PANAMAX 24

(OPERATION FUTURO NOBLE)

U.S. ARMY SOUTH TRANSITION TO A MULTINATIONAL FORCE HEADQUARTERS

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Center for Army Lessons Learned

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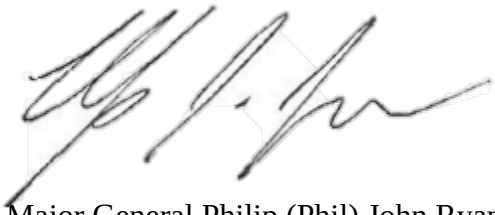
FOREWORD

I would like to thank and commend all of the U.S. units and partner nation (PN) forces who came to Fort Sam Houston, Texas to participate in Exercise PANAMAX 24 (OPERATION FUTURO NOBLE) from 5-15 August 2024. PANAMAX began in 2003 and is U.S. Army South's largest multinational, biennial command post exercise. This year, 11 of our PNs including Argentina, Belize, Brazil, Chile, Colombia, Ecuador, Honduras, Jamaica, Mexico, Paraguay, and Peru formed and trained together as part of Multinational Force South headquarters. All of us with a common goal of improving readiness and interoperability. This exercise tested our abilities to plan and conduct stability, security, and multi-domain operations to enhance the long-term security of the Panama Canal and its approaches.

Transitioning from a theater army to a multinational force headquarters is complex, deliberate, and challenging. It requires understanding collaboration between nations, sometimes thinking outside the box, and just a lot of hard work to be successful. During PANAMAX 24, multiple PNs led functional component commands in combined and joint operations. Coming together as one team, our training together provided numerous opportunities to build relationships and to share capabilities, techniques, and technologies. Combining these we are better able to confront common threats and challenges in the U.S. Southern Command area of responsibility.

I believe the lessons and best practices gained from PANAMAX 24 will help shape our security strategy going forward and increase interoperability. The personal and professional relationships established at this exercise will support our future endeavors. My thanks to those who contributed to this document. Your insights and input, along with your candor, made this publication possible.

Defense and Fraternity!



Major General Philip (Phil) John Ryan
Commanding General, U.S. Army South

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INTRODUCTION

Paul K. (Keith) Warman, Center for Army Lessons Learned (CALL)
Military Analyst Forward (MAF) at U.S. Army South

This publication reveals how U.S. Army South (ARSOUTH) planned for PANAMAX 24 (PMX24), how they transitioned to a multinational force headquarters, *Multinational Force South (MNFS)*, and presents both the successes and challenges while conducting OPERATION FUTURO NOBLE to secure the Panama Canal. The chapters contain input from ARSOUTH Directorates and Special Staff, with lessons and best practices from across the warfighting functions (WfFs). In addition, towards the end of the publication, there are multiple U.S. and partner nation (PN) key leader interviews. Because of the experience level of those interviewed, responses to questions are both forthright and precise on issues. What is shared not only benefits this command but has applicability for other units preparing for a similar mission set.

To enable the reader to better understand what the exercise is all about, we will begin with a quick background on this exercise series. PANAMAX is a U.S. Southern Command (SOUTHCOM) Tier 1 sponsored multinational, biennial exercise that started in 2003 with initial participants being Chile, Panama, and the United States. Since its inception, it has evolved to become the region's largest coalition command post exercise (CPX).

At PMX24, "More than 1,500 U.S. forces -- including staff elements from SOUTHCOM, ARSOUTH, U.S. Marine Forces South, Special Operations Command South, 12th Air Force (Air Forces Southern), and U.S. Naval Forces Southern Command/U.S. 4th Fleet and other joint force enablers, along with 500 participants from 18 partner nations -- are participating in PANAMAX 2024 at various U.S. locations to include Florida, Texas, Virginia, and Arizona."[1]

MNFS established its headquarters at Training Area 10 (TA10) on Joint Base San Antonio-Fort Sam Houston, Texas. Twelve of the PNs sent military forces to Texas including Argentina, Belize, Brazil, Chile, Colombia, Ecuador, Honduras, Jamaica, Mexico, Panama, Paraguay, and Peru. PN participants were assigned to positions in either MNFS, or the Combined Forces Land Component Command (CFLCC), based off a mutually agreed to Joint Manning Document (JMD).

Exercise focus is on the long-term security of the Panama Canal and its approaches under the auspices of a United Nations Security Council Resolution (UNSCR). This tested the multinational force's ability to plan, coordinate, and conduct multi-domain operations (MDO) to counter a variety of scenario threats. Operations in the information domain were of particular exercise emphasis. PMX24 goal was to provide realistic training for all participants to increase security cooperation, achieve shared goals, and lay the foundation for lasting integrated deterrence across the region.

There was a clear intent to improve interoperability in order to fight as a unified force. Exercise design drove this intent from the lowest to highest level of interaction. PN senior leaders were identified and selected in advance to assume critical positions in the MNFS headquarters to drive

multinational collaboration. The command post was led by Major General Phil Ryan, MNFS Commander and Command Sergeant Major Ronald J. Graves, and MNFS Command Sergeant Major. Other general officers include Brigadier General Monie R. Ulis, Deputy Commanding General-MNFS; Major General Victor Manuel Munoz Curto (Peruvian Air Force), Deputy Commanding General-Operations (DCG-O); Brigadier General Terry L. Grisham, Deputy Command General-Sustainment (DCG-S); and Brigadier General Marco A. Marin Saldana (Peruvian Army and currently assigned at ARSOUTH), Deputy Commanding General-Interoperability (DCG-I). Of note, Major General Valdivia Mendez (Chilean Army) was selected to be the CFLCC Commander whose headquarters was also located at Fort Sam Houston.

Additionally, Argentina led the Combined Force Air Component Command (CFACC), Brazil the Combined Force Maritime Component Command (CFMCC), and Colombia the Combined Force Special Operations Component Command (CFSOCC). A team of teams! As the MNFS Commander stated, "In the future, if there is a conflict in the Southern Command area of operations, we are all there. We've already met. We are able to plug into each other and work together."[2]

[1] U.S. Southern Command, U.S. Army South Public Affairs, Exercise PANAMAX 2024: U.S. Army South hosts 11 nations for major multinational exercise, Exercise PANAMAX 2024: US Army South hosts 11 nations for major multinational exercise > U.S. Southern Command > News, 13 August 2024.
[2] Ibid.

CHAPTER 1

Security Cooperation

MAJ Stephen J. Karr, Political-Military Desk Officer
Security Cooperation Division, U.S. Army South

> The commander's ability to build a cohesive team drives the foundation of successful multinational operations. The commander must consider the political objective, mission, patience, sensitivity to the needs of other force members, a willingness to compromise or coming to a consensus when necessary, and mutual confidence. This mutual confidence stems from tangible actions and entities and intangible human factors. The commander builds team relationships in multinational operations while developing mutual rapport and respect. The intangible considerations that guide the actions of all participants, especially the senior commander are- rapport, respect, knowledge of partners, team building, patience, trust, and shared understanding. If a commander or staff ignores these considerations, mutual confidence weakens and multination operations risk failure.[3]
>
> FM 3-16, The Army in Multinational Operations, page 3
> 15 July 2024

INTRODUCTION

Troop-contributing nations from the Caribbean, Central America, and South America sent their very best from across their Army, Navy, and Air Force to participate in this year's PANAMAX 24 (PMX24) exercise. The exercise's scenario to secure and stabilize the Panama Canal and its approaches provided an opportunity for the Multinational Force South (MNFS) to integrate and train together with components and partner nation (PN) forces in a common defense. The 12 PNs were positioned in key command and staff positions in the MNFS and CFLCC headquarters. The countries, number of personnel, and headquarters location are below. (See Figure 1-1)

The exercise met many training objectives and witnessed countless successes at the operational level. The challenges experienced offer valuable insights and lessons to improve future iterations of PMX and make it an even better exercise.

[3] FM 3-16, The Army in Multinational Operations, page 3, 15 July 2024
https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN41419-FM_3-16-000-WEB-2.pdf

Country	CFLCC	MNFS	Total
ARGENTINA	5	9	14
BELIZE	3	4	7
BRAZIL	4	10	14
CHILE	3	3	6
COLOMBIA	6	11	17
ECUADOR	22	17	39
HONDURAS	3		3
JAMAICA	2	2	4
MEXICO	3		3
PANAMA		1	1
PARAGUAY	2		2
PERU	31	32	63
Total	**84**	**89**	**173**

Figure 1-1. PN participants in the CFLCC and MNFS at PMX24
(Chart courtesy of Security Cooperation Division, U.S. Army South)

STRENGTHENING PARTNERSHIPS

The PMX exercise is ideal for building and reinforcing military partnerships across the Americas. The U.S. and PN forces worked together from the early planning phases through execution. This close collaboration strengthened relationships and increased the knowledge and skills of all participants.

COMBINED FORCE LAND COMPONENT COMMAND

Chile's leadership commanding the CFLCC demonstrated their ability to plan and conduct operations in a multinational environment. PNs benefit from leadership roles during PMX and should continue to be designated in leadership positions on the CFLCC staff. The CFLCC staff had representatives from multiple PN countries and across the components. The CFLCC task organization is below. (See Figure 1-2).

The exercise's Joint Manning Document (JMD) had component positions filled almost exclusively by PN officers. The CFLCC JMD was 90% PN and 10% U.S. personnel. The U.S. positions in the CFLCC had only two U.S. Army South (ARSOUTH) personnel compared to 30-50% in other components. The JMD's 30-50% U.S. personnel were assigned to the Combined Force Air Component Command (CFACC), Combined Force Maritime Component Command (CFMCC), and Combined Forces Special Operations Component Command (CFSOCC). This created both a U.S. and component manning imbalance in the CFLCC staff.

Having more U.S. personnel on the CFLCC staff would provide greater opportunity for interoperability at this command level. Additional U.S. personnel may also increase operational understanding of the exercise, allow for a better understanding of the expectations from the MNFS, and increase the effectiveness of the staff while decreasing the time needed for the PN staff to fully integrate into the exercise. Constrained U.S. involvement resulted in limited ARSOUTH personnel having the chance to train and mentor PN counterparts at the CFLCC headquarters. This represents a lost opportunity during PMX24. Adjusting the JMD for the next iteration should be considered.

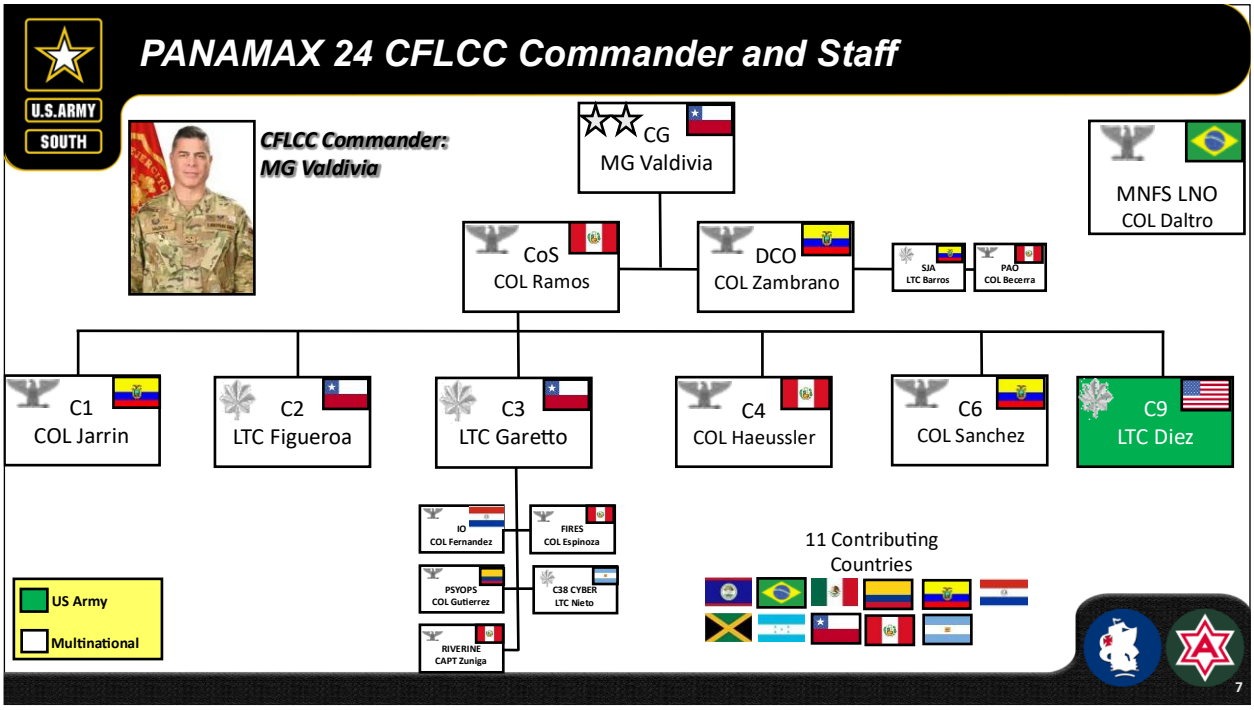


Figure 1-2. CFLCC Task Organization
(Chart courtesy of Security Cooperation Division, U.S. Army South)

INTERPRETATION AND TRANSLATION SUPPORT

Interpretation proved to be a challenge during PMX24. Although some participants spoke both English and Spanish, many did not, leading to misunderstandings and slower decision-making. The use of military linguists for interpretation, while cost-effective, resulted in inconsistent interpretation quality, especially during complex briefings. Ultimately, ARSOUTH command interpreters were utilized to provide interpretation for key briefings. However, additional support should be considered for future exercises.

TECHNICAL AND ADMINISTRATIVE CHALLENGES

PMX24 identified several technical and administrative challenges that can be addressed to improve future exercises. A major issue was the delay in setting up Combined Enterprise Regional Information Exchange (CENTRIX) accounts. This was mainly caused by late participant identification and delayed or incorrect foreign visitor request (FVR) submissions. Several countries finalized their participant list a week before the exercise began resulting in delayed account creation and a rush to create accounts upon arrival of the partners to Joint Base San Antonio (JBSA)-Fort Sam Houston, TX.

Additionally, the exercise revealed gaps in pre-exercise training on CENTRIX and other collaboration tools. Many PNs were using CENTRIX for the first time during this exercise, hindering their ability to contribute effectively to planning and operations.

These delays could have been avoided with better pre-exercise preparation, such as earlier PN participant identification and security clearance verifications. Participants also lacked sufficient familiarity with the CENTRIX system which slowed initial stages of the exercise. PNs need to finalize their participant lists earlier and arrive at least two days before the exercise to ensure all accounts are set up and participants receive adequate training. PMX planners will enhance operations by conducting more pre-exercise technical training, focusing on collaboration tools like CENTRIX and the All Partners Access Network (APAN) to enhance attendees technical readiness.

PLANNING IN CRISES

ARSOUTH hosted a MNFS Planning in Crisis (PIC) event in San Antonio, from 22-26 April, led by the G35. The MNFS PIC included participation from PNs in the MNFS staff but was lacking in PN participation from the CFLCC staff.

The lack of CFLCC participation in the MNFS PIC was apparent during the Component PIC in Miami, from 13-23 May, where they struggled to produce products needed for execution during the PIC. Increasing participation of U.S. service members will allow for more mentorship and explaining the Joint Planning Process (JPP). Of note, many of our PN personnel are learning the JPP for the first time during a 30-minute power point presentation only hours before a planning product is due.

The CFLCC leadership from Chile did an outstanding job at bringing together a large group of PN planners and they were able to develop a solid concept for the headquarters. However, due to much of the allocated time was spent learning the JPP and understanding MNFS requirements, the CFLCC was not able to produce a full operations order (OPORD) with annexes as intended and needed. Lack of a published CFLCC OPORD with annexes resulted in a delayed understanding from the CFLCC staff at STARTEX. The CFLCC course of action (COA) developed at the Component PIC is below. (See Figure 1-3)

Challenges were exacerbated by limited time and resources, a lack of technical expertise in document production, and a demonstrated need for more mentorship from the Deployable Training Team (DTT). Many participants unfamiliar with the JPP did not receive adequate

guidance to complete their planning tasks effectively. Without additional guidance, the CFLCC was unable to fully maximize the time allocated during the Component PIC. Allocating more ARSOUTH personnel and resources to assist the CFLCC during the Component PIC will pay great dividends. Also, ARSOUTH should consider embedding U.S. personnel with experience in the JPP on the CFLCC staff.

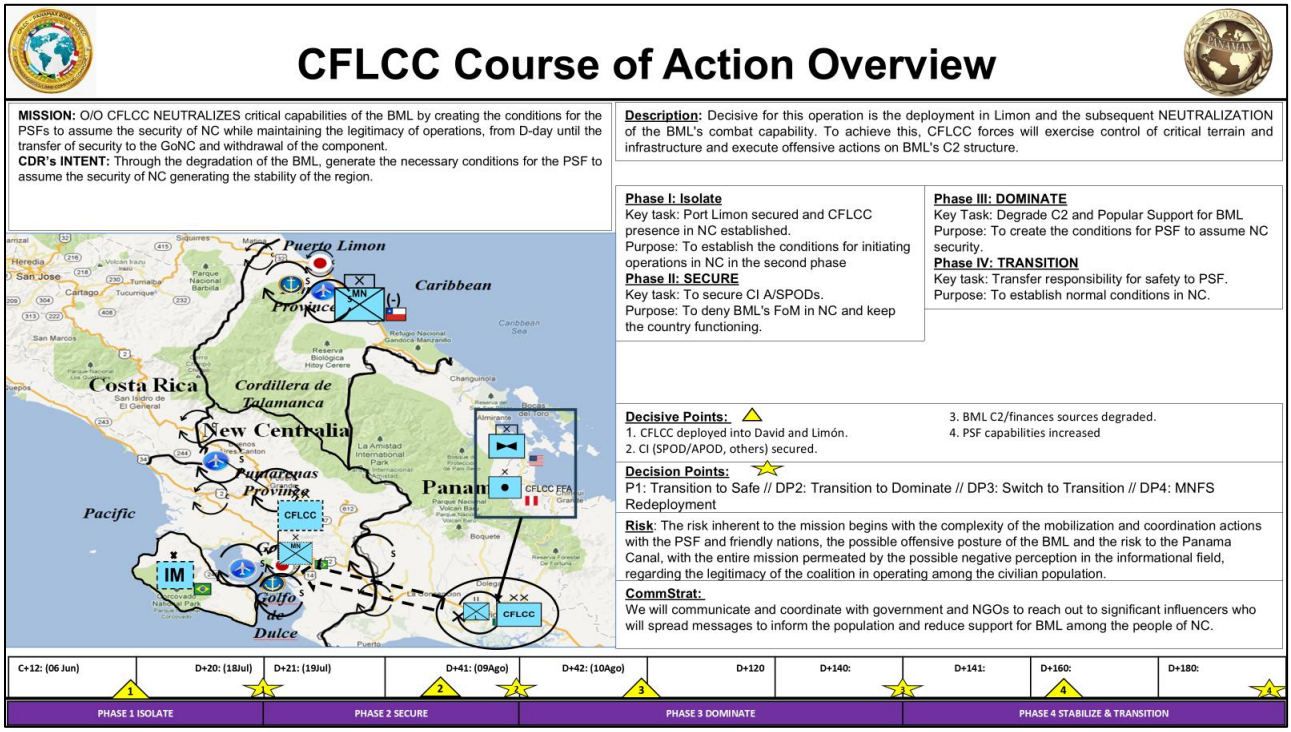


Figure 1-3: CFLCC Course of Action created during Component PIC (Chart courtesy of Security Cooperation Division, U.S. Army South)

To improve the preparedness of PNs in future exercises, ARSOUTH should also consider requesting personnel from the Western Hemisphere Institute for Security Cooperation (WHINSEC) or Security Force Assistance Brigades (SFAB) to provide mentorship and assessments. These organizations are well-equipped to train and advise PN personnel, particularly in areas like the JPP. WHINSEC and SFAB are familiar with working alongside PNs and can help bridge the technical and operational knowledge gaps that the CFLCC faced during the Component PIC.

CONCLUSION

PMX24 successfully strengthened military partnerships, improved interoperability, and fostered multinational collaboration. However, challenges related to language barriers, network training, and manning issues limited the exercise's full potential. Addressing these challenges through advanced training, expanded interpreter support, and better pre-exercise preparation will improve future PMX iterations, further contributing to regional security and cooperation.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant partner nation security cooperation findings from PMX24.

Observation. Having additional U.S. personnel on the CFLCC staff may improve integration.

Discussion. The staffing imbalance in the CFLCC would be mitigated by increasing the number of U.S. personnel on the CFLCC staff, similar to other components, to ensure smoother integration and more effective mentorship.

Recommendations.

- Allocate more ARSOUTH personnel at the Component PIC to assist the CFLCC Commander and staff.
- Continue to offer leadership roles to PNs in the CFLCC headquarters.
- Assign ARSOUTH senior staff as mentors to each warfighting function (WfF) in the CFLCC headquarters during the exercise.
- Position more ARSOUTH personnel on the CFLCC staff during the exercise or add more external U.S. positions in the PMX26 JMD.

Observation. Challenges in interpretation and translation.

Discussion. Using military linguists at PMX24 was ineffective and negatively impacted operations. Military linguists demonstrated a lack of experience and technique to interpret at this level of exercise, especially given the number of PNs represented.

Recommendations.

- PMX planners should contract an adequate number of interpreters and translators to support key briefings and events.
- Use ARSOUTH command interpreters if available (two assigned at the headquarters).
- Use military linguists for routine interactions among the staff.
- Identify and purchase translation software and integrate into communication systems to streamline operations.
- Translate briefings in Portugues and Spanish (languages of participating countries) to ensure clear communications.

- Translate military terminology, symbology, and acronyms used throughout the exercise, print and post in meeting rooms, and hang them on the digital network to enhance interoperability and ensure familiarization of terms commonly used during combined exercises.

CHAPTER 2

Exercise Design and Readiness

Douglas M. Keeper, Chief, Operational Exercises
G-3/5/7 Training and Exercises, U.S. Army South

> Commanders make every effort to integrate mission partners into the exercise design and planning conferences prior to exercise execution. This practice fosters buy-in and can serve as a substantial training event for the foreign staff officers as they plan alongside their U.S. counterparts. It also functions as a rehearsal, ensuring all parties understand and agree to the exercise design and training objectives prior to execution.[4]
>
> FM 3-16, The Army in Multinational Operations, page 37
> 15 July 2024

REFERENCES:

a. SC Regulation 35-2, Joint Exercise Program, 20 January 2016

b. SC Regulation 35-2, New DRAFT, Joint Exercise Program, 31 May 2024

c. SC Regulation 35-3, JTF HQ and Training and Readiness Program, 14 December 2020

d. CJCSM 3500.03 Series, Joint Training Manual for the Armed Forces of the United States, 20 April 2015

e. Joint Training Event Handbook, Joint Staff J7, 2021

f. SOUTHCOM Exercise Panamax (PMX) 2024 Exercise Directive (EXDIR) Final CAO 011448ZJAN24

g. U.S. Army South (ARSOUTH) Exercise Directive 23-086 PANAMAX 2024

WHY WE DO PANAMAX?

<u>To Comply with United States Southern Command (SOUTHCOM) Policy</u>

SOUTHCOM (SC) Regulation 35-2, Joint Exercise Program (JEP) prescribes policy and

[4] FM 3-16, The Army in Multinational Operations, page 37, 15 July 2024
https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN41419-FM_3-16-000-WEB-2.pdf

procedures for planning, executing, and assessing the SOUTHCOM overarching Joint Training Program (JTP), JEP, and service component training deployments and exercises. These procedures are based on the policy and guidance published with the specific objective of developing capabilities-based training that integrates the key components of the SOUTHCOM Campaign Plan (SCP) and supports the SOUTHCOM Joint Mission Essential Task List (JMETL) while maintaining readiness.

To Accomplish SOUTHCOM Joint Training Objectives

The JEP is a principal means for Combatant Commanders (CCDRs) to maintain trained and ready forces, exercise their contingency plans, support their theater campaign plan, and achieve joint and multinational (combined) training. CCDR sponsored JEP events train to mission capability requirements described in the command JMETL as well as theater security cooperation (TSC) requirements as directed in the theater campaign plan (TCP).

The overall objective of the SOUTHCOM JEP is to maintain optimum readiness through operational, Foreign Military Interaction (FMI), and Humanitarian/Civic Assistance (HCA) exercises integrated within the goals and aims of the SOUTHCOM TCP. Within the JEP, SOUTHCOM's exercise objectives are focused on expanding U.S. cooperation, assuring friends, and dissuading potential adversaries.

The overarching goal of the SOUTHCOM JEP is to increase its proficiencies and readiness while promoting regional security and stability through the training of U.S. personnel and forces. The Joint Event Life Cycle (JELC) is the codified process of laying out key events in time and space with clear inputs and outputs for each event described in detail in the Joint Training Event Handbook, Joint Staff (JS) J7, 2021. (See Reference E).

To Achieve and Maintain Unit Readiness

IAW SC Regulation 35-3, JTF HQ Training and Readiness Program, the CCDR has directed select components to develop the ability to operate as a JTF headquarters (HQ). This regulation establishes training and readiness requirements for a JTF-capable HQ. Overall intent is for the CCDR to have command and control (C2) options within SOUTHCOM capable of performing selected tasks of a JTF HQ when needed. Select components will complete the requirements indicated in Appendix E of SC Regulation 35-3. Additionally, the designated components will incorporate JTF C2 tasks within their respective Mission Essential Task List (METL), identify and plan the sourcing of their respective shortfalls with respect to manning, equipping, and training, and develop sourcing requirements. When components meet the requirements in this regulation and complete a validation exercise, the CCDR will determine/designate the component as a JTF-capable HQ. (See Figure 2-1, Ideal vs Historic JTF Readiness). ARSOUTH currently follows the historic JTF readiness trend line.

