

United States Coast Guard



Standard Operating Procedures for the

Common Tactical and Common Operational Picture

Standard Operating Procedures

For The

Common Tactical Picture and Common Operational Picture

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Architecture

1. Purpose

The goal of this document is to develop general procedures for building and managing a Common Tactical Picture (CTP) and ultimately the Common Operational Picture (COP) to support the US Coast Guard in all mission areas. A timely and accurate COP provides the information necessary to establish and maintain maritime domain awareness (MDA). In the current state this Standard Operating Procedure (SOP) focuses on the development, maintenance, and dissemination of the classified track database to address the need for data standardization in support of the deployment of the Global Command and Control System to the Area, District, and Section Command Centers and the integration of unique track data sources into a single geographic representation of the operational situation. As additional data sources and systems are integrated into the COP this document will be updated to encompass the procedures for the use, maintenance, and dissemination of that information. It is envisioned that this SOP will act as a precursor to formal Coast Guard Command and Control Doctrine.

2. Overview

2.1 The Common Operational Picture

The Common Operational Picture (COP) is a display of relevant information shared by more than one command. The COP provides a

shared display of friendly, enemy/suspect, and neutral tracks on a map with applicable geographically referenced overlays and data enhancements. The COP contains a decision maker toolset fed by a distributed and exchanged track and object database(s). Each user can filter and contribute to these databases according to their area of responsibility or command role. The COP environment may include distributed data processing, data exchange, collaboration tools, and communications capabilities. The COP may include information relevant to the tactical and strategic level of command. This includes, but is not limited to, geographic information systems data, assets, activities and elements, planning data, readiness data, intelligence, reconnaissance and surveillance data, imagery, and environmental data. A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness.

2.2 The Common Tactical Picture

The CTP is an accurate and complete display of relevant tactical data that integrates tactical information from multiple sources. The CTP enables command and control (C2), MDA, and classification/identification of contacts, in support of the tactical elements of all mission areas. The CTP contributes to the Common Operational Picture (COP). The CTP is derived from sensor information and other sources and refers to the current depiction of the operating area for operations within a commander's AOR. It displays current, anticipated or projected, and planned disposition of contacts of interests, hostile, neutral, and friendly forces as they pertain to U.S. and multinational operations ranging from peacetime through crisis and war.

2.3 COP VS CTP

The CTP is the key to producing an effective COP. The CTP is built through various sensors and manual inputs from cutters and aircraft to support a Commander Task Unit (CTU) or District Commander in

accomplishing the goals of a specific mission, patrol, or operation. A CTP fuses data from organic sensors, data links (Link 11, OTCIXS) and other communications mediums and merges it with data available from the COP to produce a complete, timely, and accurate tactical picture. Units normally maintain the CTP to the limit of the unit's sphere of influence or to the limits of their organic sensors and are recipients of the broader COP which supplies the unit with MDA of adjacent operational areas. The COP is a collection of the available CTPs, which are fused and then merged with data from national sensors, intelligence information, and other communications and data providers to produce an overall depiction of a specific Area Of Responsibility (AOR).

2.4 Necessity of Standard Procedures

Standardized CTP/COP procedures provides for the rapid dissemination of information to different force or echelon levels. Data requirements and the standardization of data entry formats will facilitate this accurate situation reporting. Data standardization will compliment the correlation capabilities of the tactical data processor by allowing for automatic updating of information and will enable sites to tailor a CTP to meet their specific requirements through track controls and filters. Additionally, data standardization will enable operational commanders to make a rapid assessment of the tactical situation when responding to situations ranging from normal operation through crisis and surge operations. Paragraph 4.7 of this document provides specific guidance for information entered in or maintained in the CTP/COP. Adherence to standardized reporting requirements will ensure the accuracy and timeliness of the information contained in the COP.

2.5 The Value of a Common Operational Picture

A well-maintained COP will provide the decision maker with a near real-time source of information and is an enabler of Maritime Domain Awareness (MDA) by providing the Commander with the "right information, at the right time, to the right level." Specific advantages of a well maintained COP is the reduced degree of operational uncertainty and

reduced decision-making time. To take advantage of these elements the COP must become an integral part of the Command and Control process. It must be incorporated into everyday operations and exercises to ensure not only operator proficiency but also that decision makers are familiar with and understand how to manipulate and utilize the information and resources available through the COP.

