in the original document.

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ENCLOSURE A

COP REPORTING REQUIREMENTS

1. General. The Secretary of Defense, Joint Staff, Services, supporting commanders, and Department of Defense support agencies require information from a combatant commander's area of responsibility (AOR) via the COP. The combatant commander is responsible for providing the COP according to the requirements in this instruction. To accomplish this, combatant commanders maintain the COP and designate reporting responsibility for elements within their respective AORs. These requirements may be altered or modified by the Secretary of Defense or the Chairman of the Joint Chiefs of Staff, if conditions warrant.

a. Consistent with reference a, combatant commands should develop a single reporting structure for the COP to facilitate clear, accurate, and timely (real or near-real time) SA. Combatant commanders have ultimate responsibility for management of the theater COP for their respective AORs.

b. The purpose of reporting requirements is to provide consistent and critical battlespace status information to commanders at all levels so they can make decisions, analyze, and plan operations. This instruction provides specific requirements to build and properly manage an accurate COP. To achieve the goals of this instruction, the reporting system must be flexible enough to allow for: differences in organizational structures; situational variances caused by the operation at hand; and different operating styles of each combatant commander. Hence, combatant commanders have the responsibility of designating the appropriate level of information required to ensure the COP accurately displays the current situation in their respective AOR. The COP Fusion Center (CFC), for the combatant commander, and COP correlation site (CCS), at the COP inject sites, play key roles in providing the level of detail necessary to build an accurate COP. Specific reporting requirements may be further defined during crisis action planning.

c. Not all information that makes up the COP comes from automated sources. The COP differs from a tactical display. A tactical display depicts current location of forces or objects in real or near real time forming the common tactical picture (CTP), generally associated with the JTF mission. The COP merges selected information from multiple CCSs, sensor injects, and the CTP, if a JTF is active with projected information (force status, logistics, weather, intelligence, etc.) that could impact

forces or objects with real or near real time information, allowing viewers to influence their future status or position. For the JTF and below, the CTP is focused on the current, projected, and planned disposition of hostile, neutral, and friendly tracks/forces that includes real time, near real time, and non-real time data, both directly and/or indirectly from national, theater, and tactical sensor feeds via available communication links and via feeds that provide additional fused and correlated data. This collection of data is combined with available amplifying data (planning, weather, etc.) to produce the CTP. The COP receives its data (correlated and fused) in near and/or non-real time and amplifying data from the CTP and additional data sources. Although GCCS continues to mature, some track data will require manual inputs. Situation reports, Global Status of Resources and Training System (GSORTS) data, and verbal inputs from the AOR are major sources of manual input data.

d. The COP consists of a collection of air, space, land, and maritime tracks and units. A track is a single entity reported on the COP such as an aircraft, ship, theater ballistic missile (TBM), or emitter location. A unit can designate an aggregation of military personnel, weapon systems, vehicles, and support elements or any other operationally significant item. Unless track and/or unit reporting are automated, manual inputs may be limited to the most operationally significant items as determined by the combatant commander or specifically designated by the NMCC. The size of reported forces will vary by combatant command, operation, situation and plan.

2. Baseline COP Information. Commanders establish COP reporting requirements and ensure that those reporting requirements are satisfied through COP procedures, training and policy. Baseline COP information may include:

a. Current position and associated movement data for hostile, neutral, and friendly, including interagency, forces of interest within a combatant commander's AOR.

b. Overlays (e.g., boundaries, coordination measures), manual inputs, labels, etc., that show the commander's intent, location of major headquarters, environmental information, joint intelligence preparation of the battlespace, battle plans, indications and warning, limited order of battle (OB) information, and functional boundaries the combatant commander determines to be relevant to the operation at hand (e.g., area of interest, area of influence). Wherever possible, commanders need to push for automated input of this information.

c. Amplifying information essential for mission success that may include the air tasking order (ATO), information from GSORTS, Joint

Operation Planning and Execution System, modernized integrated database (MIDB), imagery products library (IPL), and processed and raw intelligence information and imagery, such as OB imagery products and database information. MIDB OB data contains all valid textual and graphical information about enemy sites, facilities, and units.

3. Basic COP Development

a. Combatant commanders have the responsibility to direct procedures for components and deployed forces within their respective AORs to maintain an accurate theater COP. The combatant commander coordinates/tasks organizations via operation task (OPTASK) COP messages (Enclosure H). The key nodes within a combatant commander's AOR that function to consolidate, deconflict and forward appropriate data required for creation of a theater COP are called the CFC. The term "Top COP" refers to the actual GCCS server and station that hosts the primary COP node for the Theater Commander.

b. Elements within a combatant commander's AOR that consolidate, manage and forward track and/or unit data are designated CCSs. The majority of COP data is shared among CCSs within a given theater through GCCS communication interfaces. CCS forward their local COP to the theater CFC for creation of the "theater or combatant command's" COP.

c. CCSs will share filtered information with major combatant command COP participants. This ensures COP recipients understand the effects of filtering. The NMCC, Service headquarters, agencies, and supporting combatant commands should coordinate with the supported combatant command to get unique information not resident on the theater COP. Figure A-1 depicts basic COP development.

d. Enclosure F provides basic guidance for COP CONOPS development.

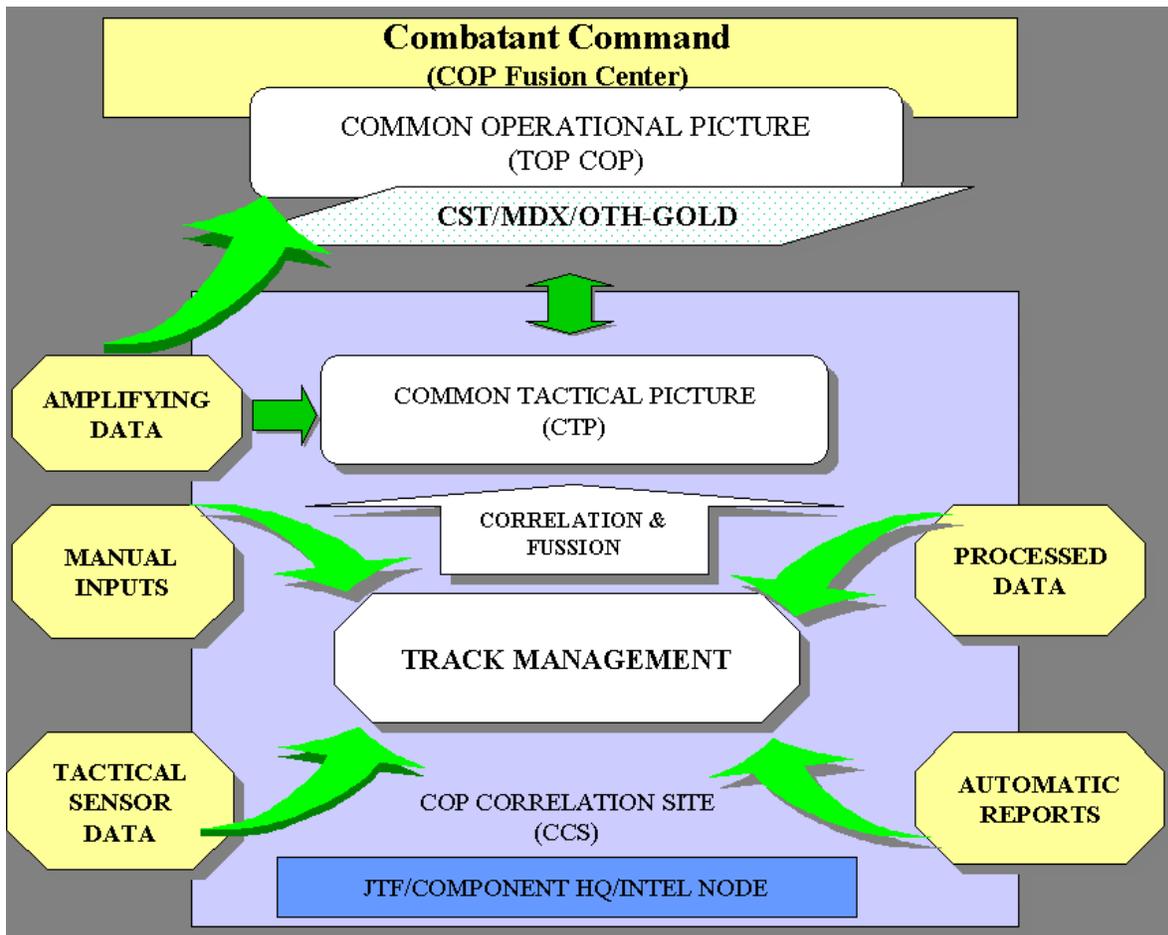


Figure A-1. Basic COP Development

e. COP displays on GCCS workstations can be tailored to mission needs; however, the following guidelines are in effect to provide the basis for a common picture throughout the theater.

(1) Icons. MIL STD 2525 defines the correct symbology for track display and transmission. Tailored symbology may be used at a particular display site for easy icon recognition, but MIL STD 2525 should be used for all track communications and broadcasts.

(2) Mapping Datum. MIL STD 2401, World Geodetic System 1984 (WGS-84) is the standard to which positional information is registered.

f. COP information can be displayed on personal computers (PC) workstations using the Command and Control for Personal Computer application available on Windows clients as long as there is SIPRNET

access. For clients running less powerful PCs or a client that has limited access to a COP environment, the Enhanced Link Virtual Information System browser application will allow access to the COP.

4. Global COP. The global COP is a fused view of regional and supporting combatant command COP track data. Specific responsibilities, resources required, and reporting requirements are under development. The use of the global COP fusion center by DOD organizations is not mandatory.