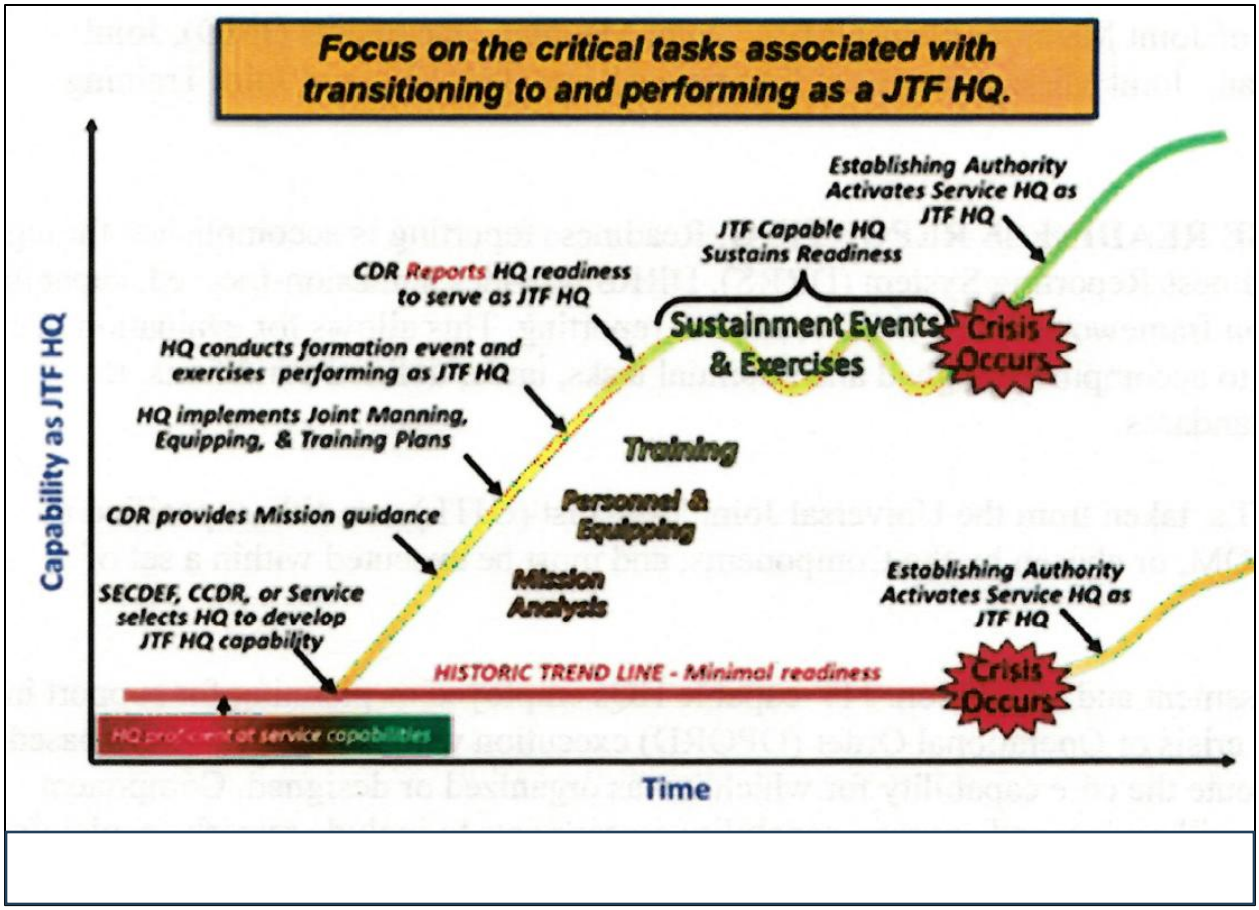


Figure 2-1. Ideal vs. Historic JTF Readiness
(Chart provided by G7 TREX, U.S. Army South)

Importance of Panamax is High

According to SOUTHCOM, PANAMAX (PMX) is the largest and highest priority FMI/OPEX collective enterprise set and repetition that SOUTHCOM executes. PMX facilitates achieving U.S. readiness not only at the at the combatant command (CCMD) level (Tier One training audience), but also at the ARSOUTH component level (Tier Two training audience), forming the backbone of the Multinational Force South (MNFS) HQ. Moreover, PMX provides the other SOUTHCOM components a role working with partner nations (PNs) as combined training audiences. Currently, it is the only all-encompassing SOUTHCOM led exercise opportunity in the SC JEP tool bag that provides a JTF representative for ARSOUTH.

Recommend SOUTHCOM look at designing U.S. only events the year prior to PMX to work on Joint Force Command (SOUTHCOM) improvement and component JTF readiness. A way could be using the building block approach through time, i.e. mission analysis, building manning documents and Joint Mission Essential Equipment List (JMEEL), training plans, and ultimately culminating in a collective exercise event. This may take several years to plan and achieve.

WHAT TYPE OF EXERCISE IS PANAMAX?

Per SOUTHCOM, PMX is a combination operational exercise (OPEX) and FMI exercise.

Operational Exercise

SOUTHCOM plans and conducts OPEXs to train the SOUTHCOM staff, components, designated JTF-capable HQ, supporting forces, and organizations in crisis action response to contingency scenarios found in SOUTHCOM deliberate plans. These exercises are coordinated with the JS J7 to schedule JTF, and technical support as needed and are submitted annually for SOUTHCOM Commander review/approval. To the extent possible, relevant deliberate plans and exercise scenario locations are identified in accordance with (IAW) the TCP. Exercise locations may remain tentative, especially if troop deployments are required.

Foreign Military Interaction Exercise

SOUTHCOM plans and conducts FMI exercises to influence advancing U.S. influence in the region, promote interoperability, and build the capabilities of PNs and U.S. forces. These exercises posture the U.S. and PNs to respond to future contingencies cooperatively and effectively. FMI exercise focus includes peacekeeping operations (PKO), humanitarian assistance/disaster relief (HA/DR), combating transnational organized crime (CTOC), counterterrorism (CT), antiterrorism (AT), consequence management (CM), and security interoperability.

Exercise scope ranges in complexity from simple seminars to interagency/multinational exercises involving major combat and combat service support units, as well as interagency, intergovernmental, nongovernmental organization (NGO), private voluntary organization (PVO), and other private sector organizations. SOUTHCOM annually executes multiple FMI command post exercises (CPXs) and FMI field training exercises (FTXs).

WHAT WAS THE COMBATANT COMMANDER'S GUIDANCE?

ARSOUTH PMX24 exercise design is based on the SOUTHCOM Commander's guidance and exercise objectives as directed in SOUTHCOM Exercise Directive (EXDIR) Final CAO 011448ZJAN. As per SOUTHCOM Regulation 35-2 an EXDIR is required for each exercise. The PMX 24 EXDIR was received after the mid planning conference (MPC) in January 2024. The main outputs codified in this document are highlighted below in Figure 2-2, "(GEN Richardson) Combatant Commander's (CCDR's) guidance" and in Figure 2-3, "CCDR Approved objectives" which were received in the SOUTHCOM initial planning conference (IPC) output message.

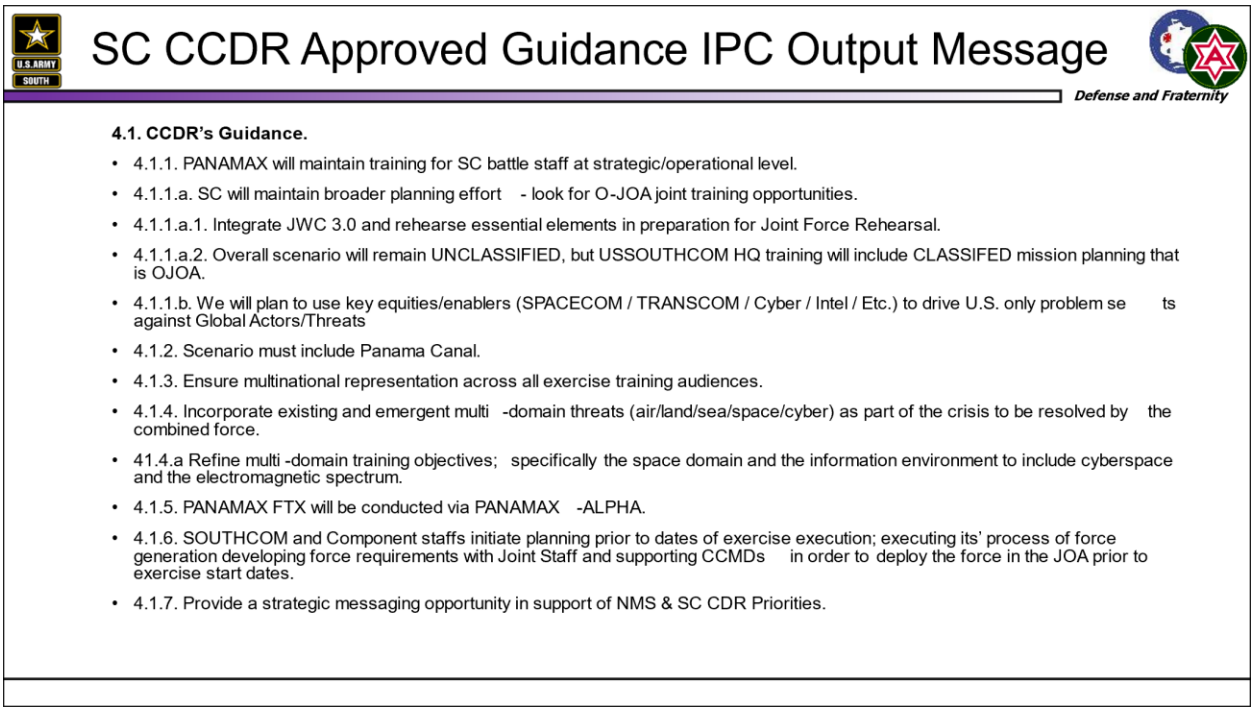


Figure 2-2. SOUTHCOM Commander Approved Commander's Guidance (Chart provided by G7 TREX, U.S. Army South)

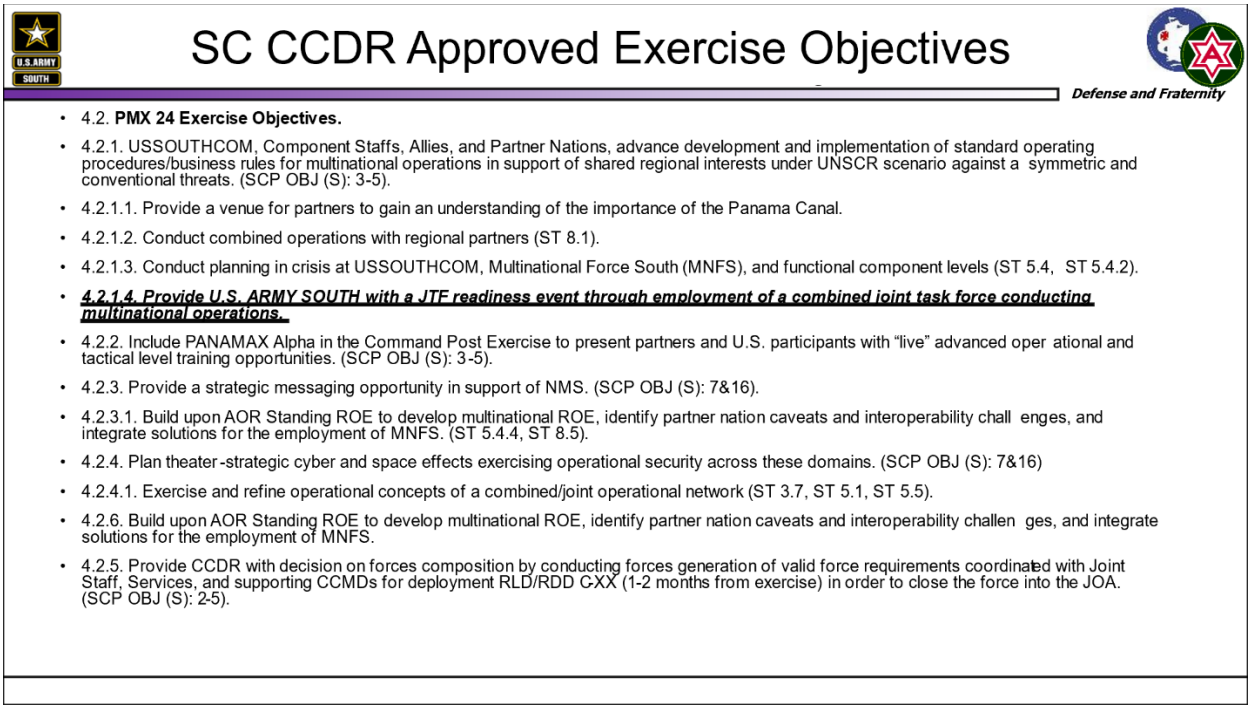


Figure 2-3. SOUTHCOM Commander Approved Exercise Objectives (Chart provided by G7 TREX, U.S. Army South)

HOW DID ARSOUTH G7 OPEX PLAN FOR PANAMAX 24?

G7 OPEX uses the Joint Training Event Handbook 2023 published by the Joint Staff J-7, Deputy Director Joint Training as it's "Bible" for all OPEX joint exercise planning. PMX24 was no exception. We were the main lead on PMX 24 exercise planning but established clear swim lanes between white cell planners, BLUEFOR (friendly forces) trusted agents, and other key players. (Figure 2-4) OPEX also wrote a comprehensive and detailed 30-page PMX24 ARSOUTH EXDIR detailing tasks to staff based on lessons learned from the past on some tasks slipping through the cracks. Using the Joint Staff Training Event Handbook and writing a detailed EXDIR are a definite sustain.

G7 OPEX developed and implemented three lines of effort (LOE) for PMX24 to focus and keep on task both the training audience and those providing exercise support. These included LOE 1: White Cell, LOE 2: BLUEFOR (MNFS), and LOE 3: BLUEFOR (Combined Forces Land Component Command (CFLCC) as noted in Figure 2-4 below.

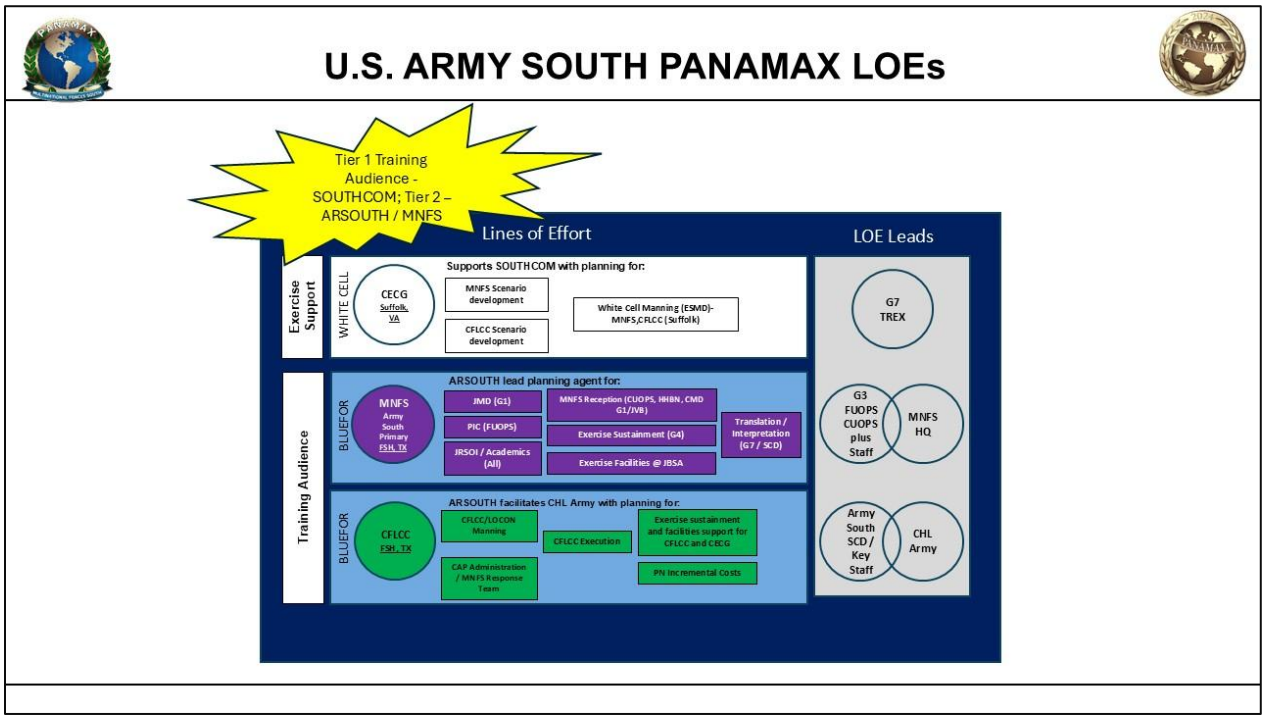


Figure 2-4. ARSOUTH PMX24 Lines of Effort
(Chart provided by G7 TREX, U.S. Army South)

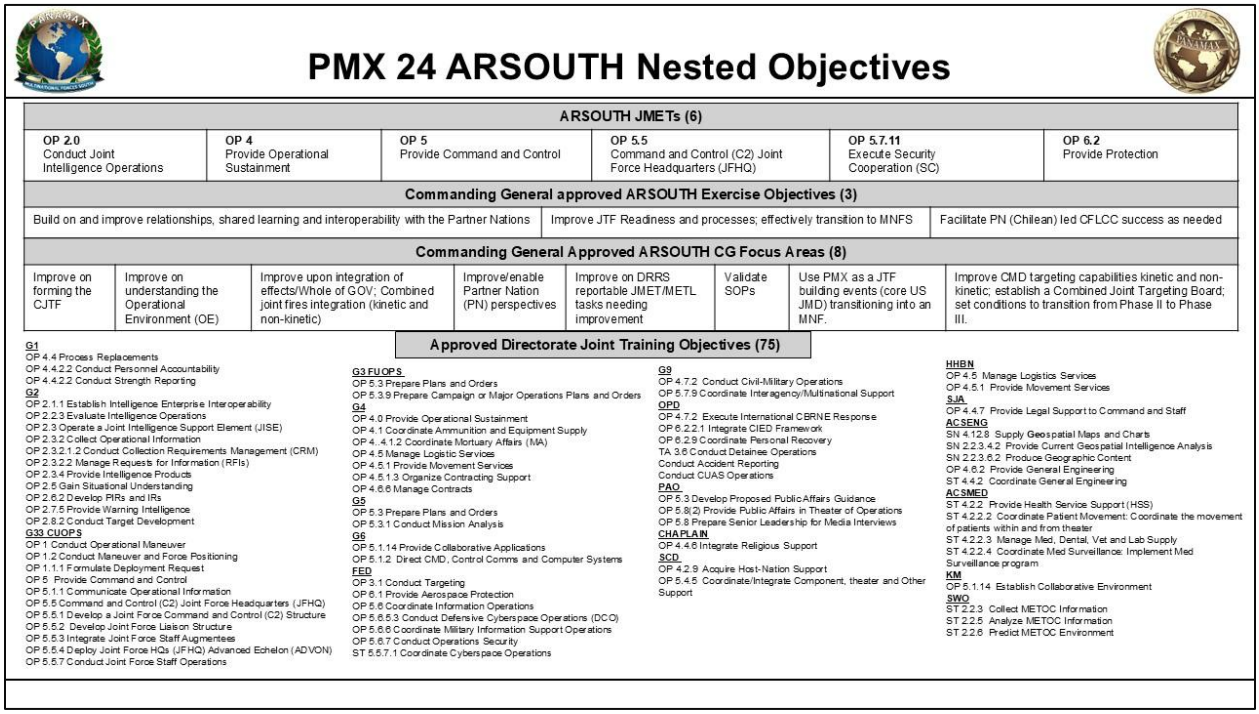
WHAT HAPPENED IN THE JELC DESIGN PHASE?

PMX 24 led working groups commenced in March 2023. These were bi-weekly at first and later on a weekly basis. This was well ahead of the first JELC event, the Concept Development Conference (CDC), held 7-9 August 2023. As per the Joint Planners Event Handbook, the purpose of the exercise was already established and laid out in chapter one. The operational

environment (OE), another key component of exercise construct, was a repeat of previous years OE with a United Nations Security Council Resolution (UNSCR) authorizing a U.S. led multinational force assisting the fictitious friendly country of New Centralia located northwest of Panama in putting down an insurgency caused by a violent extremist organization (VEO) known as the Brigade of the Martyrs of Liberation (BLM). BLM was portrayed as a major threat to the Panama Canal lines of communications (LOCs).

HOW DID ARSOUTH DEVELOP AND NEST EXERCISE OBJECTIVES AND FOCUS AREAS?

The lessons observed and outputs from the last JELC training event become the inputs, bedrock, or baseline for the next iteration of the commander approved exercise objectives, more refined commander exercise focus areas, and ultimately the Directorate joint training objectives. The Joint Staff J7 PMX22 Facilitated After Action Review (FAAR) and internal ARSOUTH PMX22 AAR were well used to develop and nest exercise objectives and focus areas in the PMX24 MNFS nested objectives shown below at Figure 2-5.



PMX 24 ARSOUTH Nested Objectives

ARSOUTH JMETs (6)

OP 2.0	OP 4	OP 5	OP 5.5	OP 5.7.11	OP 6.2
Conduct Joint Intelligence Operations	Provide Operational Sustainment	Provide Command and Control	Command and Control (C2) Joint Force Headquarters (JFHQ)	Execute Security Cooperation (SC)	Provide Protection

Commanding General approved ARSOUTH Exercise Objectives (3)

Build on and improve relationships, shared learning and interoperability with the Partner Nations	Improve JTF Readiness and processes; effectively transition to MNFS	Facilitate PN (Chilean) led CFLCC success as needed

Commanding General Approved ARSOUTH CG Focus Areas (8)

Improve on forming the CJTF	Improve on understanding the Operational Environment (OE)	Improve upon integration of effects/Whole of GOV; Combined joint fires integration (kinetic and non-kinetic)	Improve/enable Partner Nation (PN) perspectives	Improve on DRRS reportable JMET/METL tasks needing improvement	Validate SOPs	Use PMX as a JTF building events (core US JMD) transitioning into an MNF.	Improve CMD targeting capabilities kinetic and non-kinetic; establish a Combined Joint Targeting Board; set conditions to transition from Phase II to Phase III.

Approved Directorate Joint Training Objectives (75)

G1
OP 4.4 Process Replacements
OP 4.4.2.2 Conduct Personnel Accountability
OP 4.4.2.2 Conduct Strength Reporting

G2
OP 2.1.1 Establish Intelligence Enterprise Interoperability
OP 2.2.3 Evaluate Intelligence Operations
OP 2.3 Operate a Joint Intelligence Support Element (JISE)
OP 2.3.2 Collect Operational Information
OP 2.3.2.1.2 Conduct Collection Requirements Management (CRM)
OP 2.3.2.2 Manage Requests for Information (RFIs)
OP 2.3.4 Provide Intelligence Products
OP 2.5 Gain Situational Understanding
OP 2.6.2 Develop PIRs and IRs
OP 2.7.5 Provide Warning Intelligence
OP 2.8.2 Conduct Target Development

G33 CUOPS
OP 1 Conduct Operational Maneuver
OP 1.2 Conduct Maneuver and Force Positioning
OP 1.1.1 Formulate Deployment Request
OP 5 Provide Command and Control
OP 5.1.1 Communicate Operational Information
OP 5.5 Command and Control (C2) Joint Force Headquarters (JFHQ)
OP 5.5.1 Develop a Joint Force Command and Control (C2) Structure
OP 5.5.2 Develop Joint Force Liaison Structure
OP 5.5.3 Integrate Joint Force Staff Augmentees
OP 5.5.4 Deploy Joint Force HQs (JFHQ) Advanced Echelon (ADVON)
OP 5.5.7 Conduct Joint Force Staff Operations

G3 FUOPS
OP 5.3 Prepare Plans and Orders
OP 5.3.9 Prepare Campaign or Major Operations Plans and Orders

G4
OP 4.0 Provide Operational Sustainment
OP 4.1 Coordinate Ammunition and Equipment Supply
OP 4. .4.1.2 Coordinate Mortuary Affairs (MA)
OP 4.5 Manage Logistic Services
OP 4.5.1 Provide Movement Services
OP 4.5.1.3 Organize Contracting Support
OP 4.6.6 Manage Contracts

G5
OP 5.3 Prepare Plans and Orders
OP 5.3.1 Conduct Mission Analysis

G6
OP 5.1.14 Provide Collaborative Applications
OP 5.1.2 Direct CMD, Control Comms and Computer Systems

FED
OP 3.1 Conduct Targeting
OP 6.1 Provide Aerospace Protection
OP 5.6 Coordinate Information Operations
OP 5.6.5.3 Conduct Defensive Cyberspace Operations (DCO)
OP 5.6.6 Coordinate Military Information Support Operations
OP 5.6.7 Conduct Operations Security
ST 5.5.7.1 Coordinate Cyberspace Operations

G9
OP 4.7.2 Conduct Civil-Military Operations
OP 5.7.9 Coordinate Interagency/Multinational Support

OPD
OP 4.7.2 Execute International CBRNE Response
OP 6.2.2.1 Integrate CIED Framework
OP 6.2.9 Coordinate Personal Recovery
TA 3.6 Conduct Detainee Operations
Conduct Accident Reporting
Conduct CUAS Operations

PAO
OP 5.3 Develop Proposed Public Affairs Guidance
OP 5.8(2) Provide Public Affairs in Theater of Operations
OP 5.8 Prepare Senior Leadership for Media Interviews

CHAPLAIN
OP 4.4.6 Integrate Religious Support

SCD
OP 4.2.9 Acquire Host-Nation Support
OP 5.4.5 Coordinate/Integrate Component, theater and Other Support

HHBN
OP 4.5 Manage Logistics Services
OP 4.5.1 Provide Movement Services

SJA
OP 4.4.7 Provide Legal Support to Command and Staff

ACSENG
SN 4.12.8 Supply Geospatial Maps and Charts
SN 2.2.3.4.2 Provide Current Geospatial Intelligence Analysis
SN 2.2.3.6.2 Produce Geographic Content
OP 4.6.2 Provide General Engineering
ST 4.4.2 Coordinate General Engineering

ACSMED
ST 4.2.2 Provide Health Service Support (HSS)
ST 4.2.2.2 Coordinate Patient Movement: Coordinate the movement of patients within and from theater
ST 4.2.2.3 Manage Med, Dental, Vet and Lab Supply
ST 4.2.2.4 Coordinate Med Surveillance: Implement Med Surveillance program

KM
OP 5.1.14 Establish Collaborative Environment

SWO
ST 2.2.3 Collect METOC Information
ST 2.2.5 Analyze METOC Information
ST 2.2.6 Predict METOC Environment

Figure 2-5. PMX 24 MNFS Nested Objectives
(Chart provided by G7 TREX, U.S. Army South)

What the staff will train on at the directorate level is fundamental to exercise success. For comparison, in PMX22, ARSOUTH directors developed 59 training objectives (TOs) with this number increasing to 75 in PMX24. It is good we increased. But if you compare these numbers to other Army Service Component Commands (ASCCs) our staff training objective numbers are low. Part of the reason for the numbers increase between PMX22 and PMX24 was due to a hard push from G7 Training and Exercises (TREX) OPEX to inform the staff on why we do exercises

persistently. We do it to train the staff to be a JTF or combined joint task force (CJTF), validate a contingency plan (CONPLAN), and to build relationships etc. It's not just an exercise! All ARSOUTH directorates and special staff have Universal Joint Task List (UJTL) tasks that they need to do "sets and reps" to be trained in their METL or JMETL tasks as part of a collective unit.