2.6 Common Operational Picture Architecture

The Coast Guard's Common Operational Picture will be produced using a collaborative effort from all units equipped with a COE based system. Ashore nodes will utilize GCCS and employ the Common Operational Picture Synchronization Tools (CST); allowing all sites to be included in the building, editing, and dissemination of the COP. Controlling Nodes (TOP COPS), assigned at each Area Command Center, are ultimately charged with merging the data from all sources, including operational units and unclassified systems along with available information from national sensors and the classified intelligence provided by the Maritime Intelligence Fusion Centers (MIFC). Data from unclassified data sources such as Vessel Monitoring Systems (VMS), Vessel Traffic System (VTS) and Rescue 21 will be aggregated at a Track Management Server located at each of the Communication Area Master Stations using the CGDN+ communications pipeline, where it will be injected into the SIPRNET through a High Assurance Guard (HAG) for inclusion into the classified COP. Specific responsibilities for all echelons of command are outlined in paragraph 6 of this document.

2.7.1 Common Operational Picture Synchronization Tools (CST)

The Common Operational Picture Synchronization Tools (CST) supports commanders by providing an automated method of transferring and synchronizing data for a common operation picture across an area of responsibility. The flow of information over the CST network channel can be represented by an inverted tree diagram, in which the child node may itself be a parent of another node. A parent or master node provides data

to its child nodes. Likewise, child nodes may also provide data to their parent node, for further transmission to the other participating sites. Figure 2.7-1 shows the data flow of a track update from a child node to the other participating nodes on a WAN.

Figure 2.7-1 Data Flow in the COP Synch Architecture

In addition to receiving data from other participants (or nodes), each participating site can receive and process raw organic track data through other means such as satellite communications, data feeds, and manual entries, process the track information and distribute the results of track correlation and fusion throughout the CST network. Each child node can transmit data to only one parent node. In contrast a parent or master node can transmit data to up to five nodes. Upon start-up, the parent nodes

begin sending SITREP messages to child nodes. These messages, which contain the most current track data, enable the child node to have the same track picture as the other nodes on the CST network. CST can also handle low-bandwidth network connections allowing a participating node that does not have a high data rate connection to still reliably receive data.

3. Display and Communications.

3.1 Common Operating Environment Compliant Systems

Workstations and systems used to display the COP/CTP must be Common Operating Environment (COE) based. Within the Coast Guard there are numerous systems in operation for injecting and displaying tactical and operational data. The ashore infrastructure will use the Global Command and Control System (J), the Maritime Intelligence Fusion Centers (MIFC) will use the Global Command and Control System (I3), Afloat units (378's, 270's, and 210's) use the Shipboard Command and Control System (SCCS), and airborne systems including the OASIS suite as well as the C-130 Airborne Sensor with Electronic Palletized Electronic Reconnaissance (CASPER) are COE based. Additionally applications such as the Enhanced Linked Visual Information System (ELVIS I & II) and Command and Control for the Personal Computer (C2PC) as well other as PC based client applications allow for CTP/COP viewing and limited interaction.

3.3 Communications

The primary method of disseminating COP data is through the Secret Internet Protocol Router Network (SIPRNET). All ashore GCCS sites are connected to SIPRNET allowing secure communication and data flows throughout the Coast Guard. Afloat units use the Officer in Tactical Command Information Exchange Subsystem (OTCIXS) to relay their information via Over the Horizon (OTH)-Gold formatted messages. SIPRNET/OTCIXS Gateways located at CAMSPAC, JIATF-East and COMPACFLT receive these reports and forward them on to their intended

recipient. An installation is planned for CAMSLANT, which will allow the Coast Guard to fully support itself in this process. In the event of an exercise or contingency operations a special point-to-point communications (MDX) channel will be established between reporting sites and command sites to facilitate the flow of vital information.

4. Data Management

4.1 Data Ownership

The CTP/COP applications use distributed rather than centralized, information flows. Specific sites are assigned to be responsible for collecting specific source information, performing the database management functionality on the data, and finally disseminating the information product. Assignments will be based upon a combination of AOR characteristics, data source, sensor, track category, and tactical or strategic need for the data. Sites entering information collected through organic sensors are by default responsible for the integrity of that information.

4.2 Track Management

Database Management involves three distinct functions. Actions must be taken to correlate incoming contact reports that are not automatically correlated upon entry into the Tactical Data Processor (TDP). Reports are manually entered for own-unit contacts and reports received by means that are not automatically entered into the TDP. Finally track maintenance must be performed by entering supplemental attribute data for tracks; and by verifying and updating track histories by merging dual tracks, separating wrongly merged tracks, and deleting tracks or track history points.