5. Daily Operations. The COP must become an integral part of daily operations for combatant commands, components, and DOD support agencies. Only through daily use will proficiency be gained to handle the reporting load during all contingency operations. Each regional combatant command will provide access to COP data from within its respective AOR to the NMCC that depicts current tactical information according to the guidance below and any additional information the combatant commands deem significant to their AOR. Commanders are responsible for establishing air, land, maritime and military assistance to civil authorities COP reporting requirements based on standing and situation dependent mission events.

a. Air Component of the COP. The air component of the COP will include sensor-generated air and space tracks regardless of origin (AEGIS, AWACS, control and reporting center, PATRIOT, tactical air operations center, etc.) that are relevant to ongoing operations and major exercises within the combatant commander's AOR.

b. Ground Component of the COP. The ground component of the COP will depict garrison, deployed locations, and relevant in-transit locations of major friendly combat elements and appropriate hostile combat elements relevant to ongoing operations and major exercises within the combatant commander's AOR. Combatant commands should include all special operations forces (SOF) units participating in operations classified at the secret collateral level and below.

c. Maritime Component of the COP. The maritime component of the COP will depict locations of friendly, hostile, and relevant neutral surface and subsurface vessels operating within the combatant commander's AOR.

d. Special Interest Tracks. Include tracks, regardless of size or composition, of special importance that are key to an operation, linked to major negotiations, have national-level interest and may involve the Secretary of Defense. Examples of this include search and rescue operations, humanitarian assistance forces, non-combatant evacuation

operations, activities surrounding mishaps, freedom of navigation operations, Global Reach missions, and transit of forces in high-interest peacekeeping operations.

e. Intelligence Component of the COP. A critical relationship within COP reporting structures is the intelligence analysis and production partnership between theater and national intelligence commands and agencies and the joint, component, and operational-level intelligence organizations. There are three aspects of intelligence data that can be displayed on the COP:

(1) Near real-time hostile and neutral track data derived from national and tactical sensor data, augmented by manual input, and managed by the intelligence nodes performing the CCS function.

(2) Order of battle and general military intelligence that is derived from the MIDB and contained in the GCCS intelligence shared data server (ISDS) component of the integrated imagery and intelligence (I3) segment. The MIDB and ISDS replication architecture provide a means by which national- and theater-level analysis is provided to tactical/operational units; likewise up-echelon replication provides a mechanism for critical intelligence collected at the tactical level to be disseminated back to theater and national level decision makers and analysts. Close linkage between relevant hostile and neutral tracks and the MIDB are critical to maintaining the relevance of the COP.

(3) Imagery data derived from imagery product library (IPL) and displayed on the COP using the imagery transfer services segment of I3. This information does not require management by the GCCS COP user or CCS.

f. Environmental data. The combatant command's senior meteorological and oceanographic (METOC) officer (SMO) is responsible for defining the specific requirements for environmental data to meet the combatant command's needs. This will include basic environmental parameters directly relevant to the mission, as well as Red/Yellow/Green charts depicting environmental effects on selected mission parameters for the land, air, sea, and space environments. The following data types will be provided at a minimum:

(1) Historical environmental data (climatology), to be included as part of the background foundation overlays, similar to terrain data.

(2) Visible and infrared meteorological satellite imagery.

(3) Graphical depictions of the current state (analyses) and future states (forecasts) of the air, land, sea, and space environment.

6. Service and Component Information. Services and components must provide COP information to the combatant command. Service-unique functions that enhance the COP must follow the migration path for GCCS meeting the appropriate level of common operating environment compliance. Functions that support reporting to the COP must be joint and universal in application.

7. Unified Action. Operations may involve participation of nonmilitary organizations or agencies. In some instances, these agencies will function to provide reporting of information. However, there may be cases where the COP will be useful to these agencies in their role. Some nonmilitary agencies equipped with only GCCS will need the COP transmitted to them. For other agencies that do not have the COP, it may be appropriate to provide a temporary GCCS capability. For unified actions, ensure that the proper security requirements are met before the release of information.

8. Security Considerations. Both the combatant command and JFC classification authority must provide active oversight of the COP to ensure proper classification and accreditation for hardware, software, and distribution nodes.

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APPENDIX A TO ENCLOSURE A

AIR TASKING ORDER REPORTING REQUIREMENTS

1. General. GCCS provides the capability to transfer and display the ATO in text format. The use of GCCS to distribute the ATO through the chain of command will facilitate information flow and coordination. The ATO can be posted or E-mailed as necessary.
2. Read and Transfer Capability. GCCS provides an ATO read and transfer capability. This allows the rapid transfer of the ATO between commands to assist in planning and coordination. Combatant commanders should make ATOs available to the NMCC for all operations and circumstances.
3. Monitoring. During crisis monitoring, combatant commanders will ensure the designated air component commander provides the ATO to the NMCC and supporting combatant commanders using GCCS. The ATO will be provided as soon as published and updated as required.
4. JTF Operations. When a JTF has been established, combatant commanders will ensure that the designated Joint Force Air Component Commander (JFACC) provides the ATO to the NMCC and supporting combatant commanders daily.
5. Joint Exercises. During conduct of significant military exercises, combatant commanders will provide the ATO to the NMCC and supporting combatant commanders for monitoring as required.

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ENCLOSURE B

DATA MANAGEMENT

1. Time Value. The information that the COP displays is time sensitive. The approved joint definitions (reference e) of real time, near real time, and non-real time serve to provide a commander a sense of the value of information. Delays due to data processing, slow communications networks, or any other transparent delays can further degrade the value of information. It is imperative that track managers and operators understand the time value of data being displayed on the COP and communicate this to commanders.

2. Data Sources. Track data can originate from a variety of sources both in and outside an AOR and can be incorporated into the COP via automated or manual methods. Real-time and near-real-time data is typically sensor generated and incorporated into the COP at a CCS via automated feeds. This information may arrive at a CFC and/or CCS via a secure wide area network or be directly injected from local equipment. An adequate communications network is necessary to allow flow of information to the CFC and/or CCS. A Joint Intelligence Center (JIC) or Joint Analysis Center (JAC) may analyze intelligence data before incorporation into the COP at a CCS to add amplifying information, context, or correlation. Some data feeds may come from multinational sources through appropriate filters or security devices. Manual input of data from SITREPs, GSORTS, or other information sources may occur at any level.

a. Reporting methods of data from source locations may come in one of five ways:

(1) Automatic detection by remote, dedicated, or organic surveillance sensors.

(2) Units that automatically report their position or status (e.g., through space-based blue force tracking (SB BFT) systems.

(3) Data automatically injected from other databases.

(4) Manually entered data from situation reports, GSORTS, or other source reports.

(5) Data derived from national, theater, and tactical collection and reported via intelligence broadcast.

b. Information feeds processed through a JIC or JAC will have a time delay. Track managers must pay particular attention to the time value of data coming from correlation, processing, and screening sites. Processed data has high operational value, but good judgment with regards to the time value and close coordination between operational and intelligence personnel is an important planning factor.

c. Manual input of data is the least preferred method to update CTP or COP displays. Commanders at all levels, particularly the Services, should make automated reporting a top priority. Manual inputs can provide force or unit locations not connected to an automated reporting mechanism; however, manual input of data is resource intensive and usually has a time delay due to data processing. Unless specifically instructed by the NMCC, combatant commanders will need to further define manual reporting relevant for the type and scope of operation in their AOR. Figure B-1 shows how data sources and time value of data are interrelated.

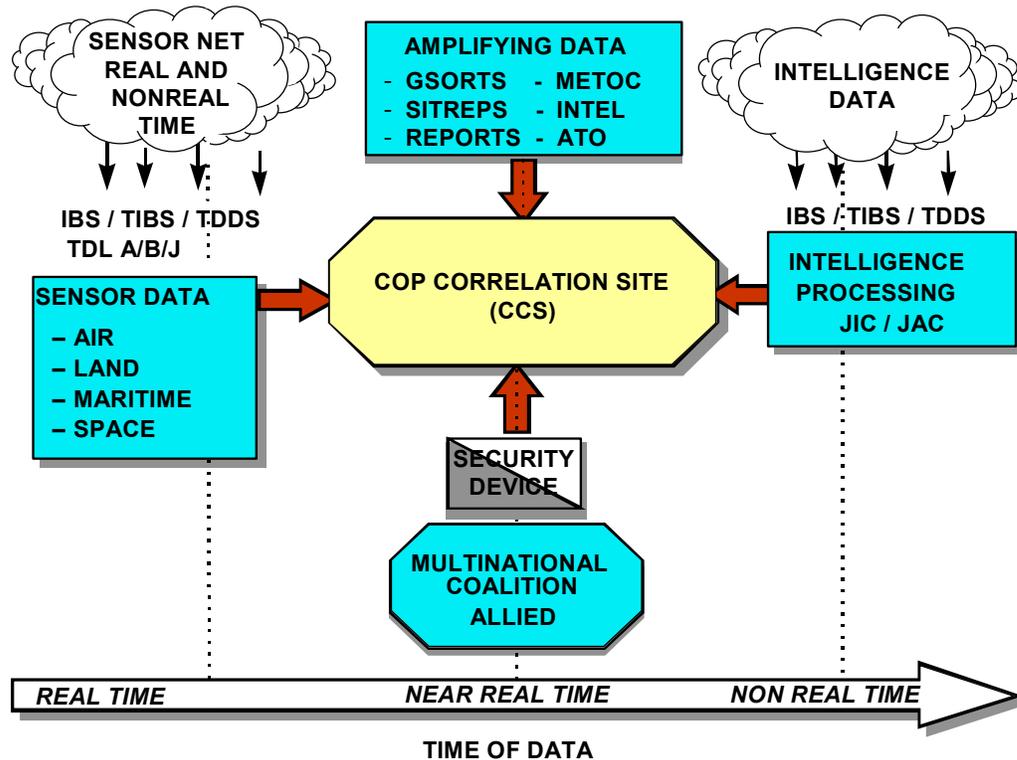


Figure B-1. Data Sources and Time Value

3. Track Management. Proper track management is critical to maintaining an accurate COP. Considering data can come from multiple sources, it is possible that two or more sources will provide a contact report on the same object. The track manager for the theater combatant commander will work closely with service and/or functional components to ensure that COP reporting requirements are accurately reflected by the COP. Track managers at all levels must resolve data conflicts in the COP through the correlation process and the development of procedures to resolve track naming conflicts.