The OPEX team also conducted a Training Objective Working Group (TOWG), early on in planning, on how to write a training objective. This is somewhat difficult in an ASCC because we are no longer in tactical units. It requires your best people to do it right. You cannot just cut and paste from the UJTL. There is a set process with worksheet to do this. The worksheet records who is the originator, who is getting trained, what is the training situation, performance measure, metrics, and what METL or JMETL task it links back to. As per the ARSOUTH EXDIR all training objectives will be approved by the director, or deputy, or special staff officer in charge (OIC). The ones that wrote them are in our PMX24 TO folder on Teams. The onus, good or bad, comes back to the directorate or special staff section in the end. In support, the G7 TREX OPEX team conducted quality assurance/quality control (QA/QC) on all submitted TOs from those who wrote them.

MSEL WRITING AND SCRIPTING

The hardest part falls on the exercise scripters. There has been much improvement since the last Panamax, but more work is needed. ARSOUTH scripters from across the staff must build on this year's successful scripting for the next iteration in 2026. Recommend master scenario event list (MSEL) scripters hotwash for a later date to identify the sustain and improve areas from the build for PMX24.

Bottom line up front (BLUF): All MSELs must link back to a TO and ultimately back to the UJTL. All MSELs go through an implementor (operations order/fragmentary order (OPORD/FRAGORD), email, logistics status report (LOGSTAT), situation report (SITREP), or intelligence report (INTREP), etc. They create an action for the element receiving it to react to (expected outcome). This is tied back to the TO and how the element did (performance measure with metrics). This provides a readout of our performance to be fed into the Defense Readiness Reporting System (DRRS). Readiness is what it is all about.

ARSOUTH Combined Exercise Control Group (CECG) recorded tracked and not tracked MNFS staff TOs. This has proven invaluable in recording which TOs were completed, from one PMX to the next, and which ones should be worked on at the next rotation. (See Figure 2-6 and Figure 2-7)

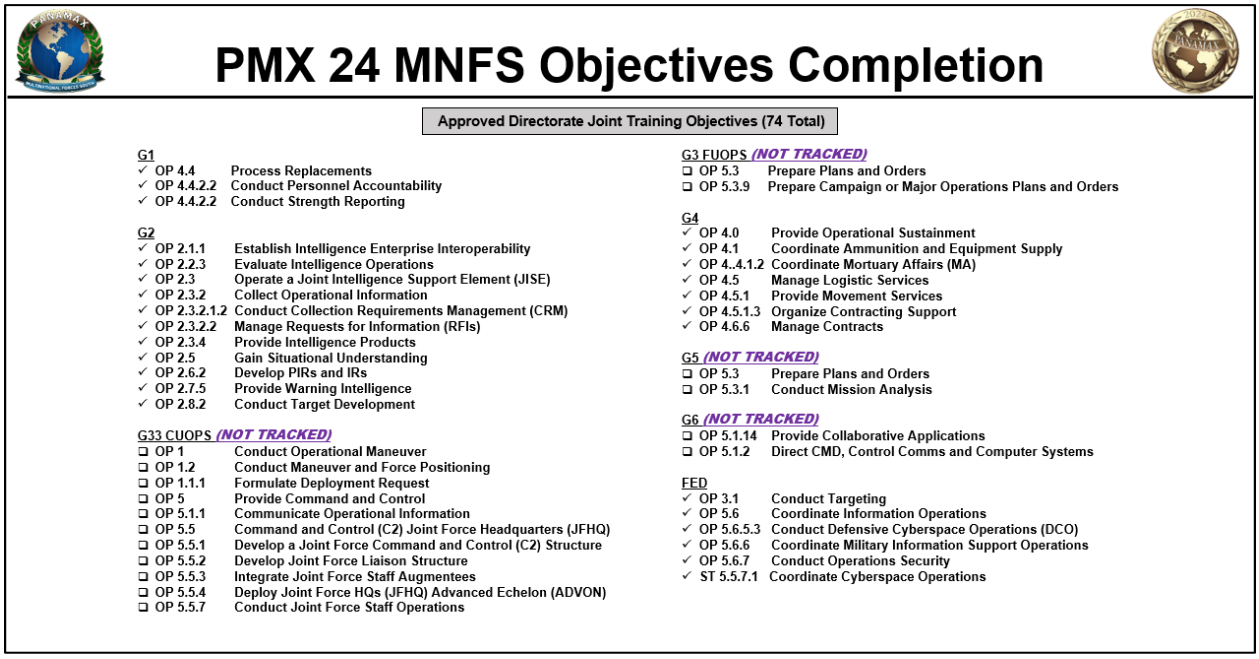


Figure 2-6. PMX 24 MNFS Objectives Completion
(Chart provided by G7 TREX, U.S. Army South)

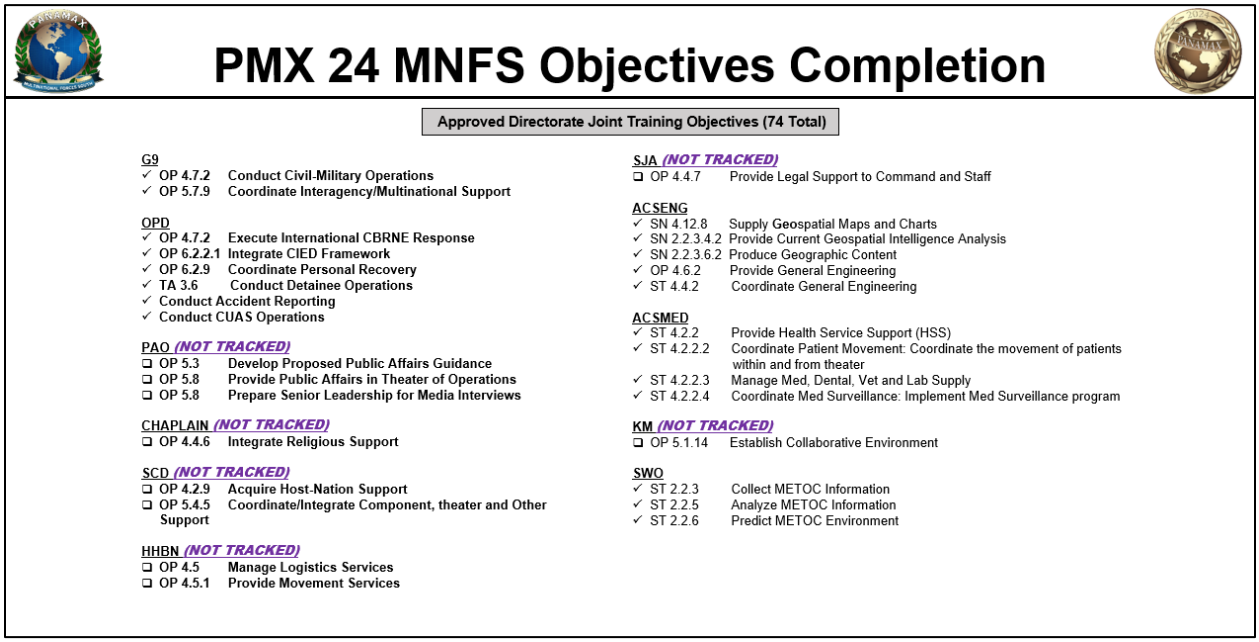


Figure 2-7. PMX 24 MNFS Objectives Completion
(Chart provided by G7 TREX, U.S. Army South)

Additionally, the ARSOUTH Combined Exercise Control Group (CECG) kept track on all exercise injects. For PMX24 there were 714. Injects were sorted by type (key, supporting, or other) and by which staff section cell inserted it. A record was kept on how many were injected into the exercise and which ones were deferred for whatever reason. (See Figure 2-8)

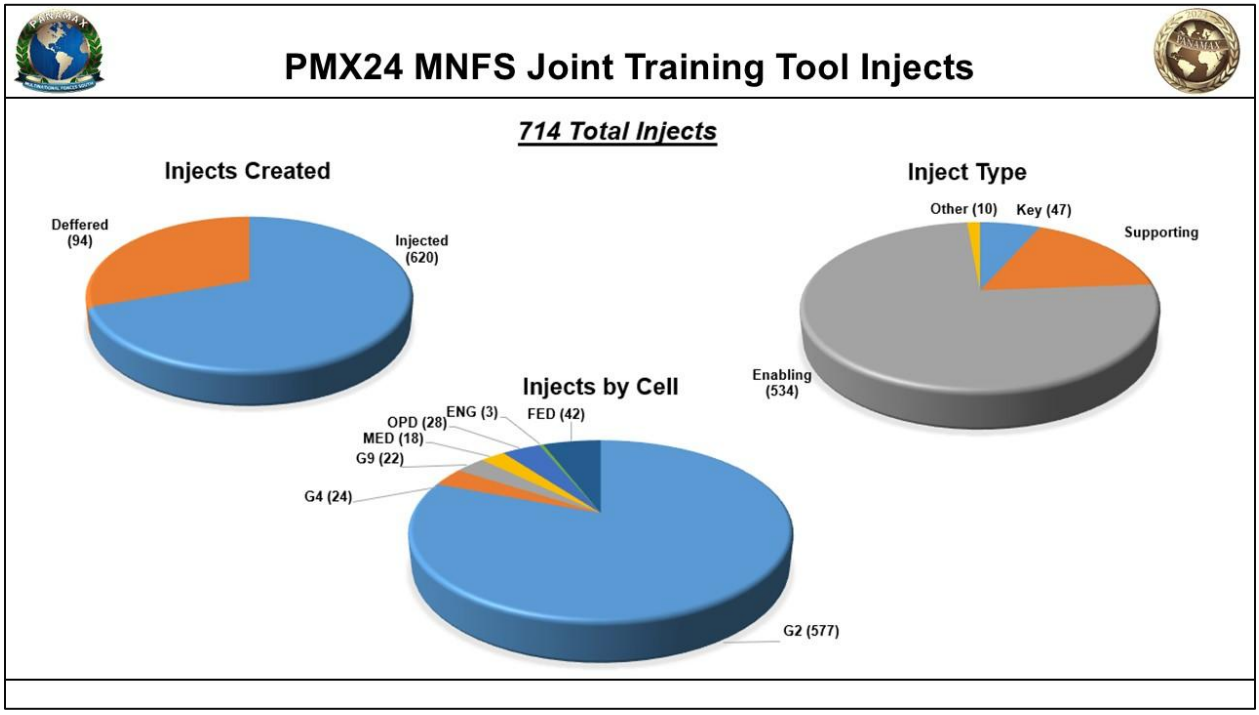


Figure 2-8. PMX 24 MNFS Injects
(Chart provided by G7 TREX, U.S. Army South)

ACADEMICS

The OPEX team was persistent and proactive supporting academics throughout the JELC cycle. Multiple documents were distributed out in advance to help the training audience. This included: JS J7 JTF pamphlets, multinational operations pamphlets, detailed joint operations center (JOC) standard operating procedures (SOPs), and JOC battle drills. Perhaps the most significant disseminated product was the ARSOUTH Multinational SOP that is the current "gold standard."

Additionally, a Microsoft (MS) Teams reference library was established for most of this information and an academics folder. These are both definite sustains. Recommend future training audiences be more aware of and use these resources, early on, to identify what training is needed and when. Otherwise, they may only receive broad stroke topics during academics when this time could be better utilized in other critical areas.

AFTER ACTION REVIEW, ASSESSMENT, AND SURVEY

The OPEX team came up with the plan on how to report the findings from PMX24. We briefed it and messaged it often throughout the JELC. This resulted in more tailored sustain and improve observations briefed by the directorates and special staff at the AAR. Also, directorates and special staff briefed how they did (self-assessment) on their TOs (T, P, U) which fed DRRS. Finally, the Operations Research and Analysis (ORSA) section briefed on the PMX24 survey responses.

CHAPTER 3

Intelligence Synchronization and Common Intelligence Picture

COL Jarrod P. Moreland, G-2, U.S. Army South

> Commanders and staffs require accurate, relevant, and predictive intelligence to understand threat characteristics, goals and objectives, and COAs across the domains and dimensions. Precise intelligence is also critical in detecting, identifying, and targeting threat capabilities at the right time and place and in opening windows of opportunity across domains and dimensions, particularly during large-scale combat operations. Commanders and staffs must have detailed knowledge of threat strengths, vulnerabilities, organizations, equipment, capabilities, training, employing and controlling forces, and tactics to plan for and contribute to unified action across the Army strategic contexts (competition below armed conflict, crisis, and armed conflict). This requires using the intelligence warfighting function to provide the detailed knowledge necessary to support the operations process.[5]
>
> FM 2-0, Intelligence, page 1-6
> 1 October 2023

COMMON INTELLIGENCE PICTURE (CIP)

Agile Client provided a clear view of all activity within the joint operations area (JOA). Utilizing Global Command and Control System-Joint (GCCS-J) allowed for clear communication of Red (enemy) forces across the staff. However, the Joint Intelligence Support Element (JISE) utilized the Army Intelligence Data Platform (AIDP) for enemy tracking, which is unable communicate with Agile Client. This lack of interoperability forced G2 Operations to manually enter Red icons exported from AIDP. Due to the scope of this exercise, it was inconvenient, but not insurmountable. If there had been more enemy movement this process would not have been sustainable. There was a total of four trained personnel on GCCS-J which allowed for collaboration and problem solving with Agile Client. Only the common operational picture (COP) was displayed in the joint operations center (JOC), with both Blue (friendly) and Red forces. There was some difficulty in viewing information on the map in areas with enemy density, friendly locations, or overlapping significant activities (SIGACTS). Due to disparate mission command systems, intelligence analysts were not able to send targets directly to any targeting systems.

[5] FM 2-0, Intelligence, page 1-6, 1 October 2023, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN39259-FM_2-0-000-WEB-2.pd

The Multinational Force South (MNFS) JISE worked on both classified and unclassified information systems. This included using the Combined Enterprise Regional Information Exchange System (CENTRIX) as the Mission Partner Environment (MPE). Due to exercise design and exercise intelligence architecture, the ability to pass information reports and finished products across different information domains was significantly limited. We recommend that coordination is done with United States Southern Command (SOUTHCOM) to ensure key intelligence battle rhythm events are held on partner accessible systems, with discussion at a higher classification to follow separately. We also need to explore options to develop a cross-domain server solution that will facilitate information transfer between U.S.-only and mission partner networks (MPN).

From a technical perspective, the use of multiple tools across multiple information domains challenged the MNFS JISE's ability to integrate and synchronize information in support of the JISE's running intelligence estimate. The MNFS JISE employed AIDP, which modernizes the core technology fielded at the Army's Fixed Sites/Military Intelligence Brigades with a modern enterprise data warehousing and analytics solutions. AIDP organizes data for analytics and hosts services and tools in the cloud. SOUTHCOM also used CENTRIX, however leveraged a different enterprise tool on other information domains.

From a procedural perspective, the MNFS JISE collaborated constantly with SOUTHCOM J2 and the MNF's subordinate component commands. This enabled the MNFS JISE to maintain situational awareness and situational understanding of the threat's disposition, composition, and associated most likely/most dangerous course of action (COA). The MNFS JISE was responsible for describing the threat within the JOA and the SOUTHCOM J2 was responsible for describing the threat outside of the JOA. The MNFS JISE maintained two daily battle rhythm events for collaborating with SOUTHCOM J2, which assisted with overcoming the technical and analytical challenges. However, battle rhythm as implemented did not allow time for formal meetings involving MNFS and component CJ2 leadership. There were also some command support relationships that challenged our intelligence operations during execution. To remedy this issue, clearly defined command and reporting relationships need to be developed prior to execution of the mission. Also, there needs to be a daily touch point between the CJ2 and component CJ2s to ensure synchronization of the all-domain intelligence assessment across echelons.

G2 CURRENT OPERATIONS VS FUTURE OPERATIONS (FUOPS)/JISE

Commanders and staffs at all levels require intelligence to plan, direct, conduct, and assess operations. This intelligence is crucial in identifying and selecting specific objectives and targets, associating them with desired effects, and determining the means to accomplish the command's overall mission. Through timely, accurate, and relevant intelligence estimates, commanders gain temporal decision advantage by understanding the threat's operations, intentions, and the full range of alternative futures in relative order of probability.

J2 Operations and the JISE worked together to create understanding across the staff regarding the current enemy situation. However, at the start of the operation, the JISE was pulled into the current fight (24-48 hours) and did not have time to look at emerging trends. This was remedied over time during exercise execution. FM 2-0, *Intelligence*, identifies "theater army-level all-

source intelligence capabilities current operations (CUOPS) as current to 72 hours and future operations/targeting (FUOPS [future operations]/JISE) as 72 hours to nine days."[6] The short duration of this exercise did not allow for full theater army intelligence processes. To remedy this, we need to truncate timelines to exercise our intelligence staff. One recommendation is to have current operations (CUOPS) focus on the current fight – 48 hours with assessments and recommendations while the FUOPS/JISE focuses on 48-96 hours with assessments and recommendations, COA refinement, and joint intelligence preparation of the operational environment (JIPOE) updates. This would allow for proper exercising of the entire Intelligence Warfighting Function (IWfF) for short duration exercises. CUOPS must communicate and coordinate with all down trace units and the JISE to understand not only enemy seams and gaps, but friendly seams and gaps as well, so they can leverage collection to close the gaps that can lead to a risk to mission or risk to force.

INTELLIGENCE HANDOVER LINES AND STREAMLINING COLLECTION WITH OUR HIGHER HEADQUARTERS

During PANAMAX (PMX) an intelligence handover line (IHL) was established between MNFS and SOUTHCOM to support the tracking of threat vessels projected to enter the MNFS area of operations (AO). SOUTHCOM provided MNFS with insight to task, purpose, and potential end state, which aided in determining potential risk to mission and risk to force. Based on the information received and projected arrival (into the AO) of the threat vessels, MNFS prioritized and synchronized targeting from maritime and air assets during targeting working groups and boards. MNFS intelligence, surveillance, and reconnaissance (ISR) assets were tasked to track, support targeting, and conduct battle damage assessments (BDA). The neutralization of the threat greatly enhanced MNFS' ability to support partner nation sovereignty and disrupted threat plans and operations. "Using intelligence handover lines [IHLs] is a flexible means of directing information collection, as well as analysis, to support key decisions and/or targeting. An intelligence handover line is a control measure between two friendly units used to pass responsibility for the conduct of information collection against a specific enemy force."[7] We recommend continued collaboration with SOUTHCOM to clearly delineate IHLs ensuring seamless collection transitions.

JOINT COLLECTION MANAGEMENT BOARD (JCMB) SHOULD BE CHAIRED BY THE CJ2/CJ3 TO PROVIDE GUIDANCE, DIRECTION, AND PRIORITIES

It is critical that the CJ2 and CJ3 co-chair the JCMB. The JCMB is an opportunity to synchronize collection efforts across echelons focused on priority targets – ICW the Joint Targeting Coordination Board (JTCB) to align ISR requirements with targeting and assessment needs (BDA), shaping operations for the next operation or phase of the operation, determine additional

[6] FM 2-0, Intelligence, page 7-12, 1 October 2023, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN39259-FM_2-0-000-WEB-2.pd
[7] Ibid, page 3-18.

support to subordinate echelons and validate requirements. Measures of performance (MoP) and measures of effectiveness (MoE) should also be discussed to determine proper use/allocation, reallocation, potential need for different assets/capabilities, lost collection, and impacts to operations. Without the CJ2 and CJ3 present, the opportunity for making well-informed/timely decisions may pass impacting operations increasing risk to mission and risk to force.

INTELLIGENCE SUPPORT TO TARGETING

U.S. Army South (ARSOUTH)/Sixth Army enables multi-domain operations (MDO) by identifying, exposing, and degrading malign influence, setting the theater, and conducting security cooperation operations and activities in the SOUTHCOM AOR as part of integrated deterrence towards threats to the U.S. homeland. On order, provides a joint task force-capable headquarters to respond to emergent requirements and tasked contingency plans.

For PMX, the Target Development Working Group (TDWG) was not conducted on a regular basis due to battle rhythm conflicts. As a result, all the outputs of this meeting, staff-integrated target guidance and prioritization, target development nominations, collection requirements, named areas of interest (NAIs), BDA reports, and risk/intelligence community vetting were all shifted to the Joint Targeting Working Group (JTWG). This hindered the ability of the staff to leverage effects on the enemy both lethal and non-lethal.

We recommend working closely with G3 Fires to integrate a systematic framework that follows a doctrinal series of steps and statistical analysis to create objectives, synchronize capabilities during Operations in the Information Environment (OIE), generate MoPs and MoEs (quantitative and qualitative) during the targeting process to guide all intelligence professionals and planners with assessments that include descriptive statistics to describe findings. This framework should be able to integrate PMX into real-world operations seamlessly.

Additionally, the framework permits the joint task force-capable headquarters to respond to emergent requirements and conduct efficient intelligence support to MDO, targeting, and assessments. The SOUTHCOM emphasis on non-lethal operations requires an intelligence professional to demonstrate a comprehension of what intelligence support is required for OIE planners in the areas of joint electromagnetic spectrum operations (JEMSO), denial and deception, military information support operations (MISO), target audience analysis, operations security (OPSEC), cyberspace operations, strategic communication, civil military operations (CMO), public affairs, voice programs, financial threats, and any complementary information related capabilities. The framework should incorporate methods for intelligence professionals to learn how to gather, deliver, and assess weaponized information, planned, and delivered as cross-domain fires.

COUNTERINTELLIGENCE (CI)/HUMAN INTELLIGENCE (HUMINT) PLAY IN PANAMAX

In PMX24, the CJ2X received few intelligence information reports (IIRs) written by U.S. HUMINT teams, even though the Combined Forces Land Component Command (CFLCC) had 11 teams under their control. IIRs resulting from interrogations on detainees in MNFS custody,

specifically the CFLCC and Combined Forces Special Operations Component Command (CFSOCC) were non-existent.

Additionally, the CJ2X was unable to do any type of source evaluations/analysis in the reporting and would benefit from having a database of sources to target collection priorities. Moreover, this would provide some context to a source's placement and access to evaluate the credibility of a source/report.

For future PMX iterations, the link between detainees being captured and intelligence reporting from interrogations needs to be linked in the White Cell. With the speed at which the exercise moves, IIRs from interrogations should flow shortly after detainees are reported as being captured. Waiting for the CJ2X to task components to conduct interrogations forces the CJ2X to operate as if they are at a brigade or lower echelon, not a theater-level headquarters with separate domain components.

The Army Theater Counterintelligence Coordinating Authority (ATCICA) requires a flow of reports containing CI reportable indicators to direct CI Teams within the AOR. For the PMX problem set, we recommend CI reporting should consider including the following:

- Espionage indicators – include items with foreign influence or connections.
- Disregard for security purposes – someone bringing unauthorized electronics into classified areas.
- Unusual work behavior.
- Soliciting others to obtain classified information.

The below observations represent some of the most significant intelligence planning and operations findings from PMX24.

LESSONS AND BEST PRACTICES

Observation. Intelligence Warfighting Function (IWfF) from an interoperability perspective experienced challenges in the procedural and technical dimensions.

Discussion.

Procedural: MNFS & SOUTHCOM common operational pictures (COPs) were established on the Combined Enterprise Regional Information Exchange System (CENTRIX) using Agile Client. The MNFS common intelligence picture (CIP) was established on Secret Internet Protocol Router Network (SIPRNet) using AIDP, while the SOUTHCOM CIP was established on the SIPR using BOHDI. Concerning feeding the CIP (SIPR) to the COP (CENTRIX), the unit did not start the process early enough to develop a cross-domain solution between CENTRIX &

SIPR, forcing the unit to manually "swivel chair" input information between networks, extending process time.