4.3 Correlation Nodes

Every site with a Track Data Processor (TDP) and the prerequisite communication equipment can be considered a correlation node.

Correlation nodes receive track data from organic, dedicated, and non-organic sensors, and receive contact reports from other correlation nodes. The correlation node will fuse and correlate the data received and produce a comprehensive, coherent tactical picture. The process of maintaining the tactical picture is referred to as Database Management.

4.4 Data Entry Responsibility

Units who receive contact information by any means are responsible for entering it into the COP. Track information may be entered automatically through an interface channel, in which case the operator is only required to ensure the data integrity and validity of the information. Information received by means that are not automatically entered into the COP (i.e. voice reports) must be manually entered. Per refs (d) and (e), OTCIXS equipped units underway are required to report their position and those of non-OTCIXS equipped units in company to the Blue Force Locator SID on a frequency of not less than 15 minutes and not to exceed 2 hours.

4.5 Track Data

A track appears as a symbol that represents an object (such as a ship, land unit, or aircraft) and is plotted on a map background for a tactical display. A single report for a track is called a contact; a track may be made up of numerous contact reports from a variety of sensors. The position on the display reflects information contained in the tracks most recent contact report. Normally track information received by the COP is automatically updated through the correlation processor. A contact report received with incorrect information, attribute data that differs from the parent, or a position report that is deemed not motion feasible by the correlator will be assigned to the ambiguity file for operator correlation.

4.5.1 Track Correlation and Fusion

Correlation is the automated or manual process of assessing a given contact report to determine if the contact can be associated with an existing track, contains sufficient information to become a new track, or should be discarded.

Fusion is the process of integrating contact reports from multiple sources into a single track. Refs (g) and (h) provide specific information on the procedures and techniques for performing correlation and fusion.

4.6 Amplifying Information

The COP consists of more than track data. Operators should use available tactical decision aids, such as overlays, track groups, PIM tracks, site controls and plot controls, to highlight high interest data and make this information easily accessible to the operational commanders.

4.6.1 Overlays

Information such as patrol areas, security zones, and other vital areas should be entered and displayed as an aid to assist the operational commander in maintaining situational awareness. Additionally geo-spatial information such as significant weather fronts, which may impair normal operations, should be displayed as much as feasible.

4.6.2 Track Groups

Track groups should be established for high interest or suspect vessels, highlighting them in a unique color to aid in recognition. This will enable the decision maker to rapidly assess the situation aiding in establishing Maritime Domain Awareness.

4.6.3 Position of Intended Movement (PIM) Tracks

Position of Intended Movement (PIM) tracks should be entered for vessels not capable of making position reports. This will allow operators to determine an estimated position for the subject vessel. Additionally, establishing a PIM track from an available merchant vessel's sail plan or arrival reports will aid in recognizing a deviation from track and allow for this information to be acted on.

4.6.4 Plot Controls

Operators should use plot control functions to tailor the information

displayed on the COP in order to provide the operational commander with a clear and accurate picture that enables situation awareness and assists in accomplishing mission goals.

4.6.5 Geographic and Message Filters

Judicious use of Geographic and Message filtering should be used to control data flows into the system. Operators should identify the geographic boundaries of their AOR and exclude extraneous information. Unneeded data types should also be excluded from the database. This will aid in producing the best possible product by allowing them to concentrate on information vital to their area or operation.

4.7 Data Entry Standards

A coherent COP begins with operators practicing strict discipline with regards to data entry. In view of the fact that the station entering the track information is responsible for the accuracy of that information it behooves the operator and supervisors to ensure that data integrity is adhered to when completing the associated track data fields. To be considered for entry in to the COP the information must consist of a minimum of three data elements, which are; position (Latitude and Longitude, Geo Coordinates, Line of bearing, or an Area of Probability), time of event, and a track name or identifier. The following paragraph provides input guidance for fields that commonly contain errors. This information is general in nature and is meant to supplement not replace information contained in operational guidance such as the World Wide OPTASK FOTC.

4.7.1 Track Name

Name spelling of naval units and Coast Guard units will be in accordance with the Standard Attribute Relationship (STAR) Manual; name spelling of merchant vessels will be in accordance with the Merchant Marine Identification Guide, World. Actual ship name will be used for live training tracks (i.e. RUSH simulating a Go-Fast is RUSH, not Go-Fast or XGo-Fast). For synthetic simulated training track, an X is placed ahead of ship

names for all tracks, (i.e. XRUSH, XGO FAST). In situations where the name of the contact is not known the following conventions will be used to populate the track name field.