a. Effective track management discipline requires that only the reporting authority can delete tracks or merge tracks. Only the theater track manager at the CFC and designated CCSs can override this policy when sufficient information proves that erroneous tracks exist.

b. The CFC is the controlling authority over data coming from outside the AOR.

c. Track correlation and fusion of data are the key functions of track management. Track correlation is a process to match contact reports to visually displayed tracks. Fusion is a process to integrate already correlated track information with additional data to refine the track. It consolidates all reports associated with one object into a single track.

d. General reporting functions and track management procedures are listed below. Specific track management guidance for tactical data link (TDL) networks is found in reference h. In all cases, reporting nodes are responsible for maintaining the communications to support broadcast of information to the CCS as required.

(1) Theater Combatant Commanders. The combatant commanders or designated representatives act as track managers for their respective theater. Each combatant commander will establish or designate a CFC where theater components, unified commands, joint agencies, and joint task forces will report their CTP for consolidation into the theater COP. Each theater combatant commander will have geographic responsibility to provide the respective COP to the appropriate command outside the theater.

(2) Combatant Commanders. Combatant commanders or designated representatives act as the track managers for their respective AORs. Reporting responsibility may be by the type of track and/or unit (air, space, ground, or maritime), geographic area, or a combination of both. When a JTF is established, the CCS will fulfill the track management function for the JTF joint operations area (JOA). In

instances where a JTF is not designated, component headquarters or other designated nodes, such as a JAC, will provide track management in accordance with this instruction for their reporting responsibilities. The designated CFC and/or CCS will use all means available to ensure that track databases are consistent between reporting nodes.

(3) Joint Force Air Component Commander (JFACC). The JFACC track manager is normally responsible for reporting and database management for airborne contacts at altitudes from the surface up to 100,000 feet in a designated JOA. Coordination and management of the data link interfaces will be handled by the combatant command's Joint Interface Control Officer (JICO).

(4) Joint Force Land Component Commander (JFLCC). The JFLCC track manager is normally responsible for reporting and database management for all conventional ground tracks at least two echelons below the JFLCC command echelon, unless more detail is necessary.

(5) Joint Force Maritime Component Commander (JFMCC). The JFMCC track manager is normally responsible for reporting all maritime contacts. Depending upon the AOR and tactical situation, the JFMCC may have to manage the air picture for airborne tracks over water. A maritime component commander track manager may have to manage the air picture for airborne contacts operating over water outside of the JFACC's responsibility.

(6) Joint Force Special Operations Component Commander (JFSOCC). The JFSOCC will provide location data (when classification permits) that details the location of any SOF forces operating within an AOR or JOA. When providing this information, the JFSOCC will be responsible for track management of SOF forces. This should include friendly, assumed friendly, neutral, and hostile data.

e. Sources of Data

(1) Intelligence Data. MIDB is the intelligence community's (IC) national database. Delegated producers throughout the IC update records based on current intelligence information. These updates are replicated, event-by-event, to MIDB servers. GCCS I3 ISDS is a subset of MIDB within combatant commands. ISDS servers can be used in event-by-event replication to ensure intelligence database information amplifying a track is the most useful information available.

(2) Early Warning Information. Hostile activities that warrant immediate or special dissemination may be classified as early warning information. Injection of early warning information supplements, but

does not replace, existing early warning networks. This includes, but is not limited to, theater missile defense information. In most situations, USSTRATCOM-controlled assets will provide first warning of TBM attack to the COP. The theater ballistic missile defense module and tactical related applications (TRAP) Data Dissemination System (TDDS) feed provide automatic warning and tracking function in the COP. The integrated broadcast service (IBS) will integrate the functionality of several legacy intelligence dissemination systems such as the TDDS, near-real-time dissemination (NRTD), and tactical information broadcast system (TIBS) into a single integrated architecture. For the purposes of the instruction, IBS-interactive (IBS-I) and IBS-simplex (IBS-S) are synonymous with TIBS and TDDS respectively.

(3) Link Data. Effecting planning and management of the joint multi-TDL network within a theater of operations is the responsibility of the JICO.

(4) Environmental Information. The SMO is responsible for ensuring that all environmental data needed by the combatant commander, the component commanders, and others are provided for integration in the COP. This includes:

(a) Ensuring that the digital environmental data provided to the COP is consistent with the official joint forecast issued by the Joint METOC Forecast Unit or other designated unit(s), necessary to upholding the 'one theater, one forecast' principle mandated in reference h.

(b) Coordinating requirements for environmental data to ensure that only mission-essential data and products are integrated into the COP.

(5) Space-Based Blue Force Tracking (SB BFT). The combatant command determines operational need to track blue forces within its AOR and identifies an associated priority in relation to other command requirements. Current capabilities and responsibilities for SB BFT are discussed in ref(s) l. and m.

4. Track Latency Guidance. The goal of a COP is to present accurate, timely information for use by decision makers. The following guidelines are provided to ensure currency of track information. The guidelines in Table B-1 are derived from reference j and are presented as desired standards. Tracks latency may exceed time limitations based on special situations and combatant commander's guidance. In all cases, extreme caution must be taken when deleting tracks to ensure relevant information is not lost. These guidelines are not intended to limit the

JFC's authority in the establishment of specific reporting requirements for any given situation.

DOMAIN	FRD	AFD	NEU	SUS	HOS	UNK	PND
Surface	15 min	4 hours	6 hours	24 hours	24 hours	6 hours	0
Subsurface	6 hour	6 hours	6 hours	24 hours	24 hours	6 hours	0
Conventional Land	4 hours	4 hours	4 hours	24 hours	24 hours	2 hours	0
Air	3 min	3 min	3 min	3 min	3 min	3 min	0
SOF	4 hours	N/A	N/A	N/A	N/A	N/A	0
TBM (special)	0	0	0	6 hours	6 hours	6 hours	0

Table B-1. Desired Track Latency

5. Foreign Releasability. Operations will likely include multinational forces organized within the structure of an alliance or coalition. Foreign disclosure policy will be followed. Reliability of COP data/information not covered by national disclosure policy (NDP) will require an exemption to NDP. Specific guidance can be found in NDP-1.

ENCLOSURE C

COP OPERATIONAL ARCHITECTURE AND DATA EXCHANGE FORMATS

1. General. Consistent with references a and b, operational reporting of the COP follows the chain of command. Hence, the COP architecture consists of a hierarchy of reporting and processing facilities taking data feeds from sensors, manual inputs, and automated sources. The systems and technical architecture will be consistent with the JTA outlined in reference b. To support critical joint warfighter interoperability, the exchange of COP data needs to be seamless and meet key performance parameters for automated information systems requiring real-time access to a normalized data environment. Achieving this vision requires interoperability and cooperation of the Services to focus on joint applications. The key elements of the COP reporting architecture are as follows:

a. Data Sources. COP data originates from various sources such as sensors, GPS-based tracking devices, GCCS databases, and a variety of logistics and intelligence databases and situation reports. This information provides the basic building blocks for COP development at the local CCS.

b. Theater CFC. The theater CFC provides overall management of the accumulated data from the subordinate CCSs, adds additional information as required, and acts as the gateway for transmission of the theater COP to the NMCC and supporting combatant commanders, services, and agencies. Figure C-1 shows the hierarchical relationships of the various reporting levels.

c. Local CCS. The local CCS provides track data management, produces operational overlays, and transmits the local CTP/COP to the theater CCS. CCSs are designated by the combatant commander and typically include JTF headquarters, Service component headquarters, and major intelligence nodes, such as a JAC, based on combatant command requirements and node capabilities.