Technical: Although partially resolved, the MNFS CJ2 and SOUTHCOM J2 exercised significant muscle movements to get AIDP accounts for non-Army personnel; however, the unit had to manually transfer CIP information between AIDP and BOHDI. ARSOUTH's 470th Military Intelligence Brigade-Theater created workarounds to enable MNFS attendance to multiple SOUTHCOM meetings (SOUTHCOM Operations and Intelligence (O&I), JCMB, Plans Working Group, etc.) across networks (SIPR and Joint Worldwide Intelligence Communications System (JWICS)). Extra steps created hurdles, overcome with less-than-optimal MNFS participation in some of SOUTHCOM's Boards, Bureaus, Centers, Cells, and Working Groups (B2C2WGs).

Recommendations.

- Units seek correct partner sharing agreements for SIPR to CENTRIX cross domain.
- Ensure systems displaying COP/CIP can transfer information easily or set the COP/CIP solution early in the planning process to allow for technical solutions to be established.
- Request equipment (i.e. Tesseract secure video teleconference (SVTC), etc.) that better support higher network meetings.

Observation. Confusion about the Foreign Disclosure (FD) and Data Transfer Agent (DTA) process.

Discussion. FD is the process used to legally review information before it can be disclosed, released, or transferred to another government. Many requests did not meet the criteria for FD like graphics, templates, or already approved Foreign Disclosure Office (FDO) products. In addition, personnel need to be aware of what the FDO is capable of reviewing- 100+ requests from a single requestor is not feasible. DTA process was not well defined and created confusion concerning their order through FD then DTA.

Recommendations.

- Send out ARSOUTH Enterprise Task Management Software Solution (ETMS2) tasker to all directorates to submit primary and alternate DTAs and FDRs four months prior to the exercise.
- Ensure three months prior to execution, DTAs are identified and submitted for approval through G6 to the 7th Signal Command (NETCOM) (45-day approval process).
- Conduct an FDO briefing two months prior to Planning in Crisis / PMX execution and include a refresher during academics.

- Submit approved FD products on Non-Secure Internet Protocol Router Network (NIPRNet) in the same format as the portal on CENTRIX to familiarize participants with data retrieval and storage for PMX.

Observation. Improve collection requirements management synchronization with operations and fires to enhance operations.

Discussion. Across the WfFs, there is a need to better understand the MNFS battlefield geometry across the staff. The MNFS focus was on the next air tasking order (ATO) cycle (24-hrs). This prevented synchronized planning to support the "deep fight." In order to shape the battlefield to support future operations, MNFS collections need to support collection on enemy predicted COAs as well as to understand enemy actions in the current ATO cycle.

Recommendations.

- Integrate collection management and dissemination (CM&D) w/ CJ33 & CJ35.

- Apportion collection assets for BDA, targeting, shaping, and ADHOC requirements to support the warfighter across the air, land, and sea domains. This requires a larger CM&D cell to attend meetings (JTWG (J35/J5 - branches & sequels), JCMB (ISR allocation), Protection, Cyber/Space/IO (J39)), synchronize with CUOPS (dynamic asset re-tasking), and maintain contact with the Combined Force Air Component Command (CFACC)/Combined Air Operations Center (CAOC). This also requires better coordination and synchronization between the J2 & J3.

- Ensure that the collection "management" function belongs to the CJ2 and the "execution" of the collection plan belongs to the CJ3.

CHAPTER 4

Building and Synchronizing a Multinational Force Headquarters

LTC Matthew P. Wilkinson
Chief, Future Operations, G-3/5/7, U.S. Army South

> Commanders and staffs of multinational forces and subordinate headquarters employ, process, and organize efforts, integrate warfighting functions across multiple domains, and synchronize force actions to accomplish the mission. The operations process consists of planning, preparing, executing, and continuously assessing an operation. Commanders consider each multinational force's capabilities and the desired level of interoperability during the operations process. Commanders especially consider the key relationships and integration points between commanders and staffs. Throughout the operations process, the commander and staff review considerations for achieving and improving interoperability with their mission partners.[8]
>
> FM 3-16, The Army in Multinational Operations, page 1
> 15 July 2024

OVERVIEW

The PANAMAX 2024 (PMX24) exercise highlighted the critical importance of an Army Service Component Command (ASCC)/Theater Army establishing and operating as a multinational force headquarters (HQ). The exercise's success was deeply tied to the effectiveness of Multinational Force South (MNFS) integrating individuals and forces from 15 different nations to defend the Panama Canal. This exercise provided a unique opportunity to test the processes and procedures essential for a functioning multinational force HQ, with lessons applicable to future exercises and real-world operations. The importance of the exercise extends beyond operational readiness. It also served as a platform to enhance multinational interoperability, foster relationships, and test command and control (C2) systems.

PMX24 demonstrated the ability of the MNFS HQ to effectively integrate joint, interagency, and multinational capabilities. This chapter focuses on the processes and procedures that built and synchronized the MNFS HQ and its subordinate component commands- highlighting key successes and offering recommendations for future operations. It also addresses ASCC's

[8] FM 3-16, The Army in Multinational Operations, 15 July 2024, page 1, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN41419-FM_3-16-000-WEB-2.pdf

responsibilities to support a Combined Forces Land Component Command (CFLCC) in a joint operations area (JOA).

BUILDING THE FORCE – FORMING THE MNFS HQ AND INTEGRATING THE STAFF

Forming the MNFS HQ began during the planning in crisis (PIC) sessions well before the exercise commenced. The PIC served as the foundational phase where relationships between key positions, individuals, and component commands were established. This early interaction was crucial in building trust and understanding among the multinational staff. This paid huge dividends during the command post exercise (CPX).

During the PIC, staff members from various nations collaborated to develop the operational approach, synchronization matrix (SYNCMAT), and decision support matrix (DST). These tools were instrumental in aligning the efforts of the multinational force, enabling the staff to operate as a cohesive unit. The PIC also provided a time to identify and resolve potential challenges, ensuring when the remainder of the staff arrived for the CPX, they were stepping into a well-formed and functioning HQ. The PIC facilitated cohesion and produced an executable plan. However, it was only the beginning of building the force.

The joint reception, staging, onward movement, and integration (JRSOI) process also played a critical role in forming the HQ and integrating individuals into a cohesive team. The importance of standard operating procedures (SOPs) and terms of reference (TOR) cannot be overstated in this phase. While the Multinational Force Standing Operating Procedures (MNF SOP) produced by the Multinational Planning Augmentation Team of United States Indo-Pacific Command (INDOPACOM) was available, the challenge lay in making this information accessible and practical for the staff. Creating simple visual aids and including hands-on sessions during the JRSOI helped to bridge this gap. This helped all staff members to be familiar with the procedures and expectations. An effective JRSOI familiarizes the staff with SOPs, in a formal setting, as well as hands-on training. This allows participants to familiarize themselves with their workspaces and networks. Additionally, provides an opportunity to practice SOPs; battle drills; and boards, bureaus, centers, cells, and working groups (B2C2WG) executed at the exercise. Part of the JRSOI was a series of informational briefings. This was supported this year by the Joint Staff J7 Deployable Training Division (DTT). These events brought the MNFS and component command staffs together to receive the exercise's operations order (OPORD) briefing, intelligence update, force protection briefing, a series of doctrinal briefings (across the warfighting functions), review of authorities at this level of operation, and an overview on provided communication networks/applications. (See Figure 4-1)

Figure 4-1. MNFS Commander addressing the staff and CFLCC during JRSOI
(Photo courtesy of PAO, U.S. Army South)

SYNCHRONIZING THE OPERATION AND SUBORDINATE COMMANDS

Synchronization was the cornerstone of the MNFS HQ success during PMX24. The operational approach developed during the PIC was the foundation for aligning the efforts and operations of the multinational force operations. This approach, supported by a SYNCMAT and a decision support matrix (DSM), ensured that all components were working towards the same objectives.

OPERATIONAL APPROACH

The operational approach developed during the MNFS PIC was the cornerstone of the MNFS HQ ability to synchronize efforts across the newly formed staff and subordinate components. This approach provided a clear and unified vision for the operation, as well as a common framework for understanding the mission and the steps required to achieve it ensuring that all subordinate components were aligned with the MNFS HQ objectives. (See Figure 4-2.)

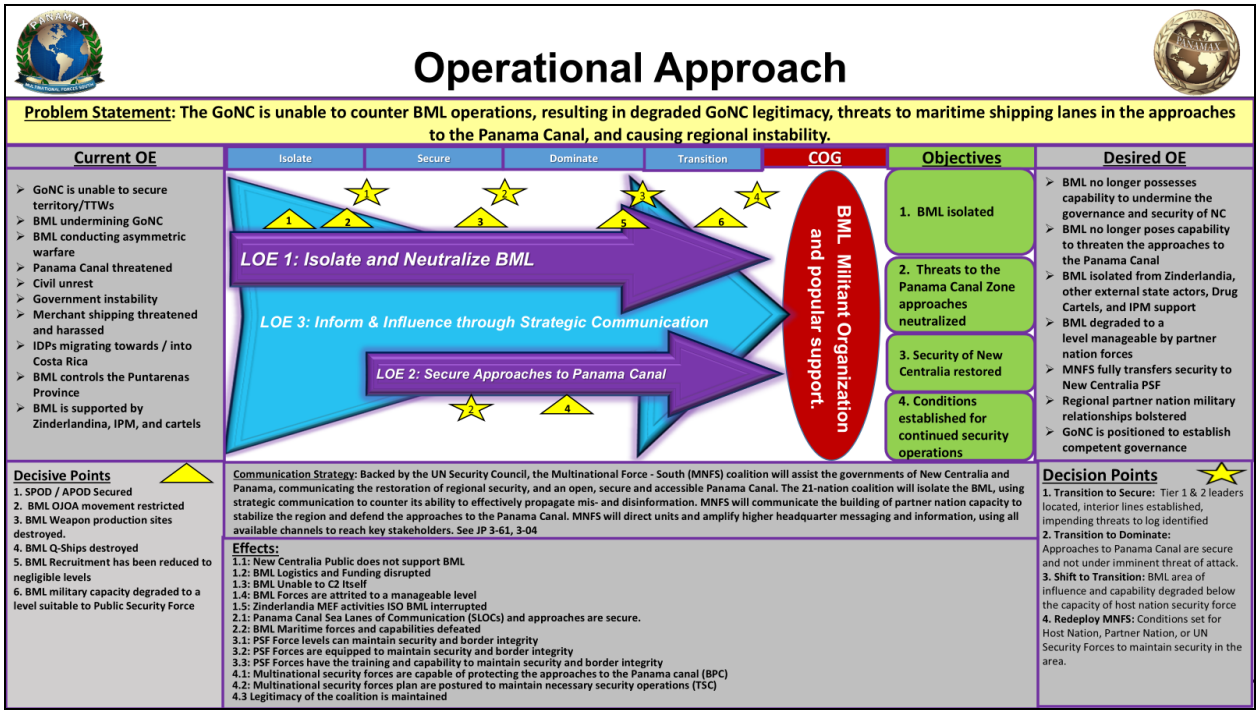


Figure 4-2. PANAMAX 24 Operational Approach
(Chart provided by G35, U.S. Army South)

The collaborative process to create the operational approach and the concept of operations resulted in a plan, not only executable, but also resilient to the complexities of a multinational operation. The SYNCMAT and DST were key outputs of the planning process, providing the staff with tools to coordinate actions and make informed decisions in real time.

MNFS HQ was able to maintain a synchronized effort at a high operational tempo (OPTEMPO) by combining the operational approach with the SYNCMAT, DST, and DSM. These tools allowed for the seamless integration of subordinate components into the overall operation, ensuring all actions were aligned with the MNFS HQ strategic objectives.

COORDINATINATING DURING THE PIC AND POST-PIC SESSIONS

Coordination between the MNFS HQ and subordinate components was established during the Component PIC and reinforced in post-PIC virtual sessions. These sessions provided an opportunity to further align efforts and address any emerging issues before the CPX. The post-PIC sessions were particularly valuable in maintaining momentum and to ensure all components remained synchronized as exercise planning progressed.

These sessions were used to create and adjust SOPs, templates, and to confirm all components were on the same page for the main event. These documents served as the foundation for coordination, providing clear guidelines on roles, responsibilities, and communication protocols. Developing SOPs and TORs in these sessions provided a common standard. Although, the challenge remained in ensuring everyone understood and utilized these documents effectively.

LEVERAGING THE DST AND BATTLE RHYTHM

The DSM is a critical tool in managing the flow of information and decision-making within a multinational force HQ. It provides a structured approach to assessing and prioritizing information, ensuring the commander receives timely and relevant analysis to make informed decisions. The PMX24 DSM was developed with input from all staff sections, reflecting the needs and priorities of the entire. (See Figure 4-3)

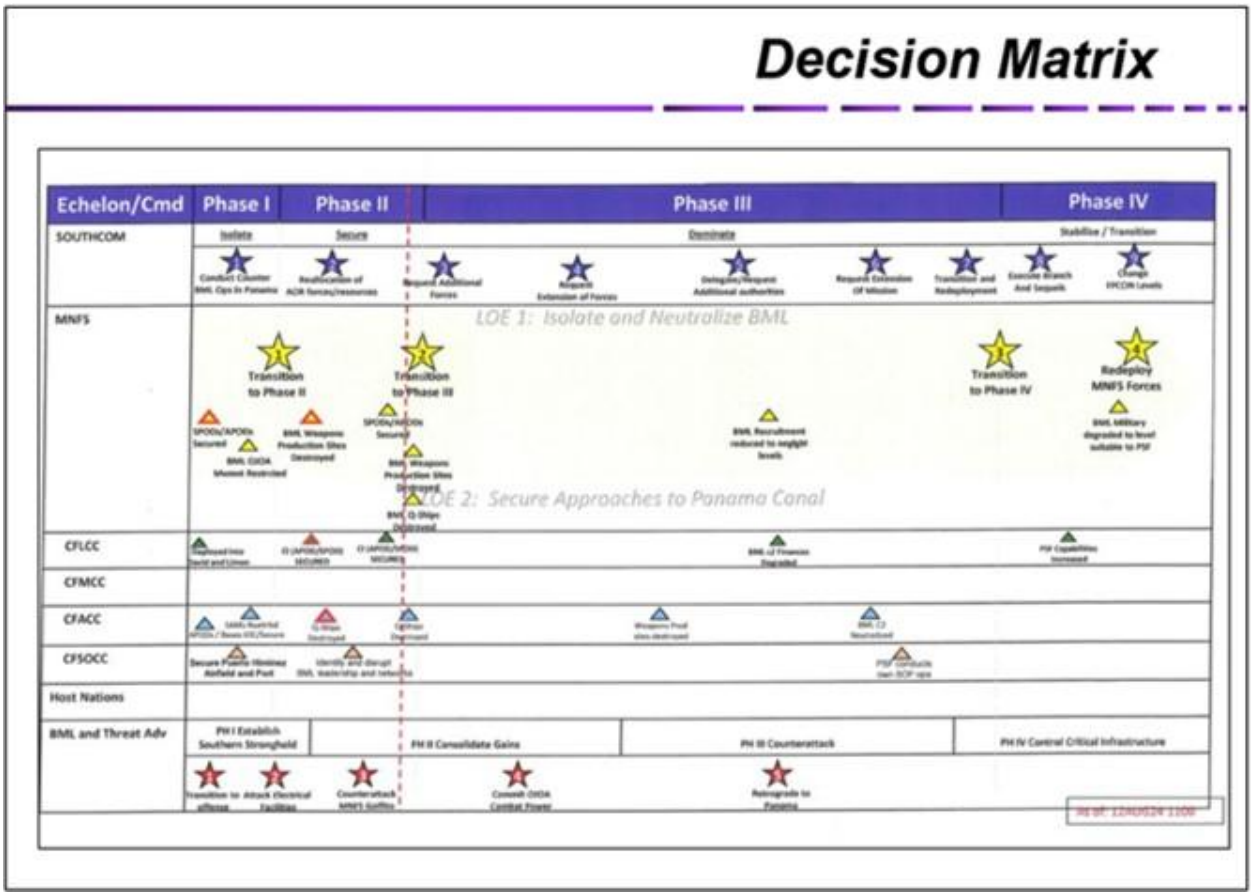


Figure 4-3. PANAMAX 24 Decision Support Matrix
(Chart provided by G35, U.S. Army South)

The battle rhythm, another key component of synchronization, is designed to support the flow of information, time management, and the decision-making process. It provided a structured schedule for briefings, updates, and coordination meetings, ensuring all staff members were aligned and informed. The battle rhythm was flexible enough to adapt to the changing operational environment (OE), allowing the MNFS HQ to maintain a high level of situational awareness/understanding and responsiveness.

Balancing a 12-hour battle rhythm of an exercise with the need for thorough analysis was a challenge. The reliance on PowerPoint briefings introduced latency, as the staff had to pause their analysis to prepare slides. Pre-approved templates for various topics allowed the staff to more quickly update and present new information, minimizing delays. This enabled the staff to

focus on analyzing and assessing the latest information, rather than being constrained by the need to produce slides.

VISUALIZING AND DIRECTING MULTINATIONAL MULTI-DOMAIN OPERATIONS

The concept of Multinational Multi-Domain Operations (MDO) was a central theme in PMX24. Visualizing and conducting MDO in a multinational context requires a clear operational approach which integrated the capabilities and expertise of all participating nations. The MNFS HQ played a crucial role in orchestrating these efforts, ensuring all domains—land, air, sea, space, and cyber—were effectively leveraged to achieve operational objectives.

During the CPX, the MNFS HQ utilized a combination of Joint Operations Center (JOC) procedures, real-time intelligence feeds, and communication networks to visualize and understand the OE and direct operations. This visualization was not limited to traditional maps and overlays; it included the integration of cyber operations, space assets, and information warfare into the overall picture. This comprehensive approach allowed the MNFS HQ to maintain a high level of situational awareness and make informed decisions across all domains.

In terms of C2, the JOC was the nerve center for MDO. (See Figure 4-4) The integration of multinational forces within the JOC required clear communication protocols, standardized procedures, and a shared understanding of operational objectives. The use of pre-approved templates and SOPs facilitated this integration. Additionally, the manning of the JOC is critical to C2. Critical here is having all functions (e.g. fires, information operations (IO), sustainment, etc.) present and operating in the JOC. They must maintain effective and up to date communications with their staff sections and to functional counterparts across the components. This collaboration proved essential to timely decision making.

Figure 4-4. MNFS Joint Operations Center
(Photo courtesy of PAO, U.S. Army South)

SUPPORTING AND SCYNCHRONIZING WITH CFLCC

United States Army South (ARSOUTH), as both the United States Southern Command (SOUTHCOM) ASCC and MNFS HQ, played a crucial role in supporting CFLCC by fostering seamless integration and synchronization of the overall multinational operational strategy. CFLCC as the main effort of the operation was actively involved in developing the operational approach during the PIC sessions. Their input resulted in aligning land operations with MNFS strategic objectives. This coordination supported the land force's ability to effectively contribute to the joint fight by leveraging their capabilities in line with the unified command structure. (See Figure 4-5)

Also, clear communication channels and standardized procedures between MNFS and CFLCC facilitated real-time collaboration during the exercise. The land component staff were fully integrated and familiar with their roles, within the larger multinational framework, by using SOPs and common visual aids.

The SYNCMAT and DST enhanced operational effectiveness and facilitated land operations, enabling the CFLCC to maintain its OPTEMPO while contributing to overall mission success. Additionally, nesting the CFLCC into the battle rhythm allowed for timely updates and adjustments to land operations in response to an ever-evolving OE. This contributed to all land forces being synchronized with MNFS HQ strategic objectives.

Figure 4-5. CFLCC HQ
(Photo courtesy of PAO, U.S. Army South)

KNOWLEDGE MANAGEMENT IN SUPPORTING OPERATIONS

Knowledge management (KM) is crucial to military operations. Organizing and disseminating critical information is a combat multiplier. Effective KM practices enable a MNFS HQ to adapt to the commander's evolving information requirements and to maintain situational awareness

across all domains. In PMX24, the absence of an assigned KM Officer (KMO) was a noted shortfall. Future iterations must prioritize this position.

CONCLUSION

This exercise offered several key lessons and best practices for building and operating a multinational force HQ. For example, the importance of the JRSOI process in forming a cohesive team cannot be overstated. Hands-on training and familiarization with SOPs and networks are essential in preparing a staff for operations. Timely and accurate information sharing using pre-approved templates minimize delays associated with PowerPoint based briefings and supports the commander receiving the most current analysis. The exercise highlighted the need for robust KM practices to support information sharing and clear communications in a complex, multinational OE. Finally, the exercise underscored the necessity for deeper integration and involvement between an ASCC and the CFLCC during both planning and execution. This promotes a more unified and effective land component.

KEY FINDINGS

- Early Integration: Integrating key personnel and components during the PIC proved essential in building a cohesive and effective MNFS HQ.
- Relationship Building: Establishing relationships and trust during the PIC were instrumental for CPX success. Build, early on, relationships among senior leaders and critical elements of the staff and its components. Maintain that relationship throughout the exercise or operation.
- Operational Approach: Developing a clear and flexible operational approach, supported by synchronization and decision support matrices, are essential in aligning the efforts of all components and maintaining OPTEMPO. Ensure the operational approach is clearly understood and communicated for unity of effort in a multinational OE.
- JRSOI and Familiarization: Include both theoretical and hands-on sessions in JRSOI process to ensure everyone is familiar with SOPs, TORs, and operational procedures. The importance of familiarization cannot be overstated, as it directly impacts ability of the staff to integrate and operate effectively. Build a JRSOI structure with half-day briefings followed by half-day hands-on training and familiarization. Ensure all participants have active network accounts and are familiar with their workspaces, networks, and SOPs before the exercise begins.
- Knowledge Management: The role of KM in operations is critical and without this dedicated function at PMX24 created challenges. Dedicated KMO must be present from exercise planning to the end of the exercise (ENDEX) to ensure information is organized on the partner enabled network and flows smoothly.

- Hybrid Briefing Approach: Adopt a hybrid approach to briefings- combining PowerPoint with real-time map and COP-based discussions and briefings. Use pre-approved templates to streamline the preparation of briefings and reduce latency.
- CFLCC Support: Assign dedicated MNFS staff representative to each key CFLCC section to ensure effective CFLCC operations and alignment with MNFS objectives.
- CFLCC Support: Establish an Operations Support Cell at the CFLCC to facilitate coordination and operations during the CPX.
- CFLCC Support: Assign and embed an MNFS O-6 in the CFLCC Command Group to mentor the CFLCC Commander and senior staff.
- CFLCC Support: Prioritize and provide more rapid responses from MNFS to CFLCC. Streamline communication and decision-making processes to enable more timely support in planning, execution, and operational activities. This should reinforce CFLCC ability to meet MNFS mission requirements.
- CFLCC Support: Embed more MNFS representatives in the CFLCC HQ during the CPX. This will enhance integration, promote synchronization, and demonstrate MNFS support for CFLCC requirements.
- Personnel Continuity: Ensure senior, key leaders in MNFS and CFLCC attend both the PIC and CPX to maintain cohesion/relationships resulting in shared understanding and more effective decision making.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant operational planning and operations findings from PMX24.

Observation. Live common operational picture (COP) must be shared and accessible across the MNFS HQ.

Discussion. The current situation should be dynamically available for streaming on computers and large screen displays other than in the joint operations center (JOC). Users, planners, and operators in other sections had to go into the JOC to get the most current situational awareness. This reduces efficiency as they must reproduce the current situation in their workspace.

Recommendation. For future exercises broadcast the COP that is on the JOC so that it is available via streaming link or an "any-display-anywhere" function. The latter would allow "view only" capability limiting the ability for people to manipulate the COP.

Observation. Having a combined MNFS HQ and component commands phone directory would improve communications.

Discussion. SOUTHCOM, MNFS, and component HQ staff experienced friction trying to communicate with MNFS counterparts. Due to an overstaffed MNFS JMD, lack of complete planning of faces to spaces in the build out of the HQ footprint, and no dedicated KM personnel in the MNFS HQ there was not a common directory with phone numbers to reference when direct calls were needed. As a result of an overinflated staff, a lack of computer terminals for all participants existed, with personnel not always logged in to answer chat room or email RFIs and without a phone directory could not be called. Bottom line, the planners in all HQ need to be able to reach out to their functional component counterparts to effectively plan.

Recommendation. Decrease the size of the MNFS staff to the space available, complete the seating plan to develop a phone directory for all staff functions and components and make it easy to find and update on the portal.

Observation. Focusing more on organizing and integrating the combined joint staff before start of the exercise (STARTEX) will enhance operations.

Discussion. PMX24 started without all of the staff having adequate knowledge of the situation of the exercise, roles occupied, vertical and parallel command relationships, and report documentation format to be presented.

Recommendations. Conduct the following as part of the JRSOI process to better organize and integrate the MNFS staff:

- As part of the JRSOI prior to STARTEX explain and discuss the organization so that personnel coming to the exercise can get to know their section and the vertical and parallel command relationships.
- As part of the JRSOI prior to STARTEX, in the battle rhythm briefings, include a class explaining and discussing the types of documentation, required reports, and their formats and forms to fill out to better prepare international staffers manning the sections and to optimize the execution time of the exercise.

Observation. Lack of readily available tools on Combined Enterprise Regional Information Exchange System (CENTRIX) computers for quick product creation, for example course of action (COA) template.

Discussion. A significant lag existed in transferring & posting information and products from Non-Secure Internet Protocol Router (NIPRNet) to CENTRIX due to the requirement to filter through the Foreign Disclosure Office as well as lack of KM representation from each staff section to identify & organize information from their respective section when products were moved onto CENTRIX. Staff will be more effective and efficient by providing the templates and other tools as well as PIC products created on NIPR made readily available on CENTRIX, the primary network the staff uses at PMX.

Recommendations. Require each staff section to assign a KM to work with the HQ KM to identify and organize information transferred to CENTRIX. Additionally, upload a folder in CENTRIX containing images, maps, and cartography along with military symbols so they can be used to create more complete products in less time.