4.7.1.2 Unknown Link 11 Tracks. Formatted SSLNNNN where:

SS = Reporting units source code
 L = Identifies the information source as Link 11
 NNNN = Link 11 track number of the contact.
 (Example CGL7002)

4.7.1.3 Non-Link 11 Maritime Contacts: Formatted SSTTTNN where:

SS = Reporting units source code
 TTTT = Contact platform code from table 4-1
 NN = Reporting units contact serial number
 (Example: RUFSH02)

4.7.1.4 Unequated ELINT Reports: Formatted SSTTTTNN where:

SS = Reporting units source code
 TTTT = ELINT Notation (Insert notation here, actual codes are classified)
 NN = Reporting units contact serial number

Platform Type	Designator Code	Platform Type	Designator Code
Bulk Cargo	BLK	Small Vessel (<100 ft)	SML
Dry Cargo, Break Bulk	CGO	Space Event Support	SPA
Factory	FAC	Service Craft	SVC
Icebreaker	ICE	Liquid Cargo	TKR
Miscellaneous	MIS	Training	TRN
Passenger	PAX	Tug	TUG
Pleasure Craft	PLS	Fishing Cargo	CGF
Refrigerator	REF	Fish Catcher	FSH
Research	RES	Unknown Merchant	MER

River-Sea	RIV	Unknown Naval	NAV
Sail Powered	SAL	Unknown	UNK

Table 4-1 Platform Type Codes

4.7.1.4 Unequated Vessel Traffic System (VTS) Reports: Formatted SSVTSTTTTNN where:

- SS = Reporting units source code
- HG = Houston Galveston
 - HR = Hampton Roads (Joint Harbor Operations Center)
 - NY = New York
 - PS = Puget Sound
 - SF = San Francisco
- TTTT = Contact platform code from table 4-1
- NN = Reporting units contact serial number
(Example: SFVTSUNK02)

4.7.2 Class

Enter exact class of ship. Class is UNEQUATED if not known. If track is a live training or simulated training track use an X in front of the simulated class.

4.7.3 Trademark

This field is only used for a subsurface prosecution. **Do not enter data in this field for any other reason.**

4.7.4 Alert

The alert data field signifies tactical interest in the contact being reported. Units must update the ALERT field for Suspect vessels cleared after a visual inspection or boarding. The definitions of the entries are classified but can be found in the World Wide OPTASK FOTC and World Wide OPTASK SUW and maybe supplemented by specific directives governing

operations or evolutions.

4.7.5 Flag

Enter the two-character country code. These codes are available in the pull down menu and Appendix E of ref (j). For live and simulated exercise tracks the following flag codes will be used; XX for simulated hostile, YY for simulated friendly, and ZZ for simulated neutral.

4.7.6 Ship Type and Hull Number

Entered for all military contacts. Live training tracks will use actual ship type and hull numbers. This information is available from numerous sources including Jane's Fighting Ships, SIPRNET sites, and the STAR Manual.

4.7.7 PIF

Enter U.S. Mode II assignments from the appropriate Fleet Commanders quarterly Mode II Assignment Message. NATO PIF Codes are also acceptable entries for this field.

4.7.8 SCRONUM

ONI developed unique identifier for maritime contact information. This data is contained in the Standard Attribute Relationship (STAR) Manual and the Merchant Marine Identification Guide, World. Should be entered when available.

5. COP Data Time Value

The information that the COP displays is time sensitive. The approved Joint definitions of real-time, near real-time, and that of historical and predictive serve to provide a commander a feel for the information value. Delays due to processing, slow communications networks, and any other transparent delays can further degrade and add confusion to the situational awareness. It is imperative for track managers and operators to

know the time value of the data being displayed on the CTP/COP and communicate this to the commander. Commanders should remain aware of the time value of the COP information and use it appropriately.

5.1 Time-late Limitation on Tracks

The successful employment of a CTP/COP as a Command and Control tool relies upon the relevance and accuracy of the information provided. Invalid or erroneous track information undermines the reliability and diminishes the system's utility. One of the key factors in maintaining a concise operational picture is to remove old data from the system. The maintainers of all tactical track databases should practice track deletion at least once an hour if possible and not less than every six hours. Track Managers should search their database to identify tracks whose data age is excessive and remove them unless there is some overriding reason for maintaining them in their databases. In accordance with refs F and G, the following time-late deletion criterion is established.