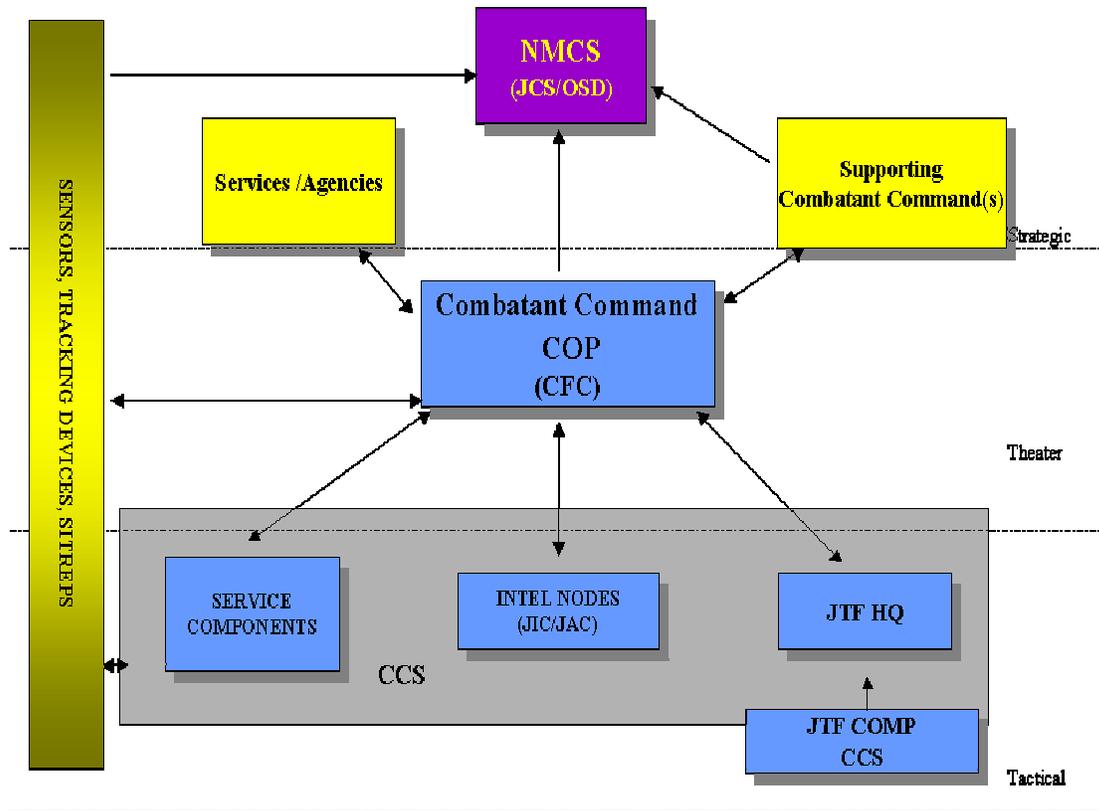


Figure C-1. COP Reporting Hierarchy

2. Communications

a. COP distribution between theater CFCs, supporting combatant commands, and other outside services and agencies is accomplished primarily via the SIPRNET using GCCS communications interfaces. Combatant commands must ensure the communication interfaces chosen do not adversely affect other COP participants.

b. Details concerning the communication interfaces are to be identified in the OPTASK COP, OPTASK Request/Reply message.

c. The primary purpose of theater communications networks is to support operational mission traffic. Hence, planners must exercise care in providing a communications architecture to support the COP that does not negatively impact communications assets required for mission accomplishment.

d. The time standard for GCCS COP is coordinated universal time with an automatic conversion capability to local time.

3. Data Exchange and Receipt Formats. Data can be exchanged between GCCS COP servers and received by COP servers at CFCs and/or CCSs using one of the following formats.

a. COP Synchronization Tool (CST). CST, in conjunction with other one-way communication methods, is the preferred method of exchanging data between GCCS COP servers. A critical component of COP operations is the initialization, maintenance, and management of the CST network supporting real-time GCCS track database exchange throughout the COP federation. CST enables each node to receive raw and processed track information and distribute the results of track correlation and fusion throughout the CST network. Care must be taken to ensure all GCCS COP interconnections are known to prevent unintended modifications to the COP.

b. Message Data Transmission (MDX). An MDX channel provides two-way point-to-point data flow. MDX is the most efficient way to send large amounts of data on a continuing basis from a source to one particular destination.

c. Over-the-Horizon Gold (OTH Gold). OTH Gold is a message text formatted American Standard Code for Information Interchange message that supports the non-real time exchange of data between GCCS and other systems. OTH GOLD is supported by the network or dedicated serial communications connection.

d. TIBS. TIBS is a satellite broadcast system for delivering of air and electronics intelligence track data using specifically formatted messages. TIBS air data will occasionally provide amplifying track data like course, speed, and altitude.

e. TDL A. TDL A, or Link 11, is a secure data link using M series formatted messages. It provides for mutual exchange of digital information among airborne, land-based, and shipboard systems via UHF or HF transmissions.

f. TDL B. TDL B, or Link 11B, is a secure, full-duplex, point-to-point digital data link using M series formatted messages. It provides for serial transfer of data between connected reporting units.

g. TDL J. TDL J, or Link 16, is a secure high-capacity, jam-resistant, nodeless data link that employs the Joint Tactical Information Distribution System (JTIDS) and Multifunctional Information Distribution System-Low Volume Terminal (MIDS-LVT). It promulgates information via J series messages and provides the backbone for multi-

TDL networks. JTIDS and MIDS-LVT platforms are principally line of sight.

h. TDDS. TDDS provides near real time contact data to a variety of tactical receive equipment, constant source, and SUCCESS radio users. TDDS receives input from local and remote collection systems, converts the data to a binary format, encrypts, encodes, and provides it for transmission to a UHF communications satellite on a 2,400 bps circuit.

i. IBS. IBS is a Joint Requirements Oversight Council approved program that integrates the functionality of several legacy intelligence dissemination systems, such as the TDDS, NRTD, and TIBS, into a single integrated architecture. It also replaces many legacy intelligence terminals with a new family of joint tactical terminals.

j. Officer-in-Tactical Command Information Exchange System (OTCIXS). OTCIXS is a UHF Tactical satellite communications system that supports exchange of position data and text messaging through formatted broadcasts to naval and joint forces.

k. United States Message Text Format (USMTF). USMTF is the DOD's message format standard.

l. All Source Analysis System (ASAS) S309 Enemy Interoperability Message. The S309 is the USMTF message that the Army ASAS will input to GCCS-Army to populate the CTP for the Army tactical environment and through GCCS-A to GCCS COP. ASAS can also directly input S309 messages to the COP. The S309 is a basic intelligence report on the enemy that includes unit information but does not include enemy equipment or facilities.

m. ASAS C103 Order of Battle Report Message. The C103 is the USMTF message that can be parsed into GCCS-I3 ISDS. The C103 provides unit, equipment, and facilities general military intelligence information and is a more detailed enemy information report.

ENCLOSURE D

PERSONNEL AND TRAINING REQUIREMENTS

1. General. Commanders must ensure that they have highly trained and proficient track managers, network administrators, system administrators, and operators to build a complete and accurate COP. In many cases, operator functions and track management will involve the system administrator. The required skills listed here do not imply that track managers and COP watch-standers will perform system administration duties. Rather, they serve to provide general skills necessary to maintain a COP, develop proficiency in operation of the system, and provide a knowledge base of awareness of the system functions. There must be a close partnership between operators and system administrators.
2. Required Skills. The online help function for COP provides a good description of each function. Using the online help function in conjunction with scenario-based exercises can provide any operator with the rudimentary skills required for displaying and manipulating the COP. Formal training should be sought for operators or track managers involved with the CTP/COP on a daily basis. Basic and advanced skills/requirements are detailed in the Single Service Training Manager (SSTM) developed COP Joint Training Requirement Matrix, and CJCSI 6721.02A GCCS Track Management.
3. Trained Personnel. Personnel assigned to a combatant command's CFC must be trained prior to arrival or have requisite experience. Combatant commands should ensure COP positions/billets are properly coded to acquire skilled personnel. Even if trained, personnel should refresh their skills by reviewing appropriate COP operator handbooks or running scenario-based examples if they do not use COP on a daily basis. CFC requirements demand proficient COP track managers and operators. Track managers and watch-standers, however, may have to inform, demonstrate to, or train CFC personnel on the capabilities and limits of the COP.
4. Skill Tracking. Personnel trained as COP operators, track managers/database managers, and system administrators need to be identified and tracked due to special training, complexity of skills, and special experience. The Services will develop means to identify COP-qualified track managers and system administrators to facilitate the identification of trained personnel for potential deployment in support of contingency operations (JTF staff, Crisis Action Support, etc.)

5. Recommended Training. Commanders must ensure that their GCCS COP operators are properly trained. The available GCCS training courses are listed on the SSTM Web site. Additionally, GCCS COP should be used during exercises ensure COP operators gain and maintain proficiency.

ENCLOSURE E

RESPONSIBILITIES

1. Chairman of the Joint Chiefs of Staff. The Chairman will provide combatant commanders and JFCs with information requirements for the COP. For JTF operations, general administration messages will supplement EXORDs or warning orders if any additional reporting requirements for COP are necessary.
2. Combatant Commanders. Combatant commanders maintain and control the information in their AOR. The COP is the tool that allows the combatant commander to accomplish the requirements found in reference d. Each combatant commander will designate COP reporting responsibilities for their respective AOR to meet requirements in this instruction and maintain overall management of the COP within their theaters. They will determine the most appropriate technical architecture to meet CJCS and NMCC requirements. In addition to ensuring CJCS reporting requirements are met, they may also specify additional theater requirements. The combatant commander:
 - a. Advises the Chairman of any additional resources required to support the strategic and theater COP architectures.
 - b. Establishes priorities for information reporting consistent with CJCS and NMCC priorities.
 - c. Controls the release of the COP to supporting and multinational forces.
 - d. Designates the location of the CFC.
 - e. Provides oversight of the communications architecture supporting COP development and ensures compliance with JTA and Enclosure C.
 - f. Coordinates and tasks respective organizations via OPTASK COP messages (Enclosure H).
 - g. Provides semi-annual COP architecture and data flow diagram to Joint Staff J-3 for posting to the COP Working Group Web site.
 - h. Ensure adherence to unique identifier (UID) standards as defined in the OPTASK COP.

i. Manage blue force tracking (BFT) emitters in accordance with approved combatant commanders CONOPS, reference n and Mission Management Center database support requirements.

j. Develop, promulgate, and enforce COP management CONOPs and/or SOPs.

3. Combatant, Functional, and Joint Force Commanders. Combatant, functional, and joint force commanders maintain and provide the COP on GCCS, as appropriate, in accordance with OPTASK COP. They will also manage blue force tracking (BFT) emitters in accordance with approved combatant commanders CONOPS, ref n. and Mission Management Center database support requirements.