CHAPTER 5

Legal Considerations

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MAJ Mike Davis, Chief, National Security Law, U.S. Army South
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> Legal advisors actively participate in the entire planning process from joint intelligence preparation of the operational environment development, to mission analysis, to course of action (COA) development and recommendation, through execution. Legal advisors assist decision makers at every echelon in translating policy decisions into legally acceptable plans and orders that support national security objectives.[9]
>
> JP 3-84, Legal Support, pages iii-ix
> 2 August 2016

OVERVIEW

U.S. Army South (ARSOUTH) and militaries from Central and South American partner nations (PN), under a United Nations (UN) mandate, established Multinational Force South (MNFS) at exercise PANAMAX 24 (PMX24). In the scenario, the MNFS deployed to the Republic of New Centralia to secure the approaches to the Panama Canal from the "Brigada de Martires de Liberacion" (BML) and other threats; and to conduct offensive, defensive, and stability operations to isolate and degrade the BML. During the exercise, the ARSOUTH Office of the Staff Judge Advocate (OSJA) provided legal support to the MNFS commander and staff on civil, acquisition, fiscal, military, international, and operational law issues during planning and execution.

In accordance with (IAW) the ARSOUTH Exercise PMX24 operations order (OPORD), dated 15 April 2024, the ARSOUTH OSJA was tasked with:

- Ensuring compliance with international law and domestic laws of each nation that may constrain the limits of coalition operations.

- Ensuring that any use of force was consistent with self-defense, the properly issued Rules of Engagement (ROE) and the Law of Armed Conflict (LOAC).

[9] Joint Publication 3-84, Legal Support, pages viii-ix, 2 August 2016, https://jdeis.js.mil/jdeis/index.jsp?pindex=27&pubId=635

- Providing guidance and interpretation on the requirements imposed by the LOAC.
- Providing guidance and interpretation on the limitations and standards imposed by the ROEs governing military operations and ensuring that they are IAW the LOAC.
- Maintaining close communications with U.S. Southern Command Staff Judge Advocate (SCSJA).

RULES OF ENGAGEMENT

> Due to the operational nature of ROE, the Director of Operations (J-3) and his staff are responsible for developing ROE during crisis action planning. Likewise, the Director for Strategic Plans and Policies (J-5) should play a large role in ROE development for deliberate planning. As an expert in the law of military operations and international law, the Staff Judge Advocate (SJA) plays a significant role, with the J-3 and J-5, in developing and integrating ROE into operational planning.[10]
>
> CJSCI 3121.01B, Standing Rules of Engagement, Enclosure J-1, page J-1
> 13 June 2005

Rules of engagement (ROE) are directives issued by competent military authority that delineate the circumstances and limitations under which U.S. forces will initiate and/or continue combat engagement. In simple terms, ROE is the commander's tool to regulate the use of armed force in military operations.

As in past iterations of PANAMAX, the training audience used the Sanremo Handbook on Rules of Engagement (the "Handbook") to develop the operational authorities needed to execute the Combatant Commander's intent. The Handbook provides exercise participants a common ROE development methodology and operational guidance. This enabled member of the multinational force to negotiate "policy and legal differences" that might have otherwise resulted in operational "friction."[11] Using the Handbook, each participant provided their national caveats during the exercise planning conferences, resulting in a coherent multinational ROE. These were captured on a ROE matrix.

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[10] CJCSI 3121.01B, Standing Rules of Engagement, Enclosure J, page J-1, 13 June 2005 https://safe.menlosecurity.com/doc/docview/viewer/docN3864608A78BFf93b933e87c6e49e5cbb2fae7b9c84c5df8cbf6861b28494591bcef367e1a738

[11] Sanremo Handbook on Rules of Engagement, November 2009, https://iihl.org/Rules-of-Engagement/

The MNFS OSJA encountered a lack of knowledge regarding multinational ROE. Very few personnel had a solid understanding of how the Handbook was intended to be used, and which directorate is tasked with publishing the ROE. This lack of understanding did not only cause some delays at the beginning of the exercise, but also created the perception that PNs did not have an equal say in the development of the ROE since working groups were mostly dominated by U.S. legal personnel. In the future, both U.S. and PN personnel should attend workshops offered at the International Institute of Humanitarian Law, in San Remo, Italy. A good practice would be for each PN to send one legal advisor and one operational planner to attend the workshop before participating in PMX.

Despite coordination during the planning conferences, the ROE message was not published until the day prior to execution. To be candid, the failure to authorize ROE through a ROE message prior to the MNFS Planning in Crisis (PIC) negatively impacted the ability of the MNFS staff to plan and execute the Combatant Commander's intent. Of note, the late issuance of ROE has been identified in past PMX exercises and discussed in previous after action reviews (AARs) with little to no improvement. Specifically, findings at PMX22, in August 2022, recorded "because there was minimal opportunity to coordinate and deconflict the ROE and develop the ROE matrix between MNFS J-3 and OSJA before STARTEX, there was confusion early in the exercise regarding approval authorities for different strikes and delayed execution of notional in-exercise missions."[12] This predicably negatively impacted the staff's ability to exercise the ROE development process. (See Figure 5-1)

[12] Paul K. (Keith) Warman and Robert A. Schafer, CALL Publication No. 24-795, PANAMAX 22 (Operation Futuro Noble), page 69, 22 November 2023, https://api.army.mil/e2/c/downloads/2023/11/29/deb07c2a/24-795-panamax-22-oct-23-public.pdf

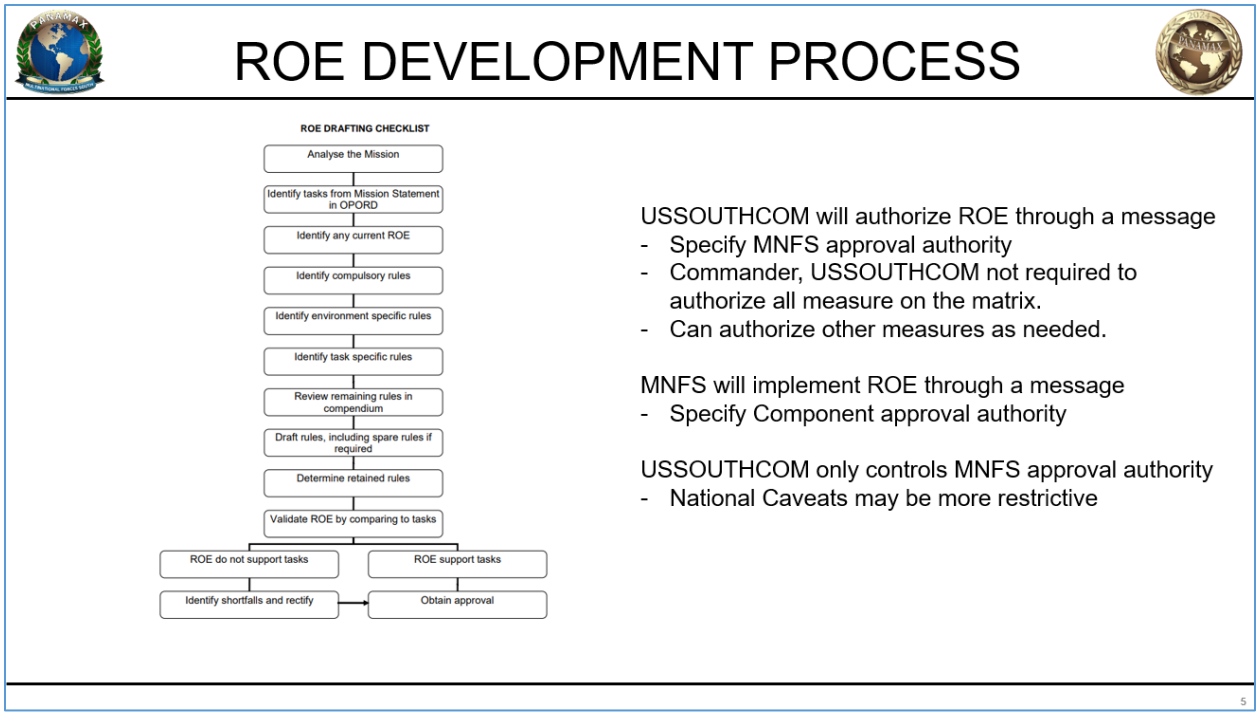


Figure 5-1. ROE Development Process
(Chart provided by OSJA, U.S. Army South)

Because the exercise scenario does not differ significantly year to year, the ROE should be published ahead of the MNFS PIC. This will allow the training audience to exercise the ROE development process ahead of execution and the ROE change process during execution.

JOINT TARGETING

> Joint targeting is the continuous, analytic, and integrative process of developing, selecting, and prioritizing targets and matching the appropriate response to them, considering command objectives, operational requirements, available capabilities, and the rules of engagement (ROE).[13]
>
> JP 3-60, Joint Targeting, page vii
> 20 September 2024

The purpose of the joint targeting process is to create desired effects in the operational

[13] JP 3-60, Joint Targeting, page vii, 20 September 2024
https://jdeis.js.mil/jdeis/new_pubs/jp3_60.pdf

environment to support achievement of the commander's objectives through prioritization, integration, synchronization, and application of fires and other capabilities. This includes the delivery of both lethal and non-lethal effects on targets. Judge Advocates (JAs) provide legal support to targeting throughout the joint targeting process. The advice rendered by JAs includes the application of the law of armed conflict, rules of engagement, target engagement authorities, and intelligence law.

During PMX24, the delayed publication of the ROE delayed the publication of a joint integrated prioritized target list (JPTL), delayed the approval of the air tasking order (ATO), and delayed starting of the targeting cycle. In an exercise where the duration is measured in days, this delay resulted in missed training opportunity. Additionally, the delayed publication of ROE also impacted the command's ability to effectively conduct the joint targeting process.

During PMX24, both U.S. and PN OSJA personnel directly participated in the targeting cycle and provided legal support during every targeting related battle rhythm event. Despite the delayed publication of the ROE, OSJA was able to develop a hasty target engagement authority ROE reference to aid the command and staff during the joint targeting process.

Additionally, having two U.S. JAs fluent in Spanish facilitated communication and understanding with PN personnel during working groups. Because the joint operating area (JOA) included maritime operations having a Navy JA was invaluable when addressing issues or concerns regarding potential targets in the maritime domain.

OSJA participation in all targeting related battle rhythm events, together with having U.S. JAs fluent in Spanish, and from across the components enhanced interoperability. The impact on targeting due to the delayed publication of the ROE underscores the importance of publishing the ROE prior to the MNFS PIC.

FORMING THE TEAM

> The most impactful way to achieve interoperability is by establishing relationships with the legal personnel of our allies and partners as early as possible.[14]
>
> Best Practices of Multinational Legal Interoperability Smartbook, page 1-1 2024

The MNFS Staff Judge Advocate (SJA) is the principal legal advisor to the commander, MNFS staff, and a is a member of the MNFS special staff. The MNFS SJA is responsible for legal

[14] Best Practices of Multinational Legal Interoperability Smartbook, The Judge Advocate General's Legal Center and School, U.S. Army, 2024 https://tjaglcs.army.mil/LinkClick.aspx?fileticket=ns8OTaB4fyY%3d

personnel assigned to the MNFS, providing legal support to the MNFS, and coordinating with the legal advisors at the strategic, operational, and tactical levels.

During PMX24, legal support was provided by a joint international MNFS OSJA led by a U.S. Army Colonel (O-6). The U.S component consisted of a U.S. Army Major (O-4) Chief of National Security Law, two National Security Law Attorneys (a U.S. Army Captain (O-3) and Navy Lieutenant (O-3), and two paralegals (a U.S. Army Sergeant (E-5) and U.S. Air Force Technical Sergeant (E-6). The PN component consisted of a Peruvian Air Force Colonel (O-6) and Ecuadorian Army Lieutenant Colonel (O-5). This team played a vital role advising the MNFS Commander and staff on targeting, ROE, LOAC, inter-agency roles and responsibilities, non-governmental organizations, fiscal law, administrative law, and international law.

Figure 5-4. MNFS legal team at PMX24
(Photo courtesy of OSJA, U.S. Army South)

While the foundations of interoperability are broad, spanning the human, technical, and procedural domains of all warfighting functions, for legal practitioners the primary focus is on the human and procedural domains. This is because JAs rely on people and processes rather than systems and hardware. In practices, achieving legal interoperability is not only a matter of understanding international agreements, treaties, and PN ROE caveats but also establishing relationships based on mutual understanding and respect.

Key to the success of building these relationships was the early participation of PN legal advisors in the MNFS PIC and Component PIC. These events enabled U.S. and PN participants to develop the mutual understanding and respect fundamental to forming a cohesive team capable of achieving unity of effort and operational success. This further lent itself to developing procedural interoperability as U.S. and PN legal personnel established a deeper understanding of each other's doctrine and policies, enabling operational harmony.

From the perspective of PN legal personnel, PMX24 provided an opportunity to participate in a dynamic, multinational training exercise in which they could experience a new perspective on legal support to military operations. PMX24 allowed U.S and PN legal personnel to foster friendships that will strengthen our partnership with PN legal personnel. The relationships forged enriched our mutual understanding of international legal norms and PN and U.S. standards, enhancing legal interoperability for future operations.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant legal support findings from PMX24.

Observation. ROE authorization message was published a day prior to the start of exercise (STARTEX).

Discussion. This is a recurrent issue. Delayed publication of the ROE resulted in delayed publication of a JPTL, delayed approval of the ATO, and delayed starting the targeting cycle.

Recommendation: Ensure the ROE is published prior to the MNFS PIC.

Observation: MNFS legal personnel participated in all targeting related B2C2WGs.

Discussion. MNFS legal personnel participated in targeting battle rhythm events providing accurate, timely, and relevant legal advice during U.S. led targeting process.

Recommendation. Sustain MNFS legal personnel participation in targeting B2C2WGs.

Observation. Developing relationships before STARTEX between U.S. and PN legal teams enhanced interoperability.

Discussion. JAs rely on people and processes rather than systems and hardware. Establishing personal and professional relationships with PN legal personnel proved key in fostering a more common understanding on legal matters.

Recommendation. Ensure U.S. and PN legal personnel continue attending the MNFS and Component PICs. For PMX 26, invite PN legal personnel to the PMX mid and final planning conferences to further enhance legal interoperability.

CHAPTER 6

Combined Joint Fires and Targeting Process

MAJ Philip J. McCormick, Information Operations Officer, U.S. Army South

> Interoperability is the ability to act together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives (JP 3-0). Multinational interoperability for fires must incorporate human, procedural, and technical means to create effects from within a multinational force.[15]
>
> ADP 3-19, Fires, page 3-3
> 31 July 2019

OVERVIEW

Targeting is a complex and multi-domain effort requiring coordinated interaction between various entities. This article examines the Multinational Force South (MNFS) Combined Joint Fires and Targeting process using the Planning, Preparing, Executing, and Assessing framework as outlined in ADP 5-0. Drawing from the experience of U.S. Army South (ARSOUTH), an Army Service Component Command (ASCC), operating with limited resources dedicated to targeting, we highlight critical observations, challenges, and successes encountered during PANAMAX 24 (PMX24). These insights offer valuable lessons for future iterations of PMX, and units engaged in similar training exercises or real-world operations.

PLANNING

At the beginning of the exercise, the lack of clearly defined task organization for assets within engineer battalions created challenges. Engineer units including construction companies, combat engineer companies, and route clearance packages were not under operational control (OPCON) to the Combined Forces Land Component Command (CFLCC) before the start of PHASE 2 (Secure). This oversight led to inefficiencies in tactical support and a disjointed approach to operational tasks until MNFS released them OPCON to the CFLCC. To avoid such issues in future exercises, it is essential to predefine and organize these assets ahead of time. Additionally, detailed capability descriptions for specific companies must be included in Appendix 6 to Annex D (Engineer Support Plan) to ensure all personnel have a clear understanding of each unit's

[15] ADP 3-19, Fires, page 3-3, 31 July 2019
https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN18615_ADP%203-19%20FINAL%20WEB.pdf

abilities and how they can best contribute to the mission. This approach will reduce confusion and enhance the coordination of engineer support efforts.

Fires and targeting planning commenced with assigning personnel to manage the targeting process. A significant initial challenge emerged as ARSOUTH faced personnel transitions, leaving the Fires and Effects Directorate (FED) without any 13-series officers with relevant targeting expertise. In response, an IO Officer (FA30) was designated, in March 2024, as the Targeting and Lethal Fires Officer for PMX24. However, there was no plan for the new Targeting Officer to receive specialized Army or Joint-level training specific to the role. To establish a baseline knowledge of the targeting process, the ASCC should request United States Southern Command (SOUTHCOM) support to increase the likelihood of securing training slots for non-13-series officers assigned to this role.

The Targeting Officer's first task was reviewing the Targeting Standard Operating Procedures (SOP) initially developed during the PMX22 exercise. This SOP required reformatting to align with PMX24 standards and needed re-approval from the Foreign Disclosure Office (FDO). After receiving FDO approval, the SOP was translated into Spanish with assistance from the Security Cooperation Division (SCD) to ensure effective dissemination among partner nation (PN) participants. Translating the SOP is a recommended best practice for enhancing multi-national interoperability and collaboration.

During the Planning in Crisis (PIC) event in San Antonio, from 22 to 26 April, the targeting officer established initial contact with the multi-national CJ36 Fires Director, a Colonel from Ecuador, and a Joint Fires Subject Matter Expert (SME) from the Joint Enabling Capabilities Command (JECC). The CJ36 developed a basic concept of fires with an initial High Pay-off Target List (HPTL), requests for fire assets, and critical fire tasks. The CJ36 team also produced a Joint Fires Appendix containing priorities of fires, targeting objectives and effects, and initial guidance on dynamic targets. However, due to limited understanding of the intricacies of targeting, the CJ36 team did not develop critical targeting synchronization tools such as the attack guidance matrix (AGM), targeting synchronization matrix (TSM), or fires support coordination measures (FSCM). These products require development in future MNFS PICs to enhance targeting effectiveness.

The subsequent critical planning event was the MNFS Component PIC in Miami from 13 to 24 May. The CJ36 Director from Ecuador represented our multi-national targeting partners, but other critical international targeting officers expected to join us for PMX were absent. The components did not start the conference with designated targeting officers or sections. To enhance future iterations of the MNFS PIC, clearly define and prioritize targeting requirements for personnel and planning efforts at the event's outset. Scheduling breakout sessions for targeting will build a shared understanding and facilitate coordination. Additionally, FSCMs should be developed to support the maneuver scheme during the Component PIC.

The Component PIC in Miami offered a crucial opportunity for SOUTHCOM to begin integration into the MNFS targeting process. As defined in JP 3-09, Joint Fire Support, “The Joint Force Commander is responsible for all aspects of joint fires planning, prioritization,

coordination, execution, and assessment."[16] SOUTHCOM targeting guidance is required to define the targeting process across the components, MNFS, and combat command levels. The combatant command (CCMD) manages the target list and vets and validates targets. Specifically, SOUTHCOM must approve the establishment of a joint integrated prioritized target list (JIPTL), no strike list (NSL), and restricted target list (RTL), as well as determine targeting approval authority. Moving forward, the best practice for the MNFS at Component PICs is maximizing PN and SOUTHCOM participation while setting clearly defined tasks for the targeting enterprise from the outset.

PREPARE

The preparation phase began in July with two main priorities: 1) Preparing an in-depth briefing on MNFS targeting for PMX Academics Week and 2) Hosting virtual targeting working groups with the components and SOUTHCOM. The MNFS Academics brief is divided into three sections: 1) a review of the targeting after action report (AAR)/comments from PMX22, 2) an overview of the Deployable Training Team (DTT) targeting class, and 3) a summary of the MNFS Targeting SOP for PMX24. To integrate these efforts efficiently, the ARSOUTH targeting officer developed the MNFS Targeting SOP for the Academic briefings in conjunction with the virtual targeting working group. This simultaneous approach yielded positive results and is a recommended best practice for future exercises.

A key focus of the MNFS Targeting SOP was establishing the pre-exercise air tasking order (ATO) and "targeting storyline" in close coordination with Air Forces Southern (AFSOUTH). The working group coordinated for the "Papa" ATO cycle to begin on 9 August, the first day of the exercise, following the conclusion of the "Zulu" Cycle on 8 August. Designing the 72-hour ATO cycle allowed for same-day target execution, a 48-hour window for target approval, and a 72-hour window for planning targets. This system theoretically enabled components to plan targets 72 hours in advance, enhancing overall coordination and efficiency. Coordinating and solidifying these dates was an effective best practice for improving synchronization and operational effectiveness. (See MNFS targeting cycle at Figure 6-1)

[16] JP 3-09, Joint Fire Support, page I-1, 10 April 2019
https://jdeis.js.mil/jdeis/index.jsp?pindex=27&pubId=693

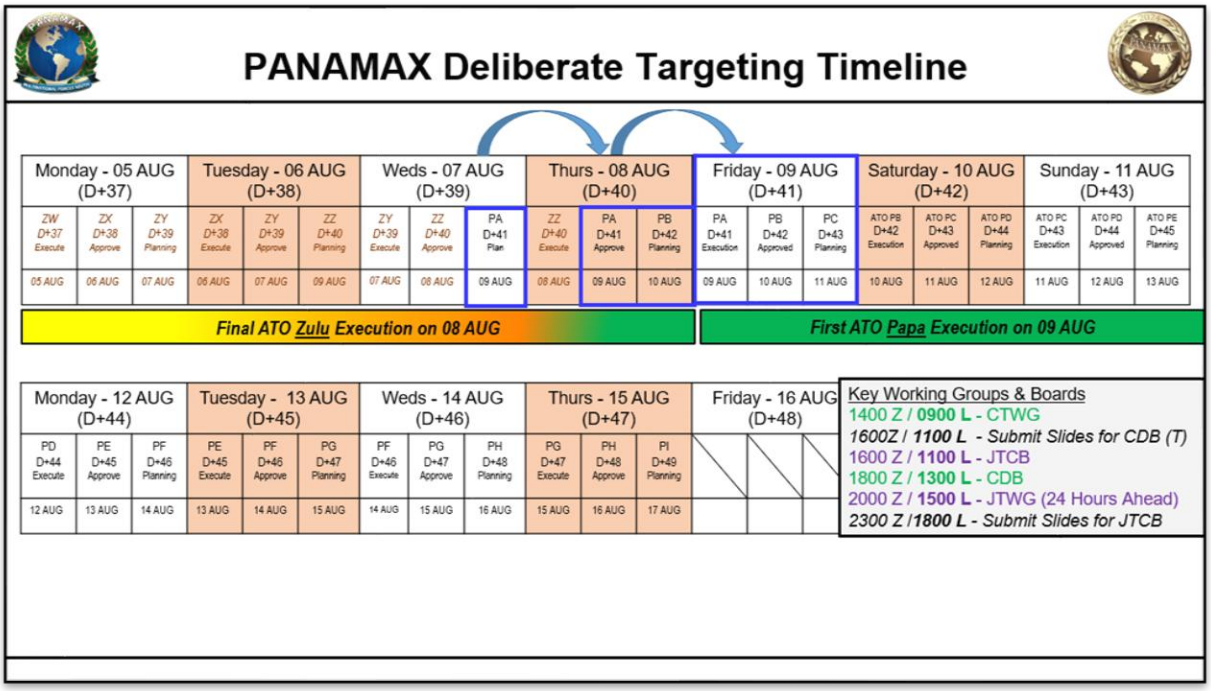
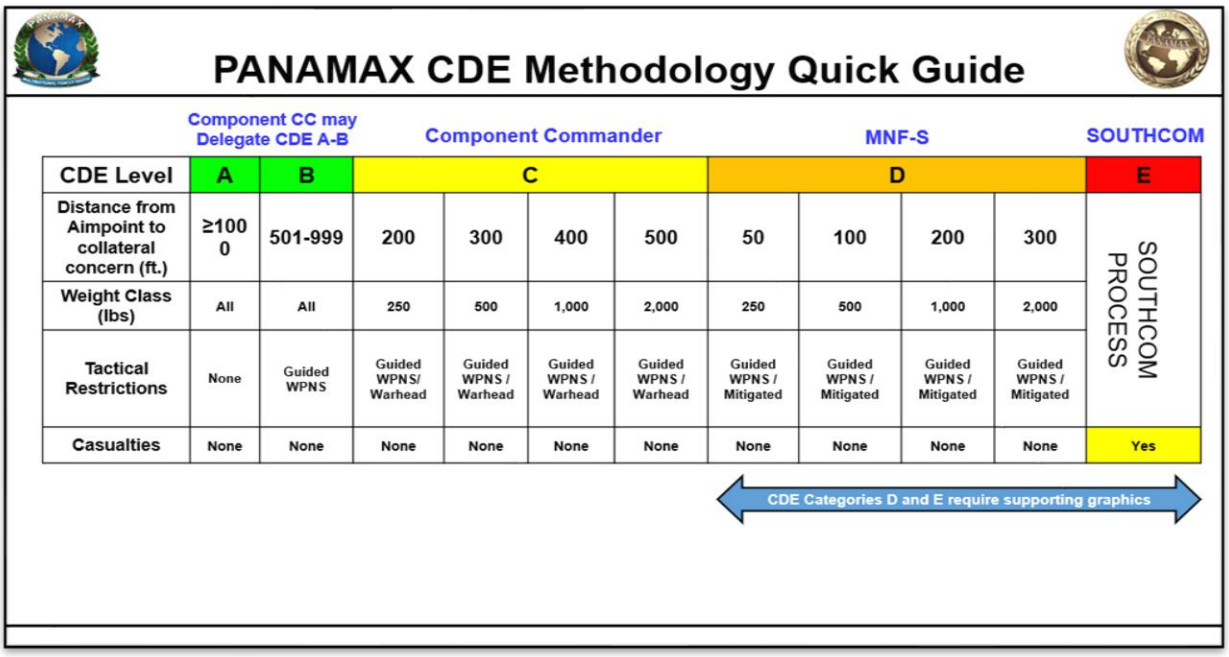


Figure 6-1. Scheduled MNFS Targeting Cycle
(Chart provided by ACS FED, U.S. Army South)

Another key objective of the working group was establishing exercise PN friendly collateral damage estimation (CDE) parameters. Instead of employing the standard Joint Staff CDE framework (1 through 5), the MNFS developed a modified framework using Categories A through E. (See MNFS collateral damage estimate methodology at Figure 6-2) Category E was the most restrictive category, requiring SOUTHCOM approval for any targets where civilian casualties (CIVCAS) were probable. Although this framework became overly restrictive during the exercise, the dialogue and discussion it generated benefited the targeting process. We recommend developing a refined CDE framework in coordination with SOUTHCOM before future exercises. Additionally, we suggest creating a CDE methodology similar to the North Atlantic Treaty Organization (NATO) CDE framework for use among PNs in the Western Hemisphere to enhance interoperability.