Category	Time Late (Hours)
Naval Surface (DoD and CG)	72
Non Naval Surface (1 report)	24
Non Naval Surface	48
Subsurface	96
Non Organic Air	6
Organic Air	RTB
Land	48
Unknown or Uncorrelated	6

Table 5-1

In addition to the above criteria any surface or subsurface contact at landfall will be deleted from the track database. Many planning cells maintain tracks that are in port using a sensor code of BMIP or INPORT,

these tracks will be deleted to reduce clutter on the COP.

6. Roles and Responsibilities

6.1 Commandant Office of Command and Control Architecture (G-OCC)

Commandant Office of Command and Control Architecture (G-OCC) ensures that Common Operational Picture reporting requirements are met in accordance with CJCSI 3151.01, Global Command and Control System Common Operational Picture Reporting Requirements. They will ensure that COP reporting meets the mission needs of the Commandant as well as supported Unified Commanders in Chief. Additionally G-OCC is responsible for establishing systems architecture that will facilitate an accurate and timely dissemination of the COP and insuring an uninterrupted flow of source information is available for inclusion in the CG COP.

Other responsibilities are as follows:

6.1.1 Designate Fusion Centers

6.1.2 Advises the Unified Commanders of any additional resources required to support data collection and distribution of COP

6.1.3 Establish Standard Operating Procedures for developing, maintaining, and disseminating the COP.

6.1.4 Initiate Memorandums of Agreements (MOA) or Memorandums of Understanding (MOU) with data providers outside of the Coast Guard to ensure an uninterrupted data flow.

6.1.5 Coordinate with G-SCE to define a common foundation for the development of Command and Control Systems

6.1.6 Coordinate with other programs, commands, and agencies to integrate data collections systems, navigation systems, information databases, and other application into a single COP.

6.2 Coast Guard Command Center (CGCC)

The Coast Guard Command Center located at Coast Guard Headquarters is designated as the Coast Guard's Common Operational Picture Manager. They will operate outside of the COP SYNCH Architecture to allow them the freedom to interact with all participating nodes and outside agencies. The CGCC will receive resolved data feeds from the Area Commanders and fuse them into a single overall Coast Guard COP. They are overall responsible for the content and completeness of the Coast Guard COP. Furthermore, they are responsible for the dissemination of the data contained in the Coast Guard COP to NORTHCOM and other Joint Commanders as well as other government agencies and coalition partners as required.

Other responsibilities include:

6.2.1 Define the Commandant's Critical Information Requirements for the Operational and Tactical Commanders.

6.2.2 Provide the Commandant and staff with a coherent and timely COP tailored to meet their needs during a crisis, exercise, or operation.

6.2.3 Maintain MDA from the strategic perspective over the data provided in the COP in order to assist the Commandant and staff in the evaluation of the information

6.2.4 Provide the maritime component for inclusion in the Commander Northern Commands Common Operational Picture in support of the Homeland Defense (HLD) mission

6.2.5 Share COP information with allied nations as necessary to support bi-lateral operations

6.2.6 Observe Coast Guard and National Policy regarding the dissemination of classified information

6.2.7 Communicate to the Area Commander's COP Manager any additional data needs, changes to the Commandant's Critical Information Requirements (CCIRs), increased reporting interval requirements, areas of interest, and other information priorities.

6.2.8 Review and provide quality assurance checks on the COP information supplied by the Area Commander's COP Manager. Coordinate with the Area Command Centers to correct data inconsistencies and/or inaccuracies. Ensure all information meets the requirement outlined in this document.

6.2.9 Resolve data conflicts in the information that overlaps the geographical boundaries of the Area Commanders. This includes, but is not limited to, information received on units conducting Counter Drug operations in the Caribbean, which may be included in both databases.

6.2.10 Respond to requests for data from outside agencies. Coordinate with G-OCC to establish Memorandums of Understanding between the Coast Guard and data customers to ensure the information exchange requirements and capabilities are understood and accepted by all parties.

6.3 Area Command Centers

The Area Command Centers are overall responsible for the production and management of the Coast Guard's Common Operational Picture within their AOR. The Area Command Center manages the COP by fusing

the multiple CTPs, conducting systems checks, completing data validation, performing correlation and merging, conducting oversight of the operational missions, as well as monitoring operation notes (OPNOTES), and coordinating with the other track managers.