4. JTF Establishing Authorities. JTF establishing authorities task DISA and force providers to ensure that JTFs are properly equipped to meet COP reporting requirements specified by the Chairman of the Joint Chiefs of Staff and combatant commanders.

5. Service Chiefs. Services provide training, manpower and equipment to support GCCS COP. In addition, each Service is responsible for assisting combatant commands, JTFs, unified commands and component commanders in refining GCCS COP use at the component level and below.

a. Develop warfighting tactics and strategies that take full advantage of battlespace awareness provided by the COP.

b. Equip and train forces to provide location information automatically to the COP (to include emergent technologies such as BFT devices). Provide equipment capable of interfacing with each combatant command's CFC. Ensure new automated reporting devices and emitters are included in unit tables of authorized equipment, unit training, Service tactics, techniques and procedures and readiness reporting requirements.

6. Commanders, Joint Task Force (CJTF)

a. Maintain the COP for their respective JOA, in accordance with the combatant commander's reporting requirements, and using procedures outlined in reference c and j.

b. Establish liaison with multinational forces within the JOA to ensure their inclusion in the COP in accordance with multinational agreements. If no agreement exists, establish a liaison with the

combatant command and Department of State to work releasability issues.

7. COP/CTP Managers (all levels)

a. Ensure reporting requirements are met and arbitrate any conflicts in track information among reporting elements.

b. Work with other staff members to ensure tasked sensor systems and reporting systems support COP requirements.

c. Ensure adequate communications capabilities exist to support receipt and distribution of COP data.

d. Specify appropriate filters for dissemination of COP data.

e. Establish effective COP database management procedures that ensure reliable data.

f. Maintain the COP at the appropriate level of detail defined by the combatant commander or CJTF for the operation at hand.

g. Ensure filters are properly set to support reporting requirements.

h. Responsible for maintaining the integrity of the combatant commander's COP topology in accordance with the commander's COP CONOPS and tactics, techniques and procedures.

i. Assist in the development of firewall rule-sets for coalition COP requirements.

8. National Imagery and Mapping Agency (NIMA). NIMA is the combat support agency responsible for providing imagery and geospatial information for the COP. The NIMA Office of International Policy provides guidance for the release of NIMA products to support multinational and coalition forces.

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ENCLOSURE F

COMBATANT COMMANDER CONOPS CHECKLIST

1. General. To provide the combatant commander guidance in producing a CONOPS for COP operations that cover the key areas, a sample CONOPS checklist is provided. This checklist identifies the major areas to be addressed and indicates areas critical to the operation of a CFC.

Does the CONOPS address?	Critical (Y/N)	Comments:
COP Reporting requirements and standards	Y	
Deletion and management of late tracks	Y	
Manual inputs	Y	
Overlays and labels	Y	
Organizational roles and responsibilities	Y	
Communication utilized	Y	
Use of geographic filters	Y	
Normal daily operations	Y	Describe normal daily operations
Crisis situations	Y	Reference action plan
JTF operations	N	
Major joint field exercises	N	
COP Fusion Responsibility	Y	
BFT devices	Y	
Sharing COP data	Y	COP OPTASK
Authority to release	Y	
JTF and component authority to forward data	Y	
Overview of current capabilities	N	
Bandwidth considerations	Y	
GCCS I3	Y	
TRS Configuration Guidance	Y	

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ENCLOSURE G

COP OPTASK REQUEST/REPLY MESSAGES

1. General. Due to the complexity, size, and continuing changes required of the COP environments, proper coordination and direction must be managed in a uniform manner. To accomplish an OPTASK COP, COP Request (REQ) and COP REQ REPLY will be utilized. This ensures communication paths are well defined and will reduce the amount of unintended actions within the CFC.

a. The OPTASK COP message format is structured to provide all required information to manage the COP communication architecture. The use of the message allows for changes to the COP communication environment without the requirement of rewriting the CJCSI 3151.01A.

b. The utilization of the COP REQ and COP REQ REPLY, described below, allows the sharing of COP data between combatant commanders. The COP REQ provides specific information and requirements that the requestor desires. The COP REQ REPLY provides a confirmation of the information and requirements that the provider had approved to provide the requestor. Only information contained within a combatant commander's AOR can be shared in order to prevent duplication of data within the CST environment and unauthorized access to a CST environment. The elimination of the verbal COP communication environment will provide stability within the COP architecture and avoid unintended communication problems.

2. Responsibilities. The OPTASK COP is utilized in conjunction with the published CONOPS to provide amplifying information that cannot be incorporated into this instruction. The responsibilities for the message are as follows:

a. JCS. Produce a yearly OPTASK COP that provides the minimum requirements to combatant commanders, as well as the block assignments for the first digit of the UIDs for each combatant commander.

b. Combatant Commanders. Produce an OPTASK COP supplement to the JCS OPTASK COP, where the commander's intentions change. The OPTASK COP supplement must follow the guidance provided within the JCS OPTASK COP with the additions of the combatant commander's guidance.

c. Services and JTF. Each command produces an OPTASK COP Supplement (SUP) on an 'as needed' basis when the combatant commander's OPTASK COP is revised, after every change of command, and for the formation of a new JTF. The OPTASK COP SUP must follow the guidance provided within the combatant commander's OPTASK COP and also include the additions of the respective Service(s) and JTF guidance.

3. OPTASK COP. The utilization of the COP REQ and COP REQ REPLY is to allow the sharing of COP data between combatant commanders in a well-established, consistent manner. The COP REQ provides specific information and requirements that the requestor desires. The COP REQ REPLY provides a confirmation of the information and requirements that the provider has approved to provide the requestor. Utilizing the messages prevents the sharing of data through non-recognized means. A combatant command will share only information originating within its AOR. This will prevent duplication of data within the CST environment and unauthorized access to a CST environment. The elimination of the verbal agreements on CST and MDX environments will provide stability within the COP architecture and will ensure unintended communication problems do not occur. Once completed, OPTASK COP will be a classified document. Refer to Table G-1 for the paragraph headings related to the information control areas that will be addressed.

A1/ REF/A
A2/PERIOD
A3/ADMIN COMMENTS/
B1/POLICY/1/SCOPE
B1/POLICY/2/GENERAL GUIDANCE AND POLICY
B1/POLICY/3/GENERAL COP RESPONSIBILITIES
B1/POLICY/4/ORGANIZATIONAL RELATIONSHIP
B1/POLICY/5/JTF RESPONSIBILITIES
B1/POLICY/6/COMPONENT RESPONSIBILITIES
B1/POLICY/7/COP FUSION CENTER RESPONSIBILITIES
B2/GCCS/1/VERSION CONTROL
B3/CST/1/CST ARCHITECTURE
B3/CST/2/CST TRANSMIT
B3/CST/2.1/CST XREF NAMING CONVENTIONS
B3/CST/2.2/CST UID CONVENTIONS
B3/CST/2.3/CST INET PORT CONVENTIONS
B3/CST/2.4/PARENT ASSIGNMENT
B3/CST/2.5/IN FILTER SETTINGS

B3/CST/2.6/OUT FILTER SETTINGS
B3/CST/2.7/TBM SETTING
B3/CST/2.8/FILTER LOCAL TRACK SETTING
B3/CST/2.9/PERMISSIONS
B3/CST/3/TIME SYNCHRONIZATION
B4/MDX/1/MDX ARCHITECTURE
B4/MDX/2/MDX TRANSMIT
B4/MDX/2.1/MDX NAMING CONVENTION
B4/MDX/2.2/MDX XREF NAMING CONVENTION
B4/MDX/2.3/DECODER
B4/MDX/2.4/ENCODER
B4/MDX/2.5/HOSTNAME
B4/MDX/4/BROADCAST TYPE
B4/MDX/5/BROADCAST CYCLE TIME
B4/MDX/6/BROADCAST FILTER SETTING
B5/COPFC/1/ARCHITECTURE
B5/COPFC/2/DATA INJECTION POINTS
B5/COPFC/3/ARCHIVE CRITERIA
B5/COPFC/4/MISSION CRITICAL SYSTEMS
B5/COPFC/5/FIREWALLS
B5/COPFC/6/NETWORK TIME
C1/DATA FEED/1/DATA FEED RESPONSIBILITIES
C1/DATA FEED/2/TDL/LINK
C1/DATA FEED/3/ISR BROADCASTS
C1/DATA FEED/4/OTHER COMM CHANNELS
D1/DATABASE/1/DATABASE MANAGEMENT RESPONSIBILITIES
D1/DATABASE/2/TDBM DATABASE MANAGEMENT
D1/DATABASE/3/MIDB DATABASE MANAGEMENT
D1/DATABASE/4/IPL DATABASE MANAGEMENT
D1/DATABASE/5/5D DATABASE MANAGEMENT
E1/TABLES/1/ATO/ACO RESPONSIBILITIES
E1/TABLES/2/MODE 2/3 PIF NICKNAME
E1/TABLES/3/ELNOT VERSION TABLE MANAGEMENT
E1/TABLES/4/ELNOT SYMBOL TABLE MANAGEMENT
E1/TABLES/5/AEN TABLE MANAGEMENT
E1/TABLES/6/RADAR FUNCTION TABLE MANAGEMENT
E1/TABLES/7/SOURCE XREF TABLE MANAGEMENT
E1/TABLES/8/FLAG-THREAT TABLE MANAGEMENT
E1/TABLES/9/TYPE-CATEGORY TABLE MANAGEMENT
E1/TABLES/10/SENSOR TABLE MANAGEMENT
E1/TABLES/11/SOURCE CODE TABLE MANAGEMENT