PANAMAX CDE Methodology Quick Guide

	Component CC may Delegate CDE A-B		Component Commander				MNF-S				SOUTHCOM
CDE Level	A	B	C				D				E
Distance from Aimpoint to collateral concern (ft.)	≥1000	501-999	200	300	400	500	50	100	200	300	SOUTHCOM PROCESS
Weight Class (lbs)	All	All	250	500	1,000	2,000	250	500	1,000	2,000	
Tactical Restrictions	None	Guided WPNS	Guided WPNS/ Warhead	Guided WPNS / Warhead	Guided WPNS / Warhead	Guided WPNS / Warhead	Guided WPNS / Mitigated	Guided WPNS / Mitigated	Guided WPNS / Mitigated	Guided WPNS / Mitigated	
Casualties	None	None	None	None	None	None	None	None	None	None	Yes

CDE Categories D and E require supporting graphics

Figure 6-2. The MNF-S Collateral Damage Estimate Methodology (Chart provided by ACS FED, U.S. Army South)

The virtual Targeting Working Group (TWG) also established which targets were notionally engaged before the exercise's official start. The PMX24 scenario notionally commenced at D+41, leaving a requirement to account for targeting activity during the initial 40 days in the scenario. The ARSOUTH targeting officer took on the responsibility of nominating a series of targets for the Operations and Intelligence (O&I) report. These nominations were then disseminated to the components and SOUTHCOM and were instrumental in the compilation of an MNFS joint target list (JTL) by the Combined Forces Air Component Command (CFACC), which included prioritization and battle damage assessment (BDA).

At PMX24, SOUTHCOM decided to bifurcate the targeting process, and ARSOUTH's targets were not included in SOUTHCOM's JIPTL. SOUTHCOM specified that only MNFS targets nominations generated from outside the joint operations area (OJOA) or those in the CDE category, where there was a significant risk of CIVCAS, could be recommended for the JIPTL. The MNFS could neither conduct intermediate target development nor secure the authorities from the CCMD to validate targets. This led to a more precise target nomination process and significantly slowed the target approval process. Additionally, the bifurcation of the joint targeting process created two ATOs, one for the MNFS JOA, and one for the rest of the CCMD AOR. A best practice for future iterations of PMX is the CCMD leads and conducts the joint targeting process for the entire AOR, developing all required target lists before the start of the exercise (STARTEX) with input from the components and MNFS.

EXECUTION

The CJ36 team quickly organized, established work priorities, and established a battle rhythm during PMX execution. They were augmented by two officers: one from the Joint Enabling

Capabilities Command (JECC), who assumed the role of Deputy Fires Support Coordinator (FSCOORD), and another from the 71st Tactical Information Operations Group (TIOG) to facilitate non-lethal integration. The team was led by a Colonel from Ecuador, with additional support from one more targeting officer provided by Ecuador. Peru contributed one Army officer and one Navy officer to support targeting efforts. (See the CJ36 team together at Figure 6-3) Notably, the C36 needed a dedicated targeting warrant officer, leading to a technical gap in knowledge of the targeting process.

Figure 6-3. MNFS CJ-36 team developing targeting products
(Photo courtesy of PAO, U.S. Army South)

The CJ36 revolved its battle rhythm around the Combined Targeting Working Group (CTWG), which convened daily at 0900. The CTWG played a vital role in gathering, refining, and prioritizing target nominations from the MNFS staff and components. (See MNFS CTWG 7-Minute Drill at Figure 6-4) However, tactical communication challenges hindered the CTWG's effectiveness and limited effective dialogue with the components. To overcome these setbacks, also a reoccurring problem from last PMX22, the CJ36 should allocate more time to battlefield circulation and face-to-face meetings, particularly with the CFLCC. Also, conducting additional off-schedule touchpoints with components may ensure better coordination and communication.

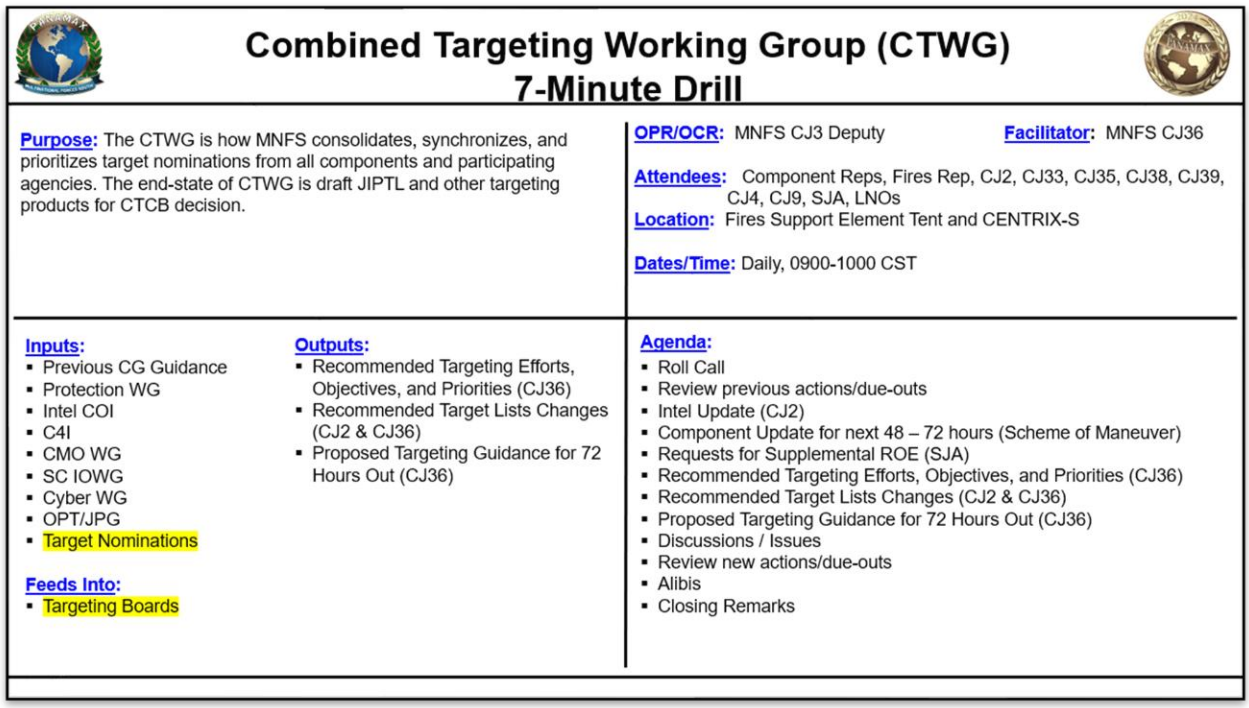


Figure 6-4. MNFS Targeting Working Group 7-minute drill
(Chart provided by ACS FED, U.S. Army South)

Despite these challenges, the CTWG successfully integrated lethal and non-lethal effects into the targeting process, enabling strikes on targets on the MNFS JTL, and nominating others to SOUTHCOM. Instead of routing target nominations through a traditional targeting board, MNFS targets were approved directly by the Deputy Commanding General for Operations (DCG-O). This ad-hoc method, while effective for rapid decision-making, is not recommended for future operations as it disrupts synchronization between operations and intelligence. Moving forward, MNFS should allocate dedicated time and space for a separate targeting board chaired by the MNFS J3, ensuring better coordination and synchronization of efforts.

ASSESSMENT

Assessment helps identify threats, suggests improvements to effectiveness, and reveals opportunities. While the evaluation of the targeting process during PMX24 does not reveal any immediate threats, it does highlight areas within the ARSOUTH Targeting Enterprise for improvement. More importantly, it reveals significant opportunities for future growth.

To strengthen the ARSOUTH targeting process for PMX26 and beyond, a comprehensive overhaul of the ARSOUTH Targeting SOP should be the priority, incorporating all recommendations from this article. It is crucial to codify the list of targeting products that require production during each PIC event. The ARSOUTH targeting process is moving in the right direction and must maintain momentum while capturing lessons and best practices.

Additionally, ARSOUTH should focus on bringing an additional 13-series officer into its ranks and invest in sending members of the Targeting Enterprise to specialized targeting training. This personnel change will enhance expertise within ARSOUTH and ensure readiness for future operations.

Finally, increasing opportunities to exercise the targeting process outside of PMX by submitting more requests to participate in SOUTHCOM exercises like FUSED RESPONSE, where the targeting process is actively used, will further refine and enhance ARSOUTH fires capabilities. This approach will also benefit from familiarizing ARSOUTH staff with SOUTHCOM personnel and processes, setting conditions for successful PMX exercises.

CONCLUSION

Expanding the targeting process with multinational partners has the potential for significant returns on investment. We recommend that ARSOUTH collaborate with PNs to build interoperability, beginning with doctrine development. This requirement is particularly evident with Ecuador, which provided the Director for the CJ36, but currently does not have its own targeting doctrine. ARSOUTH is well-positioned to lead these efforts, as the partner of choice in the Western Hemisphere, to enhance regional security cooperation and capability development. ARSOUTH can maximize the impact of these initiatives by carefully selecting and prioritizing opportunities for training and SME exchanges. This will strengthen partnerships and improve multinational targeting capabilities for PMX and potential real-world operations.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant combined joint fires and targeting process findings from PMX24.

Joint Targeting Process Adherence

Observation. The CCMD did not follow the joint targeting process as outlined in JP 3-09, Joint Fire Support, resulting in gaps in execution and MNFS integration.

Discussion. Joint targeting requires adherence to doctrine to ensure coordinated and effective fire support operations. SOUTHCOM must take the lead in defining and managing the process, integrating MNFS inputs to ensure unity of effort.

Recommendations. Follow the targeting process and responsibilities defined in JP 3-09. Require SOUTHCOM to run the joint targeting process and ensure MNFS integration.

Pre-Exercise Target Accounting

Observation. There is no clear process for accounting for targets notionally engaged before STARTEX, leading to coordination and scenario management issues.

Discussion. Pre-exercise targeting data for PHASES I (Isolate) and II (Secure) is required for effective cross-component coordination. Without a clear and shared process, we reduce exercise value.

Recommendation. Develop a standardized process for accounting for notional targets before exercises begin to improve realism and synchronization.

Refinement of the Targeting SOP

Observation. Maintaining an up-to-date Targeting SOP was beneficial, but further refinement is needed to include lessons learned and ensure early releasability to PNs.

Discussion. A current, releasable SOP enhances targeting operations and interoperability. Key challenges include translating acronyms and ensuring both hard and electronic copies are accessible.

Recommendations. Continue refinement of the Targeting SOP, incorporating lessons and best practices from this exercise. Translate a releasable FDO version for sharing with PNs to promote interoperability.

Separate Targeting Board

Observation. Targeting boards lacked doctrinal alignment, reducing coordination between operations and intelligence.

Discussion. A targeting board chaired by the MNFS J3, with senior leader participation, would improve synchronization, doctrinal alignment, and shared understanding. Avoid reliance on individual touchpoints to ensure a unified approach.

Recommendation. Implement a doctrinally correct, separate targeting board to improve coordination and synchronization between operations and intelligence, enhancing targeting effectiveness.

Development of Fires Support Coordination Measures (FSCMs)

Observation. Insufficient CFLCC-CFACC collaboration on FSCM development degraded fire support integration and maneuver synchronization.

Discussion. FSCMs are essential for synchronized fire support. Early and consistent collaboration during the exercise preparation phase optimizes operational outcomes.

Recommendation. Deliver early in-depth FSCM training and support continuous collaboration between CFLCC and CFACC to refine FSCMs during wargaming and orders production for better fire support integration.

Collateral Damage Estimation (CDE) Process Refinement

Observation. Tactical-level CDE issues are frequently escalated to the CCMD level, complicating decision-making and slowing operational tempo (OPTEMPO) and decision making.

Discussion. Refining the CDE process ensures tactical issues are resolved efficiently, minimizing escalations and enhancing the joint kill chain's lethality.

Recommendations. Conduct rehearsal of CDE execution before the exercise. Develop a CDE process to address tactical-level issues at MNFS level and below, reducing CCMD involvement and improving decision-making efficiency.

CHAPTER 7

Protection

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COL Mark A. Davis, Director, Operational Protection, U.S. Army South

> Protection determines the degree to which potential threats or hazards can disrupt operations and initiates active and passive measures to prevent and mitigate those disruptions. When commanders understand the operational environment and their protection capabilities, they coordinate, integrate, and synchronize protection capabilities to reduce risk, mitigate identified vulnerabilities, and create windows of opportunity.[17]
>
> ADP 3-37, Protection, page 1-1
> 10 January 2024

OVERVIEW

Army Regulation (AR) 34-1, Interoperability, defines interoperability "as the ability to act together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives."[18] United States Army South (ARSOUTH) Operational Protection Directorate (OPD) with joint and partner nation (PN) protection staff participated in the PANAMAX 2024 (PMX24) exercise. Throughout, the team conducted collaborative planning and preparation to employ protection capabilities, to create comprehensive, integrated, and enduring effects to prevent/ mitigate threats, and to enable freedom of action. The ability to protect and preserve the force and secure the assigned area of responsibility (AOR) remained vital to achieving agility, convergence, and endurance during operations. OPD incorporated and integrated a layered, defense-in-depth approach to PMX24, optimized Critical Assets List (CAL) and Defended Assets List (DAL), synchronized protection capabilities and capacities from a multi-domain perspective, and worked to close critical capability gaps through the United States Southern Command (SOUTHCOM) CJ341 Protection Branch.

TASK ORGANIZATION

[17] ADP 3-37, Protection, page 1-1, 10 January 2024, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN40011-ADP_3-37-000-WEB-1.pdf
[18] AR 34-1, Interoperability, page 1, 9 April 2020, https://armypubs.army.mil/epubs/DR_a/pdf/web/ARN19606_AR24-1_FINAL.pdf

ARSOUTH OPD, known throughout the exercise as Multinational Force South (MNFS) Protection (Pro) allocated protection resources and established protection priorities in support of the MNFS Main and supporting efforts. As expected, the protection priorities changed based on the operational phases and anticipated transitions. Throughout the exercise, MNFS Pro synchronized the maneuver of organic protection units consisting of a military police (MP) battalion; chemical, biological, radiological, nuclear, and explosives (CBRNE) company; and an explosive ordnance disposal (EOD) company. Additionally, the MNFS Pro supported tactical control (TACON) realignment of MNFS protection capabilities such as air defense artillery (ADA), personnel recovery (PR), engineer (ENG), and MP assets to assist the Combined Force Land Component Command (CFLCC) in mitigating vulnerabilities and to reduce threats against friendly forces near their highest troop and equipment concentrations.

PLANNING AND CONDUCTING JOINT AND MULTINATIONAL PROTECTION SYNCHRONIZATION

Before and during the exercise, MNFS Pro conducted internal, external, and lateral Protection Working Groups (PWG) to accomplish various protection responsibilities. These WGs synchronized protection assets, enhanced understanding through staff estimates and mission analysis development, and fused tactics, techniques, and procedures (TTPs), and policies with PN security forces. Ahead of execution, MNFS Pro provided detailed protection training objectives, outlines, annexes, and appendixes to develop broader awareness of the protection operational concept. The initial WG started at the Plan in Crisis (PIC) meeting o/a 24 April 2024 and continued virtually after the PIC, via Microsoft Teams to synchronize standard operating procedures (SOP), refine protection concepts of support, and consolidate protection capabilities and coverage gaps. The PWGs enabled OPD team to synchronize protection assets and to identify critical capability gaps and potential emerging threats to MNFS missions, equipment, personnel, and infrastructure.

As part of the broader efforts, the team was able to identify a critical gap in aerial domain awareness and protection due to the lack of counter small unmanned aerial systems (C-sUAS) capability to defeat level I & II drone threats. The MNFS and CFLCC protection teams also identified inadequate air defense artillery (ADA) capability as a major obstacle to protecting in the air domain. Additionally, the team recognized that future preparation efforts must focus on improved interoperability by creating greater awareness of common U.S. Army and PN protection requirements and activities. Most South American countries do not think about protection in the same way the U.S. Army does, and their protection is often embedded in their logistics warfighting function (WfF). To achieve interoperability, the OPD team identified an extended academics phase and improved participation/outreach during the pre-execution WGs as the best opportunity to better integrate PN protection leaders. The utilization of short (2-3 min) videos (in Spanish) may serve as a valuable training reference so all teammates understand how specific elements of protection will be conducted as a joint and multinational force.

PROTECTION CONCEPT OF OPERATIONS – FOUR PHASES

Phase I - Isolate: MNFS Pro coordinated with host nation (HN) public security forces (PSF) and CFLCC to establish checkpoints on main supply routes (MSRs) and alternate supply routes

(ASRs). Additionally, coordination was made to secure critical infrastructure, to include seaports of debarkation (SPODs) and aerial ports of debarkation (APODs) in vicinity of Limon and Golfito. These units executed mounted and dismounted patrols to deny enemy transit on critical MSRs and to reduce improvised explosive device (IED) attacks against MNFS forces. Moreover, these assets facilitated traffic flow along the MSRs to deny intimidation of Non-Governmental Organizations (NGOs) and facilitate Internally Displaced Persons (IDP) movement flow to the Southern border with Costa Rica.

Enhanced cyber defense preparation and force protection focus deterred malicious cyber and physical activities against MNFS bases and reduced the Brigada de los Martires de la Liberación (BML) threat forces disruption against MNFS. OPD synchronized the approved CAL and DAL with subordinate and component commands to provide a fully encompassing multi-domain view into all key country and military assets to be protected. OPD identified inadequate ADA coverage within the joint operations area (JOA) and coordinated with the Combined Force Air Component Command (CFACC) and SOUTHCOM CJ34 for additional capability and coverage capacity. Additionally, Combined Force Maritime Component Command (CFMCC) conducted persistent intelligence, surveillance, and reconnaissance (ISR) and visit board search and seizure (VBSS) missions to provide sufficient strike capabilities and surveillance patrols within the Panama Canal approaches. This enabled freedom of movement for conventional forces. MNFS Pro, equally identified common protection challenges and recommended plausible solutions and modifications for force preservation. Throughout this phase, protection efforts focused on enabling freedom of movement and setting conditions to protect critical civilian and military capabilities as the unit transitioned to Phase II operations.

Phase II - Secure: MNFS organic protection units (MP/CBRNE/EOD) respectively, played vital roles in preserving critical infrastructure and augmenting CFLCC protection units. MP units provided mounted and dismounted patrols, fixed and mobile patrols on the most important critical infrastructure to include MSRs/ASRs, Buenos Aires & Limon International APODs and SPODs, forward operating bases (FOBs), and bridges. OPD identified ADA capability gaps and coordinated with CFLCC and CFACC for adequate ground ADA and air support coverage on high priority DALs across the JOA. Additionally, MP units established a detention holding area (DHA) to process, interrogate, and release detainees to the HN within a 72-hour timeframe. This phase demonstrated the value of synchronized protection capabilities to sustain and enable freedom of movement for conventional forces and to allow the MNFS to safely transition to defeating the BML insurgency.

Phase III - Dominate: During this phase, the CFMCC increased patrol presence due to persistent BML maritime threats and weapons trafficking. CFLCC (MP BN/ENG teams) enforced routine route clearance through security and logistics escort patrols on primary and alternate MSRs. They also defended critical infrastructure, such as the Limon and Golfito APODs and SPODs, and the United States Embassy. Critically, the MP units also facilitated safe corridors toward the border with Costa Rica to enable freedom of movement for multiple IDPs. To ensure deep synchronization, MNFS Pro facilitated daily PWGs to monitor emerging threats, recommend appropriate force protection condition (FPCON) changes, and synchronized protection capabilities and requirements. Additionally, MNFS Pro requested C-sUAS systems through a Joint Operation Urgent Needs (JUONS) request to SOUTHCOM. Additional ADA

support was also requested through SOUTHCOM CJ34 to deter level I & II threats across the JOA. Insurgent forces consistently employed drones to conduct aerial reconnaissance and for coordinated complex attacks utilizing IEDs and small arms fire against critical infrastructure (APODs/SPODs). This is a direct result of not having embedded CsUAS capability in MNFS to deter and defeat drone threats against critical infrastructure and MNFS forces. This poses an immediate and serious threat to any future operation given the ongoing and emerging armed drone threat capabilities worldwide.

Phase IV - Transition: During this phase, MP units established the necessary conditions to train, coach, and mentor the New Centralia (friendly forces) PSF to resume full security operations responsibility within a defined timeline of 180 days to meet the United Nations Security Council Resolution (UNSCR) mandate. Upon the HN once again having the capability and capacity to assume their own national security, the MNFS prepared for and conducted redeployment operations.

Although not executed in exercise, the MP units would have also been postured to conduct joint patrols along MSRs and ASRs to enable freedom of movement for friendly forces conducting retrograde operations. MP units assessed and recommended that HN detention capacity be increased to accommodate the high number of BML insurgents that surrendered and were confined during Phase III operations.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant protection of the JOA in multinational operations findings from PMX24.

Improve- Interoperability, Capability and Capacity gaps

Observation. Inadequate ADA capability resulted in a major air capability and capacity gap across the AOR.

Discussion. The MNFS and CFLCC protection teams identified inadequate ADA capability as a major obstacle to protecting in the air domain. This capability gap enabled enemy forces to operate freely, potentially causing significant damages to critical infrastructure, personnel, and overall operational capabilities within the cities of Limon and Golfito.

Recommendations. Future preparation efforts must focus on improving interoperability by creating greater awareness of common U.S. Army and PN protection requirements and capabilities. In addition, synchronizing MNFS approved CAL and DAL among PN will ensure that most vital assets are prioritized and receive the necessary protection, leading to better resource allocation and overall increased combat effectiveness.

Improve- Efficiency and Effectiveness

Observation. Lack of multinational coordination between MNFS, PNs, and component participants resulted in wasted time and disengaged exercise participants.

Discussion. Insufficient time allocation for MNFS staff to plan, share TTPs, and rehearse actions on the objective with PNs resulted in delayed protection assets and identified critical capability gaps and potential emerging threats to MNFS missions, equipment, personnel, and infrastructure.

Recommendation. Allocate increased time and effort during academics to improve training products and further develop cross-coordination between MNFS, PNs, and component commands. This will improve relationships, build trust, and create shared TTPs and policies to achieve improved protection outcomes.

Improve- site set up

Observation. Protection cell space allocation must factor in, ENG, ADA, Fires, and Civil Affairs.

Discussion. Academics and exercise execution should include protection cell collocated with ENG, ADA, Fires, and Civil Affairs in order to improve interoperability, synchronize capability and capacity and mitigate emergent threats.

Recommendation. Establish protection cell adjacent or near ENG, fires, ADA, cyber, civil affairs, IO, and the J3/5/7 enabling coordination and enhancing protection operations. Current position in MNFS headquarters, near the special staff, proved suboptimal.

CHAPTER 8

Planning and Conducting Joint and Multinational Engineer Support

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Texas Army National Guard (TXARNG)

> The omission of engineer considerations in any phase of an operation may adversely impact the entire plan.[19]
>
> Joint Publication (JP) 3-34, Joint Engineer Operations, page IV-1
> 6 January 2016

OVERVIEW

Army engineers are crucial in maintaining the continuity of military operations, particularly when working alongside international forces. Their responsibilities include providing logistical support for various operations by constructing, maintaining, and repairing infrastructure, securing supply routes, and enabling the mobility of combat units. “Participation in joint exercises is another opportunity that allows engineers to exchange information, build relationships, and develop infrastructure simultaneously.”[20] Army engineers must align logistical plans, share critical information, and adapt to diverse doctrines and standard operating procedures (SOPs) to successfully collaborate and work with joint and multinational forces. Successes and failures of these collaborations were observed during the exercise’s joint training and in challenges integrating command and control (C2) systems in both Multinational Force South (MNFS) and Combined Forces Land Component Command (CFLCC).

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[19] JP 3-34, Joint Engineer Operations, page IV-1, 6 January 2016, https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_34.pdf
[20] Field Manual (FM) 3-34, Engineer Operations, page 2-8, 18 December 2020, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN31353-FM_3-34-000-WEB-1.pdf

TASK ORGANIZATION

At the beginning of the exercise, the lack of clearly defined task organization for assets within engineer battalions created challenges. Engineer units including construction companies, combat engineer companies, and route clearance packages were not under operational control (OPCON) to CFLCC before the start of PHASE 2 (Secure). This oversight led to inefficiencies in tactical support and a disjointed approach to operational tasks until MNFS released them OPCON to the CFLCC. To avoid such issues in future exercises, it is essential to predefine and organize these assets ahead of time. Additionally, detailed capability descriptions for specific companies must be included in Appendix 6 to Annex D (Engineer Support Plan) to ensure all personnel have a clear understanding of each unit's abilities and how they can best contribute to the mission. This approach will reduce confusion and enhance the coordination of engineer support efforts.