Other responsibilities include:

6.3.1 Provide the Area Commander and staff with a coherent timely COP tailored to meet their needs during a crisis, exercise, or operation.

6.3.2 Maintain MDA from the operational perspective over the data provided in the COP in order to assist the Area Commander and staff in the evaluation of the information

6.3.3 Establish priorities for information

6.3.4 Assign CTP responsibilities

6.3.5 Develop the appropriate filters and maintain data sharing requirements.

6.3.6 Establish and maintain the appropriate communication channels required to maintain data sharing requirements.

6.3.7 Maintain the COP at the appropriate level of detail as specified by the Commandant and the Area Commander

6.3.8 Work with the Command Systems Administrator to resolve system and network problems.

6.3.9 Assist CTP Managers and other track managers.

6.3.10 Monitor track inputs and provide corrective action to units violating data integrity standards.

6.3.11 Fuse and correlate data from disparate sources to produce one single integrated picture.

6.3.12 Monitor COP reporting by subordinate commands to ensure it is meeting the needs of the Coast Guard Command Center, Area Commanders Staff and is meeting the goals established for MDA, data standards, and timeliness established by this document.

6.3.13 Define the Critical Contacts of Interest (CCOI) and Contacts of Interest (COI) and reporting requirements for Tactical Commanders.

6.3.14 Provide recommended changes to the Commandant's Critical Information Requirements.

6.4 Maritime Intelligence Fusion Center (MIFC)

The MIFC will operate as a “child node” and provide enhancements to the COP by injecting intelligence source data (up to SECRET) into the tactical picture. These enhancements may be in the form of track injections or information amplifications to established track data.

Other responsibilities include:

6.4.1 Maintain the Common Intelligence Picture (CIP) and compare it to the Common Operational Picture to ensure that all applicable intelligence information has been included in the COP.

6.4.2 Provide cueing to Operational and Tactical Commanders on COIs and CCOIs as defined by current operations and threat condition.

6.5 District Command Centers

District Command Centers are equipped with GCCS, which will operate as a child node in their respective Area Commanders CST architecture. District Command Centers are responsible for reviewing the information provided by the Top Cop for completeness and accuracy and providing feedback to the Area Command Center. District Command Centers are also responsible for conducting oversight of the operational missions, monitoring operation notes (OPNOTES), and coordinating with the other track managers.

Other responsibilities include:

6.5.1 Provide the District Commander and his staff with a coherent and timely COP tailored to meet their needs during a crisis, exercise, or operation.

6.5.2 Maintain MDA from the operational perspective over the data provided in the COP in order to assist the District Commander and staff in the evaluation of the information.

6.5.3 Coordinate with the Area Command Center any situation that would required increased focus or reporting interval for a specific track or area of interest due to an ongoing evolution, exercise, or operation.

6.5.4 Communicate with the Area Command Center any need to designate a specific track as a suspect track or a high interest track. Coordinate any increase in surveillance and reporting requirements to counter an expected threat.

6.5.5 Inject locally developed information into the COP for inclusion in the overall picture.

6.5.6 Assist the Area Command Center in the resolution of ambiguous data contained within their AOR.

6.5.7 Monitor COP reporting by subordinate commands to ensure it is meeting the needs of the Coast Guard Command Center and Area Command Center. Ensure information achieves the goals established for MDA, data standards, and timeliness established by this document.

6.5.8 Monitor communication networks and channels vital to the exchange of COP data to ensure uninterrupted connectivity is maintained. Notify the appropriate Area Command Center prior to any planned interruption or in the event of a casualty.

6.5.9 Establish information priorities for subordinate units.

6.5.10 Assist subordinate units in the inclusion of information into the COP.

6.5.11 Further define the CCIRs, CCOIs/COIs, and reporting requirements to subordinate commanders in support of developing and managing the CTP.

6.5.12 Provide recommended changes to the Commandant's Critical Information Requirements

6.6 Cutters, Boats, and Aircraft

Cutters and boats underway and airborne aircraft offer the best source of near real-time track data as well as amplifying information, such as identification, for existing data. All units, regardless of their primary mission, carry an inherent secondary mission of surveillance and reporting. SCCS equipped cutters and CASPER or OASIS equipped aircraft should enter their information directly into the COP through the

appropriate system and transmit that data to Command Center of the Area or District exercising tactical control. Units that are not equipped with a means for electronic reporting should make voice reports of high interest information to their tactical commander for inclusion in the COP.