E1/TABLES/12/OTHER TABLE MANAGEMENT
F1/OVERLAY/1/OVERLAY MANAGEMENT
G1/DUTIES/1/
G1/PREPLAN/1/TRACK EDIT CRITERIA
G1/PREPLAN/2/TRACK DELETION CRITERIA
G1/PREPLAN/3/MINIMUM REQUIRED NEW TRACK REPORT CRITERIA
G1/PREPLAN/4/HIGH INTEREST TRACK (HIT) CRITERIA
G1/PREPLAN/5/TRACK SYMBOLOGY CONVENTIONS
G1/PREPLAN/6/OWN TRACK LOCATIONS (FIXED)
G1/PREPLAN/7/MASTER REFERENCE POINT
G1/PREPLAN/8/DATA LINK REFERENCE POINT
G1/PREPLAN/9/VOICE COORDINATION
G1/PREPLAN/10/FILTERS
G1/PREPLAN/11/DEGRADED COMMUNICATIONS PROCEDURES
G1/PREPLAN/12/VIDEO
H1/TGTPRIOR/CCOI AND COI CRITERIA
H1/TGTPRIOR/DTL MANAGEMENT
P1/POCS/
R1/COMMS/
X1/REPINST/1/CST SITREPS
X1/REPINST/2/DATA FEED SITREPS
X1/REPINST/3/COP REQ
X1/REPINST/4/COP REQ REPLY

Table G-1. OPTASK COP

4. COP REQ (FORMAT). To provide standardization, the format for the COP request is provided (Table G-2). A completed COP REQ will be a classified document.

A1/REF/A
A2/PERIOD
A3/ADMIN COMMENTS/
B1/GCCS/1/VERSION CONTROL:
B2/CST/1/CST XREF NAME ASSIGNMENT
B2/CST/2/CST UID ASSIGNMENT
B2/CST/3/CST PORT NUMBER
B2/CST/4/PARENT ASSIGNMENT
B2/CST/5/CHILD ASSIGNMENT
B2/CST/6/IN FILTER SETTINGS
B2/CST/7/TIME SYNCHRONIZATION
B2/CST/8/OUT FILTER SETTINGS
B2/CST/9/TBM SETTING

B2/CST/10/FILTER LOCAL TRACK SETTING
B2/CST/11/PERMISSIONS
B2/CST/12/PARTICIPANT IP ADDRESS
B3/MDX/1/MDX TRANSMIT
B3/MDX/1.1/MDX NAMING CONVENTION
B3/MDX/1.2/MDX XREF NAMING CONVENTION
B3/MDX/1.3/DECODER
B3/MDX/1.4/ENCODER
B3/MDX/1.5/HOSTNAME
B3/MDX/1.6/XMIT PORT
B3/MDX/1.7/RECV PORT
B3/MDX/2/MDX RECEIVE
B3/MDX/2.1/MDX NAMING CONVENTION
B3/MDX/2.2/MDX XREF NAMING CONVENTION
B3/MDX/2.3/DECODER
B3/MDX/2.4/ENCODER
B3/MDX/2.5/HOSTNAME
B3/MDX/2.6/XMIT PORT
B3/MDX/2.7/RECV PORT
B3/MDX/3/BROADCAST TYPE
B3/MDX/4/BROADCAST CYCLE TIME
B3/MDX/5/BROADCAST FILTER SETTING
C1/SOURCE REQUEST/1/List all sources requested
E1/TABLE REQUEST/1/List all tables requested
F1/OVERLAY REQUEST/1/List all overlays requested
P1/POCS/
R1/COMMS/

Table G-2. OPTASK COP REQ

5. COP REQ REPLY (FORMAT). To provide standardization, the format for the COP reply is provided (Table G-3). A completed COP REQ REPLY will be a classified document.

A1/REF/A
A2/PERIOD
A3/ADMIN COMMENTS/
B1/GCCS/1/VERSION CONTROL
B3/CST/1/CST ARCHITECTURE
B3/CST/2/CST XREF NAMING CONVENTIONS
B3/CST/3/CST UID ASSIGNMENT
B3/CST/4/CST PORT NUMBER
B3/CST/5/PARENT ASSIGNMENT

B3/CST/6/CHILD ASSIGNMENT
B3/CST/7/IN FILTER SETTINGS
B3/CST/8/TIME SYNCHRONIZATION
B3/CST/9/OUT FILTER SETTINGS
B3/CST/10/TBM SETTING
B3/CST/11/FILTER LOCAL TRACK SETTING
B3/CST/12/PERMISSIONS
B3/CST/13/PARTICIPANT IP ADDRESS
B4/MDX/1/MDX ARCHITECTURE
B4/MDX/2/MDX TRANSMIT
B4/MDX/2.1/MDX NAMING CONVENTION
B4/MDX/2.2/MDX XREF NAMING CONVENTION
B4/MDX/2.3/DECODER
B4/MDX/2.4/ENCODER
B4/MDX/2.5/HOSTNAME
B4/MDX/2.6/XMIT PORT
B4/MDX/2.7/RECV PORT
B4/MDX/3/MDX RECEIVE
B4/MDX/3.1/MDX NAMING CONVENTION
B4/MDX/3.2/MDX XREF NAMING CONVENTION
B4/MDX/3.3/DECODER
B4/MDX/3.4/ENCODER
B4/MDX/3.5/HOSTNAME
B4/MDX/3.6/XMIT PORT
B4/MDX/3.7/RECV PORT
B4/MDX/4/BROADCAST TYPE
B4/MDX/5/BROADCAST CYCLE TIME
B4/MDX/6/BROADCAST FILTER SETTING
C1/SOURCE/1/List all sources being provided
E1/TABLES/1/List all tables being provided
F1/OVERLAY/1/List all overlays being provided
P1/POCS/
R1/COMMS/

Table G-3. OPTASK COP REPLY

ENCLOSURE H

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- m. USSPACECOM, August 2002, "Operations Concept for Joint Blue Force Situational Awareness (S)" (DRAFT)

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GLOSSARY

PART I -- ABBREVIATIONS AND ACRONYMS

AOI	area of interest
AOR	area of responsibility
ASAS	All Source Analysis System
ASCII	American Standard Code for Information Interchange
ATO	air tasking order
AWACS	Airborne Warning and Control System
BMV	Background Map View
BFT	blue force tracking
BSA	battlespace situational awareness
C2	command and control
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CADRG	compressed arc-digitized raster graphics
CCS	common operational picture (COP) Correlation Site
CFC	common operational picture (COP) Fusion Center
CJCS	Chairman of the Joint Chiefs of Staff
CJTF	commander of the joint task force
CONOPS	concept of operations
COP	common operational picture
COP-TSE	common operational picture – transportation support enabled
CPX	command post exercise
CST	common operational picture (COP) synchronization tool
CTP	common tactical picture
DISA	Defense Information Systems Agency
DOD	Department of Defense
ELINT	electronics intelligence
GCCS	Global Command and Control System
GCFC	Global common operational picture (COP) Fusion Center
GSORTS	Global Status of Resources and Training System
I3	integrated imagery and intelligence

IBS	integrated broadcast service
IBS-I	integrated broadcast service-interactive
IBS-S	integrated broadcast service-simplex
IC	intelligence community
IPL	imagery products library
ISDS	intelligence shared data services
JAC	Joint Analysis Center
JFACC	joint force air component commander
JFC	joint force commander
JFLCC	joint force land component commander
JFMCC	joint force maritime component commander
JFSOCC	joint force special operations component commander
JIC	joint intelligence center
JICO	joint interface control officer
JOA	joint operations area
JP	joint publication
JTA	joint technical architecture
JTF	joint task force
JTIDS	Joint Tactical Information Distribution System
MDX	message data transmission
METOC	meteorological and oceanographic
MIDB	modernized integrated database
MIDS-LVT	Multifunction Information Distribution System – Low Volume Terminal
MIL STD	military standard
MTN	multi-tactical data link network
NDP	national disclosure policy
NIMA	National Imagery and Mapping Agency
NMCC	National Military Command Center
NRTD	near-real-time dissemination
OB	order of battle
OPREP	operations report
OPTASK	operation task
OTCIXS	Officer in Tactical Command Information Exchange System
OTH	over-the-horizon
PC	personal computer
SA	situational awareness
SB BFT	space-based blue force tracking

SecDef	Secretary of Defense
SIPRNET	Secret Internet Protocol Router Network
SITREP	situation report
SMO	senior meteorological officer
SOF	special operations forces
SSTM	Single Service Training Manager
SUP	Supplement
TBM	theater ballistic missile
TDDS	tactical related applications (TRAP) Data Dissemination System
TDL	tactical data link
TES	theater event system
TIBS	tactical information broadcast system
TRAP	tactical related applications
TRS	tactical receive suites
UID	unique identifier
UHF	ultrahigh frequency
USMTF	United States message text format
WGS	World Geodetic System

GLOSSARY

PART II -- TERMS AND DEFINITIONS

air tasking order -- Used to task and disseminate to components, subordinate units, and command and control agencies those projected sorties, capabilities forces to targets, and specific missions. Normally provides specific instructions to include call signs, targets, controlling agencies, etc., as well as general instructions.