PLANNING AND CONDUCTING JOINT AN MULTINATIONAL ENGINEER SUPPORT

The extensive scope of the engineer mission underscored the importance of incorporating diverse expertise into the planning process. Having staff members with specialized knowledge in areas such as route clearance, general engineering, geospatial analysis, combat engineering, and bridging was crucial for effective mission planning and execution. The ability to address a wide range of engineering challenges from a planning perspective allowed for more comprehensive and adaptive strategies. Diversity allows teams to anticipate and integrate different technical requirements and operational needs, ensuring all aspects of the mission are considered. Moreover, including experts from partner nations (PNs) in the planning process facilitated a more inclusive approach, leveraging their unique capabilities and insights. This collaborative planning not only improved the overall effectiveness of mission support but also enhanced the ability to adapt to evolving operational demands.

TRADITIONAL CHALLENGES

Engineer planners dedicate significant time supporting the planning and coordination for exercises. However, the high cost of transporting equipment often leads to the engineers getting excluded, or minimized, during exercise execution when funding becomes an issue. This recurring situation leads to very few opportunities for participation and hinders relationships with the supporting COMPO 2 (Army National Guard), COMPO 3 (Army Reserve), and engineer units. PANAMAX is the only major exercise in the United States Southern Command (SOUTHCOM) area of responsibility (AOR) where engineers historically have an active participation. This biennial training opportunity to collaborate with COMPO 2 & 3 and multinational partners is not enough to exercise and stress engineer capabilities. Additional funding should be allocated to allow more engineer units to participate in PANAMAX and other SOUTHCOM exercises.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant engineer planning and joint/ multinational operations findings from PMX24.

Observation. Exercise participants need a shared understanding of a joint combined force.

Discussion. The notional task organization incorporated both U.S. and PN engineer units, but there was a lack of clarity regarding the composition and capabilities of the PN units. This uncertainty resulted in the overutilization of U.S. units, while the PN units were underutilized, despite potentially having similar capabilities. As a result, the opportunity to leverage interoperability between the two forces was missed, limiting the full potential of the partnership. Clearer understanding and integration of both units' strengths would have enhanced operational efficiency and fostered better collaboration.

Recommendation. Ensure shared understanding of the capabilities, strengths, and limitations of each PN to enable more effective and collaborative planning, and to better align resources and capabilities during the exercise.

Observation. The CFLCC manning document should include additional positions for the Engineer Cell.

Discussion. The CFLCC manning document for the Engineer Cell allocates only one position, intended to be filled by a PN representative. This understaffing, coupled with a limited understanding of U.S. engineer units' composition and capabilities, led to operational inefficiencies and frequent requests for support from MNFS engineers. A more balanced staffing approach and clearer understanding of each unit's capabilities could have alleviated these challenges and improved overall coordination.

Recommendation. Increase the number of positions in the CFLCC Engineer Cell and embed U.S. engineers to enhance the ability to mentor partner forces. This approach will foster collaboration and improve decision-making, such as selecting the most appropriate engineer units for assigned missions. By strengthening the Engineer Cell, the CFLCC can drive greater efficiencies, optimize resource allocation, and ensure better integration of capabilities across multinational forces.

Observation. Attendance at the Component Planning in Crisis (PIC) was limited to mostly PN personnel.

Discussion. For most PNs, the Component PIC serves as their first exposure to PANAMAX. While the CFLCC engineer attended the Component PIC, the lack of familiarity with the exercise, coupled with the absence of additional engineers in attendance, hindered progress. As a result, no products or other requirements were developed in advance limiting preparedness and coordination for the exercise.

Recommendation. Ensure that a representative from the MNFS engineers attends the Component PIC alongside the CFLCC engineer. This collaboration will help develop the plan

and requirements more effectively, fostering a shared understanding of capabilities and limitations. By doing so, the CFLCC engineer will be better prepared, ensuring a smooth transition into execution and enabling a successful operation from day one.

CHAPTER 9

Operations in the Information Environment

CPT Isaac J. Armel, Information Operations Officer, U.S. Army South

> "Information is such a powerful tool that it is recognized as an instrument of national power. The elevation of *Information* to a joint function impacts all operations. It signals a fundamental appreciation for the military role of information at the strategic, operational, and tactical levels within today's complex operating environment."[21]
>
> Secretary of Defense James N. Mattis
> 15 September 2017

INTRODUCTION

This chapter is intended to highlight the successes and challenges of Multinational Forces South's (MNFS) employment of information forces, information activities, and conduct of Operations in the Information Environment (OIE) during exercise PANAMAX 2024 (PMX24). Using the lessons learned and best practices included at the end of the chapter will improve integration of information forces and activities in future operations and exercises, as well as serve as considerations for organizations conducting similar exercises. This chapter will use joint information doctrine rather than U.S. Army information doctrine while explaining lessons learned. Reference Joint Publication 3-04, *"Information in Joint Operations,"* as needed.

PLANNING

The first iterations of planning for the MNFS Combined Joint Information Planning Cell (CJ39) occurred approximately four months before the exercise, during the MNFS Planning in Crisis (PIC) conference. The goal during this five-day conference was to develop an OIE plan supporting OPERATION FUTURE NOBLE (MNFS PMX24 operation) and the received MNFS Commander's guidance to "Drive a wedge between the Brigade of Martyrs of Liberation (BML) and the civilian populace of New Centralia." In addition to this, as information planners, we had the inherent task of integrating the information joint function into the MNFS Joint Planning Process (JPP). Although the CJ39 approached these tasks with enthusiasm, integrating with directorates and information forces proved to be our greatest challenge.

Beginning with directorate integration, most of the personnel filling the Joint Manning

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[21] Secretary of Defense Memorandum, Subject: Information as a Joint Function, 15 September 2017, https://www.rmda.army.mil/records-management/docs/SECDEF-Endorsement_Information_Joint%20Function_Clean.pdf

Document (JMD) positions for MNFS were from U.S. Army South (ARSOUTH), or from other organizations with limited exposure with information planners in joint operations. Complicating this further, information doctrine for both the Joint Force and the U.S. Army has changed multiple times over the past years, leaving even the more experienced staff members confused due to changes in terminology, or new application of forces or activities. This trend continued as we attempted to integrate the MNFS information forces into our planning.

When meeting with the information force planners, while only some of them had heard about IO officers, no one truly had experience working with one. Present at the conference were representatives of Public Affairs Office (PAO), Joint Electromagnetic Spectrum Operations (JEMSO) also known as Cyber and Electromagnetic Activities (CEMA), Military Information Support Operations (MISO) also known as Psychological Operations (PSYOP), Civil Military Operations (CMO) also known as Civil Affairs (CA), Space Operations planners, with the CJ39 providing planners for Operations Security (OPSEC) and Military Deception (MILDEC).

Ordinarily, this diverse group would form a robust non-lethal effects planning cell. However, we quickly discovered that many of the information forces were fully engaged in their own planning processes, with little capacity to support additional tasks proposed by the CJ39. While it is common for information forces to plan and execute their own operations independent of the CJ39, the command's information planning cell remains responsible for ensuring all information forces are synchronized to achieve the commander's objectives across all domains, managing oversaturation of information to target audiences, and preventing information fratricide.

The CJ39 determined that the most effective course of action (COA) for delivering an OIE plan on time was to develop it as a separate line of effort (LOE). This given the challenges of integration, limited resources, and the constraints imposed by classification levels when planning with partner nations (PNs). The plan primary leveraged MISO and OPSEC with support from PAO as needed, or as available. This met the commander's intent, reduced inputs needed from the staff, and did not interfere with the information forces' plans developed independently from the CJ39. The MNFS concept of OIE support is below. (See Figure 9-1)

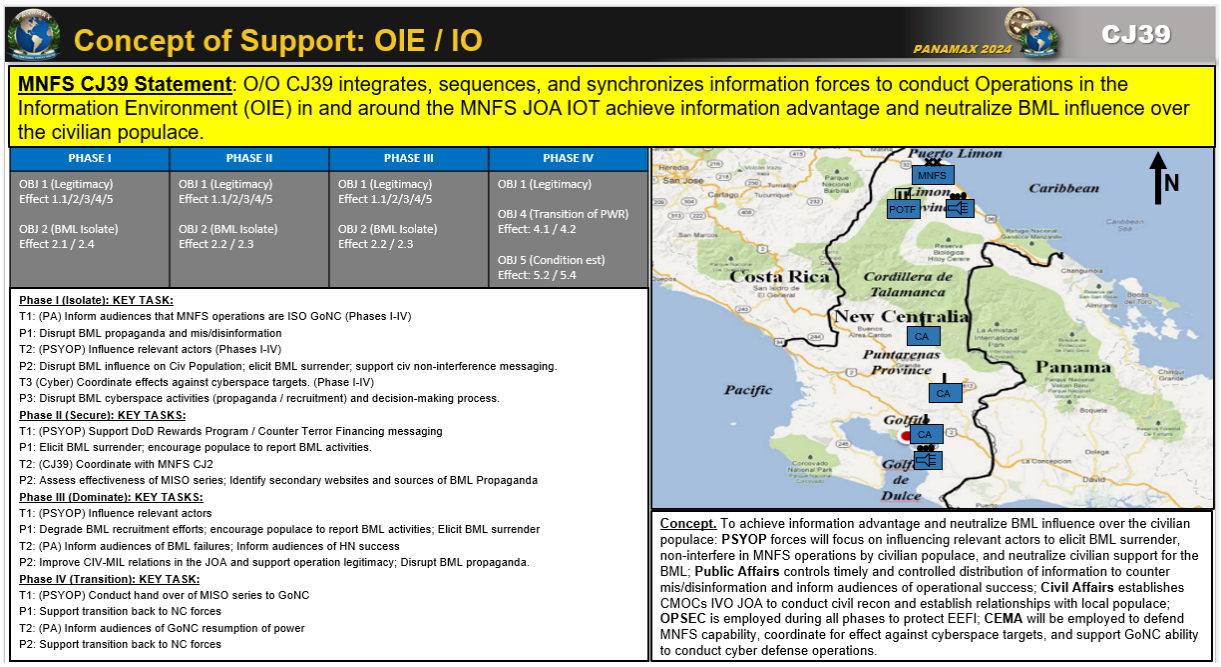

Figure 9-1. Concept of OIE developed during the MNFS PIC (Chart provided by ACS FED, U.S. Army South)

PREPARATION

Between the PIC and the start of exercise (STARTEX), planning continued in the form of MISO program and series development, refining and validating the CJ39 JMD positions, and proposing inputs to the operations and intelligence summaries. For MISO development, three series were developed and later approved for execution: “Noble Protector,” “Noble Informant,” and “Noble Turntable.” This allowed MNFS through the assigned Psychological Operations Task Force (POTF) the ability to conduct local populace shelter in place or non-interference messaging, counter BML recruiting, promote local population reporting of BML activities, and elicit BML surrender throughout the Joint Operations Area (JOA). Bi-weekly meetings with the CJ39 provided a forum to discuss exercise battle rhythm events, updates to the exercise scenario, and progress on PN contributions to fill JMD positions. This ensured the team remained aligned and prepared for the upcoming exercise execution.

EXECUTION

The CJ39 personnel met for the first time upon transition to exercise execution and during the “warm start” period. This group of fourteen personnel, under the direction of a Peruvian Army Colonel (Director of Communications and Public Image for the Peruvian Armed Forces Joint Command) was comprised of commissioned officers and a noncommissioned officer from the U.S. Army (Active and Reserve Components) and from the countries of Peru, Brazil, Colombia, and Ecuador (See Figure 9-2). With the team assembled, our priority was to create a shared understanding of the plan developed at the PIC and the current situation in the exercise scenario. To do this, the CJ39 Director instructed all personnel to review the MNFS operations order

(OPORD), concept of OIE from the PIC, and the intelligence and operations summaries. Once completed, the CJ39 identified roles and responsibilities for all personnel, created new priorities based off the updated scenario, and contacted our higher and subordinate headquarters information planning cells to coordinate battle rhythm events.

J39	INFORMATION PLANNING CELL CHIEF	COL	PN	PERU
J39	INFORMATION PLANNING CELL DEPUTY	LTC	ARSOUTH	ARSOUTH
J39	INFORMATION PLANNING CELL PLANNER	CIV	ARSOUTH	ARSOUTH
J39	INFORMATION PLANNING CELL PUBLIC AFFAIRS	LTC	PN	BRAZIL
J39	INFORMATION PLANNING CELL PSYOP OFFICER	MAJ	ARSOUTH	ARSOUTH
J39	INFORMATION PLANNING CELL JPOTF LNO	MAJ	EXTERNAL	17 POB
J39	INFORMATION PLANNING CELL OPERATIONS (JOC)	SSG	EXTERNAL	71 TIOG
J39	INFORMATION PLANNING CELL PLANNER / FST CHIEF	MAJ	EXTERNAL	71 TIOG
J39	INTELLIGENCE SUPPORT TO INFORMATION PLANNING CELL/IO OFFICER	MAJ	EXTERNAL	71 TIOG
J39	INFORMATION PLANNING CELL FST TARGETING	CPT	EXTERNAL	71 TIOG
J39	INFORMATION PLANNING CELL PLANNER	CPT	ARSOUTH	ARSOUTH
J39	PSYCHOLOGICAL OPERATIONS OFFICER/PLANNER	TC	PN	COLOMBIA
J39	PSYCHOLOGICAL OPERATIONS OFFICER/PLANNER	CAP CORB	PN	PERU
J39	PSYCHOLOGICAL OPERATIONS OFFICER/PLANNER	TCRN	PN	ECUADOR

Figure 9-2. Joint Manning Document, CJ39 Personnel
(Chart provided by ACS FED, U.S. Army South)

The key meeting for the CJ39 during PMX24 was the Information Cross-Functional Team (I-CFT), formerly known as the Information Operations Working Group (IOWG). These meetings were conducted at both the MNFS level, with subordinate components, and at the Combatant Command (CCMD) level, with U.S. Southern Command (SOUTHCOM) J39.

During the I-CFTs, we ensured the synchronization of information activities across the JOA, requested assistance as necessary, and collaborated to nominate targets for inclusion in the Joint Integrated Planned Target List (JIPTL). At the MNFS level, the PAO co-chaired the I-CFT to maintain situational awareness of ongoing and planned information activities. This approach allowed the PAO to ensure that all messaging efforts by information forces were aligned with the MNFS communication strategy, as well as its themes and messages. The MNFS I-CFT 7 Minute Drill is below. (See Figure 9-3)

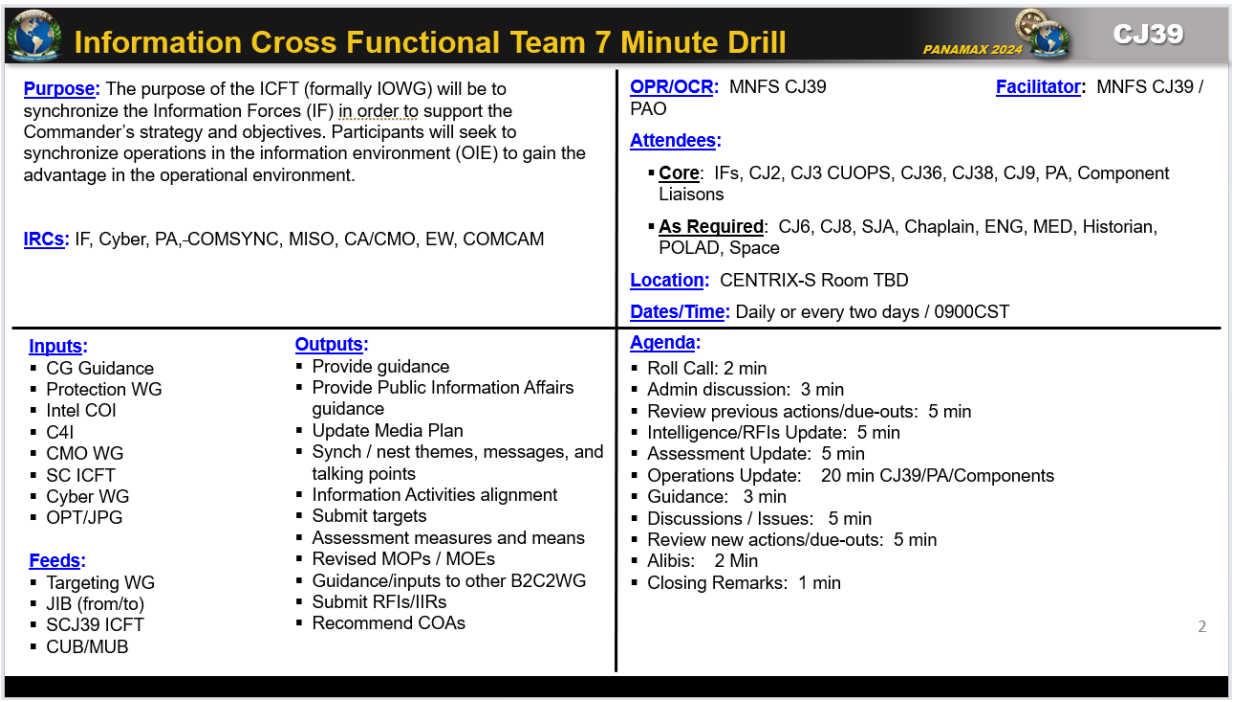

Figure 9-3. MNFS I-CFT 7 Minute Drill
(Chart provided by ACS FED, U.S. Army South)

As the exercise progressed, we continued executing our OIE plan in coordination with SOUTHCOM and our subordinate components. Both the MNFS and USSOUTHCOM commanders recognized that maintaining legitimacy for MNFS and the Government of New Centralia (GoNC) required minimizing collateral damage and civilian casualties. This led to increased interest in CJ39 activities and a heightened emphasis on non-lethal effects within the MNFS targeting guidance.

Furthermore, OIE briefings expanded beyond the MNFS level, with daily updates provided to the SOUTHCOM Commander. An OIE operations and intelligence product is below. (See Figure 9-4). Ultimately, MNFS OPERATION FUTURE NOBLE was a success, as the BML leadership was neutralized—either killed, captured, or forced to flee New Centralia. A key factor in the operation's success was the OIE plan, particularly one of the MISO series, which generated actionable tips from the civilian populace and surrendering BML members. These contributions were instrumental in achieving mission objectives.

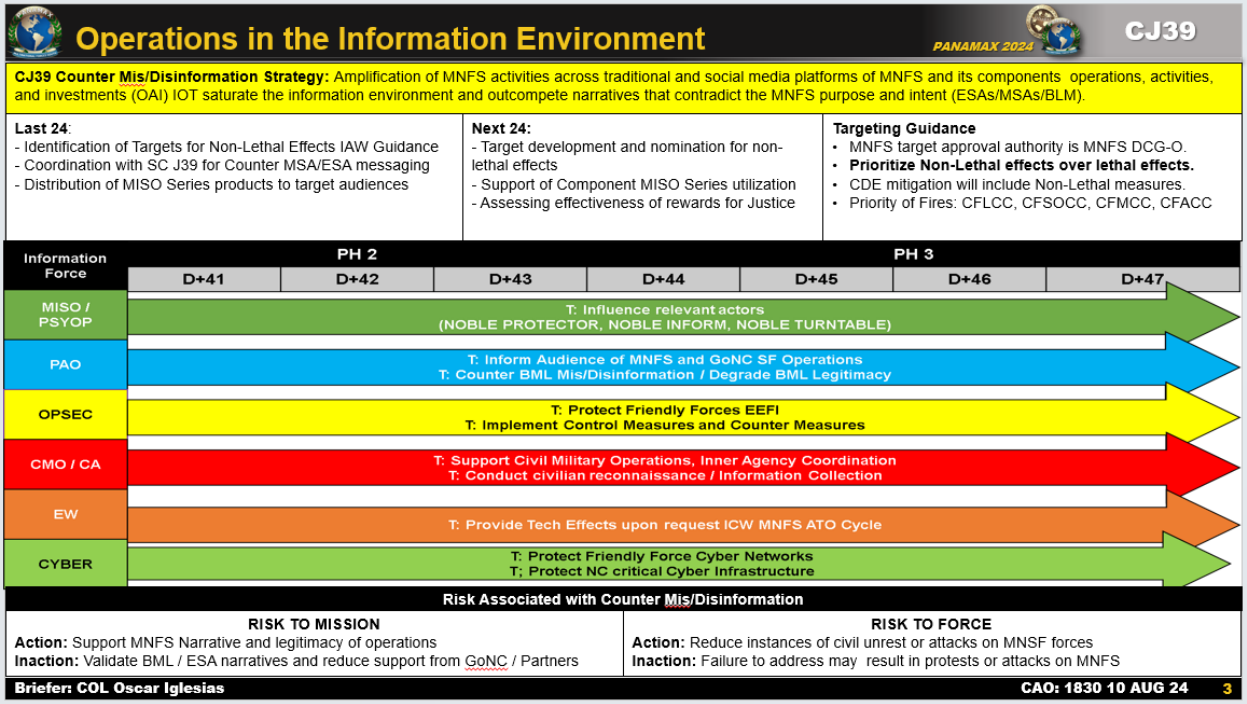

Figure 9-4. Example of operations and intelligence product briefed during execution (Chart provided by ACS FED, U.S. Army South)

LESSONS AND BEST PRACTCIES

The below observations represent some of the most significant operations in the information environment findings from PMX24.

Observation. Information planner integration is needed more during exercise planning.

Discussion. As commanders look to leverage non-kinetic means and non-lethal effects more to reduce collateral damage and retain legitimacy in operations, information planners must be included in all planning activities leading up to and during operations. Doing so will ensure that the information joint function (Joint) or information element of combat power (Army) is incorporated into operations and enable the commander to shift between lethal and non-lethal effects with ease based on mission variables or higher headquarters guidance.

Recommendations. Information planners must be included in all planning activities leading up to and during operations. Key events during planning include operational design, Flexible Deterrent Options (FDO), Flexible Response Options (FRO), Commander Option Development, recommendations on Request for Forces (RFF) and the Time Phased Force Deployment Data (TPFDD), proposing initial targets, identifying initial tasks, and identifying initial risks. During operations, information planners should be attending all current operations, future operations, and plans working groups or similar battle rhythm events.

Observation. Advantages of OIE as a Line of Operation (LOO) versus Line of Effort (LOE).

Discussion. While planning OIE as an LOE to achieve an operational objective is something that planners should be familiar and comfortable organizing, this approach sometimes limits information force employment. For instance, since the PANAMAX OIE LOE was focused on degrading the BML influence over the civilian populace, the CJ39 was oriented more on MISO activities rather than integrating and synchronizing all the MNFS information forces. As a result, there were phases during execution that saw limited capacity operations from the remaining information forces. Another option is for planners to array information forces and activities as LOOs. This would have allowed the MNFS CJ39 to concentrate information forces/activities by phase and more dynamically to support geographically separated operations. Simultaneously, this would have given the POTF the enduring task of degrading the BML influence over the civilian populace; a task they are manned, trained, and equipped to do. While each of these COAs have their strengths and weaknesses, PANAMAX operations would have been enhanced if a LOO approach were achievable.

Recommendation. During future PANAMAX exercises, explore the viability of OIE as a LOO as opposed to an LOE. If a hybrid approach is warranted, request additional resources or personnel to support.

Observation. Staff need to be more aware of IO capabilities and how to better integrate this function into operations.

Discussion. Information operations and the information joint function are often underrepresented in military Professional Military Education (PME) curricula. Consequently, many officers lack a clear understanding of the information capabilities available to their headquarters and the information warfare capabilities of adversaries. There is a need to alleviate this knowledge gap in order to provide the command with a deeper understanding of how to more effectively employ information planners.

Recommendation. Integrate information plans and operations capabilities across the ARSOUTH staff's warfighting functions- to support this provide OIE overview briefing at Staff Orientation Seminar for newly arrived personnel and schedule OIE capabilities briefing at an upcoming Leader Professional Development (LPD) event.

CHAPTER 10

Public Affairs in the Information Environment

LTC Gabriela S. Thompson, Public Affairs Director, U.S. Army South

> PA staffs help coordinate and synchronize the necessary messages used with multinational partners to counter adversary information efforts of misinformation and disinformation. As part of the National Security Strategy, the Army commonly works with multinational partners and foreign militaries to build capacity, solve international crises, conduct routine training, and enhance theater security cooperation. Adversaries often seek to fracture multinational partnerships through disinformation in efforts to create an operational area that is more difficult and costly to conduct missions in."[22]
>
> FM 3-61, Communication Strategy and Public Affairs Operations, page A-3
> 25 February 2022

EXERCISE PREPARATION

The U.S. Army South (ARSOUTH) Public Affairs Office (PAO), specifically, the PAO SGM attended all planning conferences and in-progress reviews (IPRs) leading into PANAMAX 24 (PMX24). The SGM developed proposed public affairs guidance and a comprehensive communication plan to ensure the exercise was clearly and consistently communicated before, during, and after exercise execution.

EXERCISE EXECUTION

Joint augmentation is fundamental to success in public affairs operations at the magnitude of this level of exercise. Planning and mission execution often occur simultaneously depending on the phase of the operation. This demanded flexibility and leveraging our expertise to facilitate information requirements, allowing public affairs operations to occur rather seamlessly.

The most time sensitive requirement during PMX24 was product approval. As the Multinational Force South (MNFS) headquarters, we were responsible for consolidating and approving releases from the subordinate commands. Compounding that challenge was a lack of consistency in using the Non-classified Internet Protocol Router Network (NIPRNet) versus the Combined Enterprise Regional Information Exchange System (CENTRIXS), leading to a delay in release approvals based on who was available to review.

[22] FM 3-61, Communication Strategy and Public Affairs Operations, page A-3, 25 February 2022 https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN34864-FM_3-61-000-WEB-1.pdf

STRATEGIC MESSAGING ACROSS THE INFORMATION ENVIRONMENT

At JBSA-Fort Sam Houston, "Dialago" (an Interdisciplinary Studies Journal) served as the sole media representation during PMX24. The journalist conducted video interviews with the ARSOUTH commanding general, other key leaders, and subject matter experts. Both print and video content were published in Dialago social media platforms and amplified across ARSOUTH and the United States Southern Command (SOUTHCOM) social media platforms. Published articles focused on the importance of cybersecurity, interoperability, and maritime operations in relation to a complex threat environment.