Other responsibilities include:

6.6.1 OTCIXS equipped platforms will report their position and that of non-OTCIXS equipped platforms in company or in contact to the Blue Force Locator at an interval not to exceed two hours. If units are operating in the Force Over-the-Horizon Targeting Coordinator (FOTC) mode the unit acting as FOTC will report for all participating units.

6.6.2 Enter information gained through organic or dedicated sensors and data links into the CTP for inclusion in the overall picture.

6.6.3 Assist in the identification and classification of existing data contained in the CTP.

Appendix I – References

- A) CJCSI 3151.01 Global Command and Control System Common Operational Picture Reporting Requirements
- B) CJCSI 6721.01A Global Command and Control System Management Structure
- C) CJCSI 6722.02 Global Command and Control System Operational Framework

- D) CINCPACFLT Standard Operating Procedures (SOP) for PAC-
240400z Oct 01 IO OTCIXS and TADIXS Subscribers
- E) CINCLANTFLT Standard Operating Procedures (SOP) for
271711z Oct 00 LANT/MED/CONUS OTCIXS
- F) NWP- 3.20.1 Afloat OTH-T and Surveillance
- G) COMSECONDFLT World Wide OPTASK Force Over the Horizon
300235z Jan 99 Targeting Coordinator (FOTC).
- H) COMSECONDFLT World Wide OPTASK SUW
291300z Jan 99
- I) Global Command and Control System (GCCS)
Common Operational Picture (COP) Handbook.
- J) Unified Build User Manual

Appendix II – Terms and Definitions (Generally taken from Joint Pub 1-02)

Architecture: A framework or structure that portrays relationships among all elements of a subject force, system, or activity.

Area of Operation (AO): An operational area defined by a force commander for land and maritime forces. Areas of operation do not typically encompass the entire operational area of the commander, but should be sufficiently large enough for the component force to accomplish their mission.

Area of Responsibility (AOR): The geographical area associated with a command within which the commander has the authority to plan and

conduct operations.

Command and Control (C2): The exercise of authority and direction by a properly designated commander over assigned and attached forces in accomplishment of a mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by the commander in planning, directing, coordinating, and controlling forces in the accomplishment of the mission.

Command and Control System: The facilities, equipment, communications, procedures, and personnel essential to a commander for planning, directing, and controlling operations of assigned forces and operations in the accomplishment of the mission.

Command, Control, Communications, Computers, and Intelligence (C4I): The integrated systems of doctrine, procedures, facilities, personnel, equipment, organizational structures, and communications designed to support a commanders exercise of command and control across a range of operations. The systems that are the information exchange and decision support subsystems within the forces command and control system. The support systems include intelligence information gathering and intelligence.

Commandant's Critical Information Requirements (CCIRs):

The minimum information that provides the Commandant with MDA. Defines specific, detailed information to report, how often to report, and what format to report it in. This CCIR is tailored by each subordinate command to provide for a more detailed MDA from the strategic to tactical level of operations.

Common Operating Environment (COE): Provides a familiar look, touch, sound, and feel to the commander, no matter where the

commander is deployed. Information presentation and command, control, communications, computers, and intelligence system interfaces are maintained consistently from platform to platform, enabling the commander to focus attention to the crises at hand.

Common Operations Picture Correlation Site (CCS): 1. The site designated by the Commandant where all data in the COP is received, correlated, managed, and disseminated by the Common Operational Picture Manager.

2. Any site with a track data processor and the prerequisite communication equipment to receive, process, and disseminate COP data.

Common Operational Picture (COP): The Common Operational Picture (COP) is a display of relevant information shared by more than one command. The COP provides a shared display of friendly, enemy/suspect, and neutral tracks on a map with applicable geographically referenced overlays and data enhancements. The COP contains a decision maker toolset fed by a distributed and exchanged track and object database(s). Each user can filter and contribute to these databases according to their area of responsibility or command role. The COP environment may include distributed data processing, data exchange, collaboration tools, and communications capabilities. The COP may include information relevant to the tactical and strategic level of command. This includes, but is not limited to, geographic information systems data, assets, activities and elements, planning data, readiness data, intelligence, reconnaissance and surveillance data, imagery, and environmental data. A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness.