Airborne Warning and Control System (AWACS) -- Air Force and NATO E-3A/B/C aircraft with a sophisticated, jam-resistant pulse-doppler radar, equivalent to US Navy E-2C in providing tactical airborne early warning, command and control, and air battle fighter direction to warfare commanders. AWACS provides wide area air surveillance and control of defense, including airspace management. Can cue interceptors on air targets. Some AWACS (E-3C) have been modified to detect ocean surface targets to support maritime surveillance missions. Has air refueling capability and stations for command staff elements in addition to air detection, tracking, and engagement controllers.

architecture -- A framework or structure that portrays relationships among all the elements of the subject force, system, or activity. In the Joint Technical Architecture there are three components (reference b):

a. operational architecture. A description (often graphical) of the operational elements, assigned tasks, and information flows required to accomplish or support the warfighter function. It defines the type of information, the frequency of exchange, and what tasks are supported by these information exchanges.

b. systems architecture. A description including graphics of systems and interconnections providing for or supporting warfighting functions. Defines the physical connection, layout, location, and identification of key nodes, circuits, networks, warfighting platforms, etc., and specifies system and component performance parameters.

c. technical architecture. A minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements whose purpose is to ensure that a conformant system satisfies a specified set of requirements.

area of interest -- That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objective of current or planned operations. This area also

includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. Also called AOI. (JP 1-02)

area of operations -- That portion of an area of war necessary for military operations and for the administration of such operations. An operational area defined by the joint force commander for land and naval forces. Areas of operation do not typically encompass the entire operational area of the joint force commander but should be large enough for component commanders to accomplish their missions and protect their forces. Also called AO.

area of responsibility -- A defined area of land in which responsibility is specifically assigned to the commander of the area for the development and maintenance of installations, control of movement, and the conduct of tactical operations involving troops under the commander's control, along with parallel authority to exercise these functions. In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire on known targets or targets of opportunity and by observation.

blue force tracking -- Employment of techniques to identify and track US, allied, or coalition forces for the purpose of providing the combatant commander enhanced battlespace situational awareness and for reducing fratricide. An example of blue force tracking capability is the Army's Grenadier beyond line-of-sight reporting and targeting (BRAT). Also called BFT.

coalition -- An ad hoc arrangement between two or more nations for common action; for instance, the coalition used in the Gulf War. Coalitions are typically formed on short notice and can include forces not accustomed to working together.

combined -- Between two or more forces or agencies of two or more allies. (When all allies or services are not involved, the participating nations and services shall be identified; e.g., combined navies.) (JP 1-02). Note: combined forces consist of allies and not coalition members.

common operating environment -- DOD standards-based C2 software policy developed in order to support applications services, applications platform services, and applications platform cross-area services among joint and service and/or agency automated systems. The common operating environment is identified in volume II of the Tactical Architecture for Information Management (TAFIM). [DII Master Plan] Also called COE.

common operational picture -- 1. The common operational picture is a distributed data processing and exchange environment for developing a dynamic database of objects, allowing each user to filter and contribute to this database, according to the user's area of responsibility and command role. The common operational picture provides the integrated capability to receive, correlate, and display a common tactical picture, including planning applications and theater-generated overlays and projections (i.e., environmental, battle plans, force position projections). Overlays and projections may include location of friendly, hostile, and neutral units, assets, and reference points. The common operational picture may include information relevant to the tactical and strategic level of command. This includes, but is not limited to, any geographically oriented data, planning data from Joint Operation Planning and Execution System, readiness data from Global Status of Resources and Training System, intelligence (including imagery overlays), reconnaissance data, environmental (air, land, sea, and space), predictions of nuclear, biological, and chemical fallout, and air tasking order data. 2. A single identical display of relevant information shared by more than one command A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness. Also called COP. (JP 1-02)

common operational picture synchronization tool -- Supports tactical commanders by providing an automated method of sharing and synchronizing filtered data for a common operating picture across the battlespace. Common operational picture synchronization tool uses fielded DII common operating environment-based systems and conventional DOD communications capabilities. Common operational picture synchronization tool allows the near real time exchange of track data between the sites (or nodes) participating in the common operational picture synchronization tool network over the wide area network. Each node can receive raw and processed track information and can distribute the results of track correlation and fusion throughout the common operational picture synchronization tool network. Also called CST.

common operational picture-transportation support enabled -- The situational awareness tool providing United States Transportation Command the means to effectively and efficiently accomplish its support for combatant commanders and/or joint task force commanders. The common operational picture-transportation support enabled provides Commander, Unified Transportation Command the ability to exercise command and control of forces throughout a distributed battlespace by receiving, displaying, and retransmitting correlated information for all transportation assets located worldwide. The common operational picture-transportation support enabled provides commanders and

operators a common (between all participants) graphical depiction of the battlespace area of operation. Also called COP-TSE.

common tactical picture -- An accurate and complete display of relevant tactical data, supporting a joint task force that integrates tactical information from the multi-tactical data link network, composite tracking network, intelligence network, and ground digital network. The common tactical picture enables command and control, situational awareness, and combat identification, as well as supporting the tactical elements of all joint mission areas. The common tactical picture, along with information from the joint planning network, contributes to the common operational picture. The common tactical picture is derived from sensor information and other sources and refers to the current depiction of the battlespace for a single operation within a combatant commander's area of responsibility. This responsibility includes current, anticipated or projected, and planned disposition of hostile, neutral, and friendly forces as they pertain to US and multinational operations ranging from peacetime through crisis and war. The CTP includes force location, real time and non-real time sensor information, and amplifying information. Also called CTP.

command, control, communications, computers, and intelligence systems -- Integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander's exercise of command and control across the range of military operations. The systems that are the information exchange and decision support subsystems within the total force command and control support system. The support systems include intelligence information gathering and analysis. Also called C4 IS.

common operational picture (COP) fusion center -- The combatant commander-designated location where the combatant commander integrates, correlates, fuses, manages, and disseminates common operational picture correlation site data for inclusion with the theater and strategic COPs. Also called CFC.

common operational picture (COP) correlation site -- The combatant commander-designated locations where data in the COP is generated, correlated, managed, and disseminated for inclusion with the combatant commander's COP at the COP Fusion Center.

correlation -- Matching display information with the actual contact it represents. Example: Making the determination that an aircraft is the same as indicated on the visual display (derived from reference e). There are two types of correlation: manual and automatic. Manual correlation

is performed by the track database manager or operator when two tracks for the same object appear on the display and involves verifying tracks with situation reports. The software performs automatic correlation when a track is reported from two different feeds. For example, a track reported simultaneously on the tactical information broadcast system and the tactical data dissemination system is automatically correlated into one track.

crisis situation -- An incident or situation involving a threat to the United States, its territories, citizens, military forces, possessions, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that commitment of US military forces and resources is contemplated to achieve national objectives (reference e). A crisis situation will prompt the release of an alert order.

fusion -- 1. Combining automatically correlated information with data that refines the information or presents it in an intuitive format. Fused data in many cases will arrive later than real or near real time data. 2. In intelligence usage, the process of examining all sources of intelligence and information to derive a complete assessment of activity. (JP 1-02)

fusion center -- In intelligence usage, a physical location to accomplish fusion. It normally has sufficient intelligence automated data processing capability to assist in the process. (JP 1-02)

global command and control system (GCCS) Integrated Imagery and Intelligence (I3) -- Consists of GCCS intelligence mission applications for processing national and tactical order of battle, general military intelligence, intelligence finished imagery products, and intelligence, surveillance, and reconnaissance video. It is built upon the GCCS common operational picture (COP) and utilizes the GCCS COP geographical display capabilities to link geographic points of reference to intelligence data. This data is synchronized throughout the theater GCCS COP sites via COP synchronization tool and database replication. Also called GCCS I3.

high interest tracks -- High interest tracks, designated by the joint force commander or above, are significant or carry significant information. Examples are use of a unique weapon system, VIP tracks, or special missions. Size of the track does not matter in determining its interest value.

joint force air component commander -- This term applies to both combatant command and the commander of the joint task force air component. The joint force air component commander derives authority

from the joint force commander (JFC) who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The JFC will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the JFC (normally these would include, but not be limited to, planning, coordination, allocation, and tasking based on the JFC's apportionment decision). Using the JFC's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the JFC apportionment of air sorties to various missions or geographic areas. Also called JFACC.

joint force land component commander -- This term applies to both combatant command and commander of the joint task force land component. The commander within a unified command, subordinate unified command, or joint task force (JTF) responsible to the establishing commander for making recommendations on the proper employment of land forces, planning and coordinating land operations, or accomplishing such operational missions as may be assigned. The joint force land component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The JFLCC will normally be the commander with the preponderance of land forces and the requisite command and control capabilities. Also called JFLCC.

joint force maritime component commander -- This term applies to both combatant command and commander of the joint task force maritime component. The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of maritime forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. The joint force maritime component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force maritime component commander will normally be the commander with the preponderance of maritime forces and the requisite command and control capabilities. Also called JFMCC.

joint force special operations component commander -- The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of special operations forces and assets, planning and coordinating special operations, or

accomplishing such operational missions as may be assigned. The joint force special operations component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The joint force special operations component commander will normally be the commander with the preponderance of special operations forces and the requisite command and control capabilities. Also called JFSOCC.

Joint Data Network -- A compilation of subnetworks that are comprised of a wide variety of data systems used by US military (and potentially international) services and combatant commands. These subnetworks currently fall into four distinct categories: Tactical Data Links, Composite Tracking Networks, Ground Network, and Intelligence Networks. When properly managed and fused through the use of gateways, translators, and forwarders, the data is formatted and correlated in three dimensions to resolve ambiguities and produce a single track for each object. Identification is determined when possible and correctly associated with each track to assist in making a timely characterization of tracks. When this is accomplished, the Joint Data Network, through the subnetworks it contains, will support a joint task force commander for purposes ranging from training exercises to operations. Also called JDN.

joint interface control officer -- A senior multi-tactical data link interface control officer in support of joint task force operations. The joint interface control officer is responsible for effecting planning and management of the joint multi-TDL network within a theater of operations. Also called JICO.

joint intelligence center -- The intelligence center of the joint force headquarters. The joint intelligence center is responsible for providing and producing the intelligence required to support the joint force commander and staff, components, task forces and elements, and the national intelligence community. See also joint intelligence architecture. Also called JIC.