Common Tactical Picture (CTP): An accurate and complete display of relevant tactical data that integrates tactical information from multiple

sources. The CTP enables C2, situational awareness (SA), and classification/identification of contacts, as well as supporting the tactical elements of all mission areas. The CTP contributes to the common operational picture (COP). The CTP is derived from sensor information and other sources and refers to the current depiction of the operating area for a single operation within a commander's AOR including current, anticipated or projected, and planned disposition of contacts of interests, hostile, neutral, and friendly forces as they pertain to U.S. 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. Note: The term Common Relevant Operational Picture (CROP) is similar to that of CTP.

Common Tactical Dataset (CTD): The Area Commander's information bank that the CTPs and the COP are built from. The CTD contains information gathered from all Area CTPs, schedules, intelligence, and other amplifying data that contributes, to the CTPs and the COP. From this information the Area Commanders provides a COP, available to all National Military Command Center (NMCC), the Unified Commanders in Chiefs (CINCs), the Commandant of the Coast Guard, and other government agencies (OGA) in accordance with JCSI 3151.01, Common Operational Reporting Requirements. The CTD is a logical database with information residing a various nodes and is managed at the Area COP Fusion Centers.

Correlation: **1.** Matching display information with the actual contact it represents. **2.** The process, which associates and combines data on a single entity from independent sources, in order to improve the reliability or credibility of the information.

Fusion: 1. Combining of automatically correlated information with the data that refines the information or presents it in intuitive format. Fused data in many cases will arrive later than real or near-real time data. **2.** The process of examining all sources of intelligence and information to derive a complete assessment of an activity.

Fusion Center: A physical location to accomplish fusion. Normally has sufficient automated processing capabilities to assist in the process.

Global Command and Control System: Highly mobile, deployable command and control systems supporting forces for joint and multinational operations across the range of operations, any time and any where in the world with compatible, interoperable, and integrated command, control, communications, computer, and intelligence systems.

Near Real Time: Pertaining to the timeliness of data or information, which has been delayed by the time required for electronic communications *and automatic data processing*. This implies that there are no significant delays.

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 might be technical (equipment inoperable), procedural (a reporting interval), or operational (no active sensor in contact to supply information).

Real Time: Pertaining to the timeliness of data or information, which has been delayed by the time required for electronic communications.

Appendix III – Acronyms

A

ADNET	Anti Drug Network
AO	Area of Operations
AOR	Area of Responsibility
AOU	Area of Uncertainty

B

BCST	Broadcast
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C

C2PC	Command and Control for the
Personal Computer	
CCM	Commandant COP Manager
CCS	COP Correlation Site
CENTCOM	Central Command
CINC	Commander in Chief
CINCLANTFLT	Commander in Chief Atlantic Fleet
CINCPACFLT	Commander in Chief Pacific Fleet
CJCS	Chairman Joint Chiefs of Staff
CJTF	Combined Joint Task Force
COE	Common Operating Environment
COP	Common Operational Picture
CST	COP Synchronization Tools
CTD	Common Tactical Dataset
CTP	Common Tactical Picture
CTPM	Common Tactical Picture Manager

D

DII	Defense Information Infrastructure
DLRP	Data Link Reference Point

E

ELVIS	Enhanced Linked Visual Information
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System

F

FOTC
Coordinator Force over the Horizon Track

G

GCCS Global Command and Control System
GCCS-A Global Command and Control System-
Army
GCCS-AF Global Command and Control System-
Air Force
GCCS-J Global Command and Control System-
Joint
GCCS-M Global Command and Control System-
Maritime
GMT Greenwich Mean Time
GSORTS Global Status of Resources and
Training System

I

ICP Incident Command Post
IMT Incident Management Team

J

JIATF Joint Interagency Task Force
JIC Joint Intelligence Centers
JMCIS Joint Maritime Command Information
Systems
JOIC Joint Operations Intelligence Center
JOTS Joint Operational Tactical System

M

MDA Maritime Domain Awareness

MDX Message Data Exchange
MIC Maritime Intelligence Center

N

NMCC National Military Command Center
NTDS Naval Tactical Data System

O

OPNOTE Operational Note
OTCIXS Officer in Tactical Command
Information Exchange Subsystem
OTH Over the Horizon
OTH-G Over the Horizon – Gold

P

PIM Position of Intended Movement

S

SIPRNET Secret Internet Router Protocol
Network
SCCS Shipboard Command and Control
System
SA Systems Administrator

T

TM Track Manager
TMIC Theater Maritime Intelligence Center
TOR Time of Receipt