Joint Surveillance and Target Acquisition Radar System -- The multimode radar system carried aboard an E-8C aircraft. The radar, designated AN/APY-3, is an X-band synthetic aperture phased array system. The radar scans electronically ± 60 degrees in azimuth through its in-line slot array and scans mechanically in elevation. The radar is capable of detecting non-emitting targets and tracking moving targets. It operates in a wide area surveillance mode with Moving Target Indicator (MTI); a higher resolution, smaller area mode with MTI; or in a Synthetic Aperture Radar mode for fixed target detection. The purpose of the system is to provide positional information on primarily land-warfare

targets of interest to locate enemy formations and determine enemy movements. Also called JSTARS.

joint technical architecture -- Specifies a set of performance-based, primarily commercial, information processing, transfer, content, format, and security standards. These standards specify the logical interfaces in command, control, and intelligence systems and the communications and computers that directly support them. Also called JTA.

joint operations area -- An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. Joint operations areas are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters. Also called JOA. (JP 1-02)

Marine air-ground task force -- A task organization of Marine forces (division, aircraft wing, and service support group) under a single command and structured to accomplish a specific mission. The Marine air-ground task force components will normally include command, aviation combat, ground combat, and combat service support elements (including Navy support elements). Three types of Marine air-ground task forces that can be task organized are the Marine expeditionary unit, Marine expeditionary brigade, and Marine expeditionary force. The four elements of a Marine air-ground task force are: a. command element; b. aviation combat element; c. ground combat element; d. combat service support element. Also called MAGTF.

major combat element -- Those organizations and units described in the Joint Strategic Capabilities Plan that directly produce combat capability. The size of the element varies by Service, force capability, and total number of such elements available. Examples are Army divisions and separate brigades, Air Force squadrons, Navy task forces, and Marine expeditionary forces. (JP 1-02)

Multi-Tactical Data Link (TDL) Network (MTN) -- The MTN is the multi-TDL architecture systems and associated tactical data that support the Joint Data Network production of the common tactical picture. It is the physical configuration, functional organization, and operational procedures used in the design, establishment, modification, and operation of TDL networks and associated voice circuits. (CJCSM 3115.01)

Officer in Tactical Command Information Exchange System -- A 2.4 kbps UHF demand assigned multiple access multi-user command and control satellite communications data link circuit that provides the primary

means of disseminating over-the-horizon targeting (OTHT) information within Navy battle groups. It is also used to move OTHT data between battle groups, or between battle groups and shore-based commands. Officer in Tactical Command Information Exchange System was designed to operate as a network supporting up to 60 users. In practice, many more than 60 users are often on the net, resulting in severe netloading problems and delayed reporting. Also called OTCIXS.

order of battle -- The identification, strength, command structure, and disposition of the personnel, units, and equipment of any military force. Also called OB.

organic -- Assigned to and forming an essential part of a military organization. Organic parts of a unit are those listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the administrative organizations of the operating forces for the Navy.

RIVET JOINT -- An Air Force RC-135 communications intelligence (COMINT) and electronic intelligence (ELINT) collector. RIVET JOINT provides situation awareness and indications and warning information, primarily focused on air-based and land-based air defenses. Intercepted ELINT is disseminated in a bent-pipe manner, while COMINT may be manually fused with ELINT and sanitized to the general service (GENSER) level prior to reporting. Contact reports are disseminated in a proprietary, binary, tactical data link J-like format via the tactical information broadcast system (TIBS), a UHF satellite communication or line-of-sight broadcast. RIVET JOINT is the primary producer for the TIBS broadcast, although additional sources (up to 10 total) may be included. Future plans include support for dual special intelligence and GENSER broadcasts. Recipients of RIVET JOINT reports include the common ground station and other TIBS users.

significant track -- A high-interest track that is behaving in an unusual manner, of major impact on the operation, warranting attention for any reason, or could pose a threat to a defended area. Tracks specified as special interest in the ALERT ORDER or WARNORDER. Applies to any air, ground, or maritime component.

Space Common Tactical Dataset -- The capability that controls the processing and display of satellite data from Space Battle Management Core System to Global Command and Control System. Space Common Tactical Dataset operates on satellite data received from Charlie 1-line elements, North American Aerospace Defense Command (NORAD) 2-line elements, and Reconnaissance Satellite Summary (RECSATSUM) messages, either directly or through the common operational picture (COP). The COP synchronization tool is used to move space data

throughout the COP, thus enabling other COP participants to view space data without receiving the messages directly. Space Common Tactical Dataset also provides satellite accessibility reports that determine vulnerability to detection by hostile satellites and opportunities for coverage by friendly satellites. The location and field of view of the satellites are displayed and updated on the System Chart. Ground trace projection over time can also be displayed for a selected time interval. Also called SCTD.

Tactical Data Link -- A joint staff approved, standardized communication link suitable for transmission of digital information. Current practice is to characterize a tactical data link by its standardized message formats and transmission characteristics. Tactical data links interface two or more command and control or weapon systems via a single or multiple network architecture and multiple communication media for exchange of tactical information. Also called TDL.

Tactical Information Broadcast System -- A multi-user command and control data link. It provides a full duplex binary data path from up to 10 producers to as many as 240 full duplex broadcast recipients with query capability, and an unlimited number of receive-only nodes. The primary source of information carried on Tactical Information Broadcast System is RIVET JOINT. This circuit provides data on air intercepts, ground control intercept radar sites, target acquisition radars, and early warning radars. The broadcast can be received via satellite or line of sight. Data rates can be selected from 2.4, 4.8, 9.6, or 19.2 kbps. Tactical Information Broadcast System can be received by TIBS Interface Units (full duplex), TIBS Receive Units (half duplex), Commander's Tactical Terminal Hybrid Receive, and radio. Also called TIBS.

Tactical Reconnaissance Information and Exchange System -- A multi-user command and control data link. It is a UHF line-of-sight, time division multiple-access narrowband radio system that supports dissemination of Guardrail Common Sensor data from the Integrated Processing Facility, and up to four other producers, to as many as 100 battlefield users. Also called TRIXS.

tactical related applications (TRAP) Data Dissemination System -- Provides near-real-time contact data to a variety of Tactical Receive Equipment, Constant Source, and SUCCESS radio users. TRAP receives input from local and remote collection systems, converts the data to a binary format, encrypts, encodes, and provides it for transmission to a UHF communications satellite on a 2,400 bps circuit.

Theater Event System -- Provides theater ballistic missile warning on missile events. It consists of tactical data and reporting, the Joint

tactical ground station, and the space based infrared mission control station.

timeliness -- The acceptable age of the latest report of a track is determined based on the expected reporting frequency of the platform, unit, or facility. The following terms will be used to refer to the timeliness characteristics of common operational picture tracks and not overlays. As a standard reference, all terms unless otherwise indicated come from the accepted terminology found in reference e.

a. real time -- Timeliness of data or information delayed only by the time required for electronic transmission. This implies that there are no noticeable delays. Data is real-time when current active tracks show current location, updates occur immediately, and the only delay is that of electronic transmission.

b. near-real-time -- Data or information delayed by the time required for electronic transmission and automatic data processing. Data is older than real time due to data processing, but this does not impact the current planning cycle--no significant delays.

b. non-real time -- Data older than near real time that may impact the planning cycle; tracks should not be considered actual locations but last reported and “in the general vicinity.” The reason for delay may be technical or procedural. In general, non-real-time data may be considered “static” data.

track -- The graphic or alphanumeric representation of an object or point whose position or characteristics are collated from sensors or other data sources; or, a collated source of data items associated for the purpose of representing the position or characteristics of a specific object or point. A track is a single entity reported on the common operational picture such as an aircraft, ship, theater ballistic missile or emitter location. A track can also designate an aggregation of military personnel, weapon systems, vehicles, and support elements or any other operationally significant item.

track -- A series of related contacts displayed on a data display console or other display device. The actual path of an aircraft above or a ship on the surface of the Earth. The course is the path that is planned; the track is the path that is actually taken. (JP 1-02)

track correlation -- Correlating track information for identification purposes using all available data. (JP 1-02)

track management -- Defined set of procedures whereby the commander ensures accurate friendly and enemy unit and/or platform locations, and a dissemination procedure for filtering, combining, and passing that information to higher, adjacent, and subordinate commanders. (JP 1-02)

track coordinator -- The track coordinator is responsible for proper execution of the common operational picture fusion center, ensuring filters are properly set as directed by the track manager, performing the role of liaison between services and/or joint task force track managers to maintain filter requirements, monitoring system track totals, merging duplicate tracks to correlate and fuse data.

track and database management -- The act of entering, correlating, updating, fusing, deconflicting, and otherwise maintaining assigned tracks using existing automated tools or manual methods. Each command level has a different track database manager responsible for their associated information responsibilities.

unified action -- The synchronized application of all instruments of national and multinational power including the actions of nonmilitary organizations as well as military forces.

United States message text format -- Designed primarily for non-real-time exchange, US message text format (USMTF) is based on a character-oriented message format and is the standard for man-readable and machine-processable information exchange. The jointly agreed-upon USMTFs are the mandatory standard for record messages when communicating with the Joint Staff, combatant commands, and Service components. Tactical data links (TDLs), character-oriented and/or man-readable (USMTF messages), imagery standards, voice, and video will provide a timely, integrated, and coherent picture for joint commanders and their operational forces. Also called USMTF.

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