All PMX24 content and command information products were published and amplified on Defense Visual Information Distribution Service (DVIDS), totaling more than 35 images and news articles. ARSOUTH published 25 posts to its social media platforms (Facebook, Instagram, and X), reaching more than 100,000 people, and garnering over 4,200 engagements (likes, amplification, and shares) across the three major platforms.

EXERCISE CHALLENGES IN THE INFORMATION ENVIRONMENT

There were three main challenges during PMX24. First, maintaining a viable primary, alternate, contingency, and emergency (PACE) communications plan for public affairs planning and coordination. SOUTHCOM hosted a daily meeting via MS Teams but given the poor connectivity the PAO Director would have to leave the training site to attend the meeting from the ARSOUTH headquarters building. Additionally, public affairs efforts were coordinated across NIPR and CENTRIXS. Partner nations (PNs) would have to receive information second-hand if sent via NIPR, leading to some delays in information sharing.

Second, interoperability with partner nations. During PMX24, our augmentation came from Belize and Ecuador. Neither of these PNs conduct public affairs similar to U.S. public affairs equivalents. Due to this, the Joint Enabling Capabilities Command (JECC) planners absorbed the majority of the workload simply because there was not adequate time to teach partner nations the nuances of U.S. public affairs process due to the short duration of the exercise.

Third, there were not enough hours in an exercise day. Public affairs occur in a 24-hour continuous cycle. PMX24 was a 12-hour exercise, and did not provide an opportunity to execute a full public affairs cycle. Should ARSOUTH deploy as an MNFS in a real-world Multi-Domain Operations (MDO) fight, it is imperative the augmented support match the operational needs of the MNFS.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant public affairs in the information environment findings from PMX24.

Observation. Limited external media attendance, coverage, and amplification of exercise.

Discussion. Exercise PMX24 presented challenges in capturing media attention resulting in limited attendance. This was largely attributed to competing news stories in the region and potentially the lack of a compelling narrative to differentiate the exercise. To promote the exercise, a media advisory was emailed to media outlets approximately one week prior to the scheduled "Media Day." Although two news outlets initially confirmed their attendance, the media representatives ultimately couldn't participate due to competing news requirements.

Recommendations. To increase media attendance and coverage, consider the following:

- Develop a compelling storyline that showcases the exercise's unique aspects to differentiate it from other events.
- Provide media with more lead time (2-4 weeks) to increase the likelihood of attendance.
- Offer exclusive access to unique aspects of the exercise, in addition to high-level interviews, such as groundbreaking technological initiatives or other items of trending interests.
- Build and foster relationships with local media outlets to increase interest.
- Consider virtual/telephonic interviews with regional media outlets from participating PN regions to expand reach.
- Provide media outlets that could not attend the exercise with compelling content (imagery, b-roll (footage that supplements your main video clips), and articles) to enable them to amplify the story during the exercise or post exercise.

Observation. PA capacity challenges.

Discussion. During PMX24, the public affairs (PA) team encountered difficulties in managing concurrent real-world and exercise-related PA tasks, primarily due to understaffing and the absence of a dedicated PA planner. The augmentation of JECC personnel proved essential in mitigating this challenge, enabling the team to effectively focus on both real-world and exercise events.

Recommendation. Continue JECC augmentation to MNFS PAO. Their augmentation proved essential, enabling simultaneous planning and execution. (JECC provided an LTC and MAJ)

Observation. Incomplete PA planning cycle.

Discussion. The 12-hour exercise cycle degraded the efficacy of deliverables based on exercise injects. At minimum, one exercise inject could result in an initial, follow on, and final release.

However, the 12-hour exercise window, coupled with an often hours-long approval process, resulted in an incomplete and sometimes non-actioned inject as more injects were produced. Moreover, not being able to follow a 24-hour news cycle often led to poor information environment analysis.

Recommendation. Conduct next PMX with more than a 12-hour a day timeline. Current 12-hours was challenging for PA because it did not replicate a complete 24-hour news cycle. Even with the simulated social media platform, many injects did not meet the intent of exercising the full PA planning cycle.

CHAPTER 11

Planning and Conducting Joint and Multinational Logistics

MAJ Ryan J. Breaux, G-4 Sustainment Operations, U.S. Army South

> The theater Army is the primary vehicle for Army support to joint, interagency, intergovernmental, and multinational forces (MNFs). The theater Army headquarters (HQs) perform functions that include reception, staging, onward movement, and integration; logistics over-the-shore operations, and security coordination.[23]
>
> ADP 4-0, Sustainment, page 2-10
> 31 July 2019

OVERVIEW

In today's operational environment (OE), logisticians will be working with multinational partners. The future of conflict is Large Scale Combat Operations (LSCO), and it is likely the United States (U.S.) and its military leadership will desire to operate with multinational partners, while maintaining the capability and capacity to act unilaterally. Multinational logistics (MNL) is a challenge compounded by barriers such as language, equipment, and doctrine. However, leveraging MNL increases the combatant commander's (CCDR's) freedom of action. The challenges of MNL are mitigated by having a thorough understanding of a partner's capabilities and procedures, as well as limitations before operations begin. Integrating and synchronizing logistics in a multinational environment requires information sharing, developing interoperable logistics concepts, and a common doctrine. Additionally, clearly identifying and integrating the appropriate logistics processes, organizations, and command and control (C2). This integration can most effectively be accomplished by logistics liaison officers (LNOs). When available and practical, logistics LNOs could be imbedded with each multinational force command sustainment section. Careful consideration should be given to the broad range of MNL support structures.

TASK ORGANIZATION

The task organization for the PANAMAX (PMX) series of exercises is dependent upon the partner nations (PNs) that provide forces and will change from year to year. As for U.S. forces, there are considerations to be made at the Planning in Crisis (PIC) events when the task organization is finalized. For the last several PMX exercises, including the Theater Sustainment Command (TSC) and Expeditionary Sustainment Command (ESC) have proven invaluable.

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[23] ADP 4-0, Sustainment, page 2-10, 31 July 2019, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN18450_ADP%204-0%20FINAL%20WEB.pdf

These sustainment command headquarters were critical to the success of Multinational Force South (MNFS). These commands performed their doctrinal role of executing tactical (ESC) and strategic (TSC) sustainment tasks. These units allowed the MNFS J-4 staff to focus on its set of operational level sustainment tasks. Special care should be given to how these units are task organized within the MNFS to best support MNFS operations, such as giving the TSC operational control (OPCON) of the ESC to better C2 sustainment operations.

CONCEPT OF SUPPORT

The MNFS, 167th TSC, and 143rd ESC developed sound concepts of support for each level of sustainment. However, the concepts did not include in-depth analysis of PHASE 0 (Shape) and PHASE 1 (Isolate) operations. The theater Army's primary function in any operation is setting the theater and conducting Joint Reception, Staging, Onward Movement, and Integration (JRSO&I). As with most other operational level exercises, such as the Warfighter Series, PMX does not provide any focus on the PHASE 0 tasks of building capacity- an extremely complex and complicated process of onboarding all combat and support forces in the area of responsibility (AOR). PMX started in late PHASE 2 (Secure) entering into early PHASE 3 (Dominate), with all initial forces on the ground conducting operations.

ACQUISITION AND CROSS-SERVICE AGREEMENTS

The U.S. Southern Command (SOUTHCOM) negotiated and established acquisition and cross-service agreements (ACSAs) with key countries throughout the SOUTHCOM AOR. Currently, no more agreements are assessed as required.

PLANNING AND CONDUCTION JOINT AND MULTINATIONAL SUSTAINMENT

Having the right type of personnel within each component's Director of Logistics staff is critical for successful sustainment operations. The Combined Forces Air Component (CFACC) did not have any actual logisticians as part of their staff at the exercise. This caused extensive challenges early on which negatively affected reporting and logistics assessment data of air component assets. Most components, comprised mainly with a partner nation staff, did not possess English speakers. But the U.S. was able to alleviate those challenges by sending knowledgeable logistics LNO to their Director of Logistics enabling quicker communication and response to issues.

The MNFS learned lessons from our previous PMX22 exercise drove us to fill the joint manning document (JMD) with adequate sustainment personnel from across the services. However, there were several exercise injects requiring the quick movement of cargo and personnel across the battlefield. The staff realized we lacked the knowledge of Air Force specific loading of cargo and personnel. To fix this, we will add a U.S. Air Force Air Transportation Specialist (2T2) to the JMD for the next PMX.

OPERATIONAL CONTRACT SUPPORT

Operational Contract Support (OCS) played a critical role in synchronizing contract support for the MNFS staff. They provided oversight across the components and facilitated coordination with SOUTHCOM and the 167th TSC.

An OCS Integration Cell (OCSIC) was established and properly resourced with augments from 410th Contracting Support Brigade (CSB) and the Defense Contract Management Agency (DCMA). The 143rd ESC also had an OCS planner but lacked a full OCSIC. The MNFS OCSIC assisted components with their requirements development and directed their non-organic support to the correct level for execution and resourcing. The OCSIC maintained a common operational picture (COP) for sustainment across all components, tracking contractors on the battlefield, critical contracts, and PHASE-specific OCS equities in the joint operations area (JOA). The OCS team was engaged multiple times for varying levels of contract support across the AOR.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant joint and multinational logistics findings from PMX24.

Observation. The 167th TSC and 143rd ESC continued their involvement from previous PMX22 exercise to provide theater-level and tactical-level sustainment support at this year's exercise.

Discussion. The 167th TSC based in Huntsville, AL provided support from their home station and handled all theater level sustainment, including strategic movements into and out of theater. The 143rd ESC provided a robust contingent of staff deployed to Joint Base San Antonio-Fort Sam Houston, TX and handled all tactical-level sustainment and some operational level planning. Having these headquarters attached to the MNFS allowed the MNFS J4 to focus purely on their main objective of operational level sustainment planning and tracking.

Recommendation. Continue to leverage the 167th TSC to focus on strategic sustainment and on 143rd ESC to handle the tactical level. This is key to MNFS sustainment training objectives.

Observation. Several component command PN headquarters lacked English speakers and trained logisticians.

Discussion. It was discovered very quickly in the exercise that sustainment communications between the MNFS and components struggled because of either language barriers or lack of logistics experts on their staffs. The MNFS sustainment cell, including the 143rd ESC, sent logistics LNOs that could also serve as translators to the component logistics cells. U.S. Army South (ARSOUTH) is in a unique position to have so many bi-lingual Soldiers and officers to provide as LNOs. These bi-lingual LNOs also served as translators/interpreters in the respective sustainment cells, thereby freeing up assigned translators/interpreters for other MNFS directorates to use as needed.

Recommendation. Position sustainment LNOs laterally and upward as well as translators/interpreters to each component sustainment cell. This is key to communication and quickly resolving sustainment issues.

Observation. The ARSOUTH J1, J4, Medical, and Engineer Directorates were all situated within the same tent but often lacked immediate integration and responsiveness.

Discussion. The MNFS positioned the Sustainment Enterprise Directorates within the same tent, but each answered directly to their own director. This sometimes made it difficult to immediately respond with a full sustainment response when an event was reported to one of the directorates individually. ARSOUTH's modified table of organization and equipment (MTO&E) has a separate "Sustainment Director" and "Assistant Chief of Staff G4," though often these positions are merged to one single officer. Employing a Sustainment Operations Center that reports to the Sustainment Director, along with the staff apparatus of an "operations center," would provide significant benefits in planning as well as response.

Recommendation. Implement a Joint Sustainment Operations Center (JSOC) which includes CJ1, engineer, and medical led by the Sustainment Director. This is critical to success in enabling quick coordination of sustainment across the JOA.

CHAPTER 12

Communications and Network Support in a Multinational Force Headquarters

MAJ Evaristo Rivera
Lead Command, Control, Communications, Computers, and Intelligence (C4I) Planner, G6 Communications, U.S. Army South

> Equipping the JTF [joint task force] headquarters to execute the mission is a deliberate and essential process that sets the conditions for transitioning and mitigates potential delays. Commanders emphasize the importance of developing an equipping plan that includes the necessary equipment for a joint capable headquarters. Special attention must be paid to command and control and other communications equipment to ensure systems are integrated for joint operability.[24]
>
> FM 3-94, Armies, Corps, and Division Operations, page D-9
> 23 July 2021

MISSION PARNTER ENVIRONMENT NETWORK

Soon after PANAMAX 2022 (PMX22) ended, U.S. Army South (ARSOUTH) G6 Operations Division Chief was asked to comment on the network established to support the exercise. The G6 Operations Division team played an integral part in planning, resourcing, and establishing command and control systems, applications, and the Mission Partner Environment (MPE). This effort was across five distinct network enclaves in support of the largest exercise with partner nations (PNs) in the U.S. Southern Command (SOUTHCOM) area of responsibility (AOR). Army Regulation 34-1 (AR 34-1), Interoperability, states "interoperability is the ability to act together coherently, effectively, and efficiently to achieve tactical, operational, and strategic objectives."[25] Department of Defense Directive 8000.01 (DoDD 8000.01), Management of the Department of Defense Information Enterprise (DOD IE) states this directive will be used "to

[24] FM 3-94, Armies, Corps, and Division Operations, page D-9, 23 July 2021, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN34770-FM_3-94-000-WEB-1.pdf
[25] AR 34-1, Interoperability, 9 April 2020, page 1, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN19606_AR34-1_FINAL.pdf

establish policy and assign responsibilities for DoD information resources management (IRM) activities to the Chief Information Officer [CIO] of the Department of Defense (DoD CIO)."[26] At the Theater Army level for PANAMAX 24 (PMX24), this role fell on the ARSOUTH G6. These were some of the regulations that drove PMX24 planning.

During PMX 24 planning, the SOUTHCOM Commander directed C4I planners to focus on establishing an interoperability solution that integrates the joint force with PN forces in the ARSOUTH AOR. Establishing the MPE network enabled U.S. military forces, other government agencies (OGA), allies, and regional PNs to securely collaborate and communicate classified information in real-time. During the exercise, trusted partners from 13 regional countries across the AOR utilized the U.S. Navy South (NAVSOUTH) developed, and SOUTHCOM supported, Combined Enterprise Regional Information Exchange System (CENTRIXS)-Inter-American Naval Telecommunications Network (IANTN). CENTRIXS-IANTN is one of several variations of CENTRIXS. It is the classified network authorized for use by the IANTN Secretariat supporting the 20 Central and South American countries that have been provided access to secret releasable information within the AOR.

PANAMAX 24 NETWORKS

SOUTHCOM, as the Executive Planning Agency (EPA), determined communications network requirements for participating service component commands. CENTRIXS-IANTN and the unclassified All Partner Access Network (APAN) were designated for use as shared MPEs. PMX24 also employed Secret Internet Protocol Router Network (SIPRNet), Non-classified Internet Protocol Router Network (NIPRNet), and the Joint Worldwide Intelligence Communications System (JWICS). However, these networks were available to U.S. personnel only, on a limited basis, creating a lower level of interoperability with participating countries. IANTN served as a shared communication environment for the joint force at all service component commands, including vetted personnel from PNs.

Once planning began in earnest for the exercise, APAN was heavily used as a collaboration site accessible via any commercial internet service provider (ISP) by using username and password credentials. This eliminated most issues associated with user access. Request and approval process were quick compared to other networks. APAN allows for real-time information sharing of unclassified exercise products. This includes both exercise support and exercise simulation data.

Other networks used during PMX24 were restricted to U.S. participants with a valid access requirement. This included U.S. Controlled Unclassified Information (CUI) on the NIPR network, U.S. Secret information on SIPR, and Top-Secret information on JWICs. As a major

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[26] Federal Library, Department of Defense Directive 8000.01, Management of the Department of Defense Information Enterprise (DoD IE), 27 July 2017, page 1, https://federallibrary.us/DOD/DODD/8000.01/CURRENT/TITLE.html

focus of the exercise was on improving interoperability with our partners, these networks were used to test and maintain command and control (C2) services as part of standard reporting requirements.

IANTN CONNECTIONS AND CHALLENGES

More than 10 months of planning went into designing the network and network applications for this exercise. A dedicated team of military, Army Civilian Professionals (ACPs), ARSOUTH contractors, Joint Communications Support Element (JCSE), and SOUTHCOM met weekly to design how the five networks (non-governmental organization (NGO), NIPR, SIPR, CENTRIXS-IANTN, and JWICS) would be installed, operated, and maintained. This team of planners and technicians worked through a myriad of technical, administrative, and procedural problems that confronted both individual sites and the overall network.

During PMX22, a network vulnerability assessment was conducted to validate operations security (OPSEC) procedures, network security, and administrative oversight. This assessment identified numerous vulnerabilities attributed to a lack of network management and oversight of the CENTRIXS-IANTN network. The nature of these vulnerabilities was deemed severe enough that SOUTHCOM changed their information technology (IT) support contract to a new vendor supporting PMX24. A paradigm shift resulted, as previous workflows handled by groups of individuals and teams were shifted to isolated individuals and cells not always available to the lead communications planner. Procedural challenges were also noted in how the contract was interpreted by the newly established IT support contractor and who was authorized to provide oversight of their actions.

From a technical standpoint, the JCSE aligns a Deployable Joint Command and Control (DJC2) system with each geographic combatant command (GCC) to support contingency, operational, and training events based on priorities established by the Joint Staff. The DJC2 provides expeditionary C2 communications that can deploy to remote and austere environments providing turn-key support to 60 simultaneous users. The base core can then be scaled upwards if additional core extension kits (CEKs) are added bringing the operational capacity to 240 units.

The DJC2 system, as a program of record (POR), is designed to seamlessly integrate with both tactical and strategic communications networks using a variety of transport methods from a local internet provider, strategic services, or satellite-based access points. Designed to quickly interface with DoD networks, a two-way domain trust is established between the tactical DJC2 system and the joining network. This is a paramount step needed to enhance the delivery of an available suite of services.

With the results of the 2022 network vulnerability assessment still fresh in the minds of the SOUTHCOM Information Assurance team, a one-way trust from SOUTHCOM IANTN domain to the DJC2 domain was selected for the exercise in 2024. However, the one-way trust hindered services and functionality provided to the Multinational Force South (MNFS) headquarters in two significant ways; a dual-logon user requirement and the absence of locally hosted IANTN service. Both hindered the joint force from being fully integrated and created delays in how key leaders were able to access collaboration teams and direct response actions during the exercise.

The added log-on required for all MNFS personnel bottlenecked network services and applications being available at the start of exercise (STARTEX) but was mostly mitigated during the exercise. This led to some users waiting hours before their account was established and ready for use.

Experiencing a technical challenge was also a common theme as JCSE introduced a virtual desktop infrastructure (VDI) into their DJC2 cores. While VDI works well with standard NIPR and SIPR network enclaves, the computing capacity required to support CENTRIXS-IANTN was found to be insufficient. To mitigate this problem, ARSOUTH imaged over 200 additional laptops with the CENTRIXS-IANTN image to meet operational requirements. Another technical challenge included how many users could be hosted on collaboration tools designed to integrate the various working groups and commands.

Utilizing DJC2 as a passthrough for IANTN services, which is mostly web-based, is consistently at risk of losing user productivity. Most importantly, at potentially losing the common operational picture (COP) hosted on IANTN, not locally hosted, nor replicated in the DJC2 domain. PMX24 did not experience this in its short duration, but it is a risk to longer missions. Additionally, without hosting local services, the MNFS network is at the mercy of SOUTHCOM network availability. If the network becomes unavailable for any reason, then all IANTN communications between the MNFS and subordinate organizations, including component commands, come to a halt. This is an unacceptable level of risk for non-exercise situations.

Not having a dual trust between DJC2 domain and the IANTN was not a total showstopper at this exercise. But it represents a lost opportunity to showcase how the U.S. military can provide expeditionary communications to a JTF. The PMX exercise brings together many of the most senior PN military officers from across the SOUTHCOM AOR. It is critical to reduce operational delays and complexity when integrating our partners into the MNFS. In time-sensitive situations, trusting login credentials from a POR system, like the DJC2, reduces the time necessary to set up and establish an interoperable command post. This will require an integrated solution between JCSE and the combatant command to establish network trust relationships between accredited nodes.

INTEROPERABILITY

Successfully employing a JTF headquarters and integrating PN personnel into its operations hinges on the ability to quickly provide scalable and interoperable C2 systems. PMX is a SOUTHCOM sponsored Combatant Commander Exercise Engagement (CE2), prime to test this capability. Unfortunately, this multinational partner exercise has not developed into a test bed for interoperability nor validation. Until this event matures to that level, from a communicator's perspective, we foresee repeat missed opportunities. This is especially true, given the multitude of military headquarters, across multiple echelons, that participate in a PMX. This includes SOUTHCOM, MNFS, multiple component commands, and PN military personnel from multiple countries.

Lack of equipment availability is another major lesson learned and concern for future PMX iterations. Due to its limited use outside of PMX, CENTRIXS-IANTN is not widely available

across the SOUTHCOM AOR and certainly not down to foreign nation military organizations who may serve as component commands. At PMX24, SOUTHCOM provided CENTRIXS-IANTN Flyaway Kits (CFAKs) to component commands and JCSE provided DJC2 with three CEKs to support the MNF's 240+ staff. Additionally, over 200 laptops and voice over internet protocol (VoIP) phones were resourced from Joint Staff J7 and SOUTHCOM J6 to support the Chilean-led, Combined Forces Land Component Command (CFLCC), and MNFS. Delivering CENTRIXS-IANTN outside of SOUTHCOM took months to plan. A lead time not available in contingency operations.

Lack of a deployable CENTRIXS-IANTN capability (communications nodes and IT equipment), or other compatible equipment, to support component commands and PN military places the burden on SOUTHCOM for resourcing all equipment. This known delta undermines the emphasis on ensuring joint and multinational forces are interoperable. This is associated with increased resourcing lead times, incompatible with expeditionary communications, and necessitates a requirement for the JCSE's DJC2 or similar asset. These can support a single small headquarters, if the only three CEKs globally available are committed to a higher priority operation.

OTHER CHALLENGES

CENTRIXS-IANTN network is not widely used outside of PMX exercises. There are a few countries maintaining active accounts, but they are limited in both number of users and locations. As a result, many users view IANTN as just another network, but it requires time for users to become familiar with network operations and software based applications such as Jabber and Agile Client. Users are typically not familiar with these collaboration tools, creating a need for most to be taught how the network works and how to respond to master scenario events list (MSEL) injects. Moreover, how to report information through the various collaboration tools inherent in working with a new network environment.

A lesson learned from PMX24 was the knowledge gap regarding technical limitations with Cisco Jabber, identified months in advance, as a primary communication tool for major briefing updates between SOUTHCOM, MNFS, and component commands. As communications planners tend to focus on establishing and safeguarding the network, the transition from planning to those functions commonly found within the knowledge management sections was poorly coordinated, at all levels, and at all exercise locations. This was only identified after STARTEX, once connection issues were experienced.

Another lesson learned involved Agile Client. Agile Client is used to provide a network enabled COP but requires users to be trained before being granted contributor level access to the account. The information flow of data feeding the training COP was not tested or exercised in advance of STARTEX. This is deemed to be a critical shortfall. Of note, the MNFS headquarters and subordinate component commands do not have technological infrastructure (servers) in place on CENTRIXS-IANTN to allow this to occur, as it does on SIPRNet. Air-gapped information, between two networks, feeding the exercise scenario added training value but fell short of the military's principle of "Train as you fight" reducing the level of realism.

ACCOUNT CREATION PROCESS

PMX24 account creation process underwent two significant improvements from previous exercises. First, the delegation of information owners' authority previously centralized with NAVSOUTH to the service components. As PMX24 included more than 1,500 individual users, from 13 different countries, establishing APAN and CENTRIXS-IANTN accounts can be a daunting event. For U.S. personnel, the process is the same as obtaining a standard SIPR or NIPR account. For our international partners, Security Cooperation Offices aided the process by ensuring each user had the proper credentials to receive an account. Located with each participating country, they worked closely with both the G6 Account Team and Information Assurance team to identify each potential exercise participant to expedite a time intensive process to validate each user request. Once account requests packets were accurate and complete, an entry was made in APAN for SOUTHCOM action with accounts created within 24-48 hours in the days leading to STARTEX, but less than 12-hours upon STARTEX. A second improvement in the account creation process was the use of a scripted algorithm to mass produce accounts upon component command vetting and approval. This allowed for the creation of accounts closer to STARTEX, since manual entry was not necessary. However, challenges with the process were not absent.

While the account process has improved over iterations of PMX, usernames remain not standardized and are varied over time. Standardization will allow IT personnel the ability to anticipate IANTN usernames and create DJC2 domain accounts to match usernames. This would reduce confusion for all MNFS personnel when these are similar. A separate enhancement opportunity is to create user accounts allowing one to identify the user as either military, civilian, contractor, or foreign military. Of note, all these identifiers were absent in PMX24 accounts.

LESSONS AND BEST PRACTICES

The below observations represent some of the most significant communication and network findings from PMX24.

Observation. Positioning an MNFS component HQ outside the continental United States (OCONUS) may better test multinational interoperability.

Discussion. In its current exercise design, PMX does not test or evaluate any sort of technical interoperability as described in AR 34-1, *Interoperability*. The human and procedural interoperability domains are automatically touched upon by the nature of establishing a multinational HQ, however even this is with SOUTHCOM and ARSOUTH providing all systems and services. This results in the PN capabilities are never engaged or even explored.

Recommendation. SOUTHCOM select an MNFS component, led by a willing host nation, to execute that component OCONUS. This was done in PMX16, where Chile led and operated the CFLCC in Santiago. The identified host nation must agree to provide the vast majority of technical resources. This will enable a more valid testing of MNFS multinational interoperability. SOUTHCOM and ARSOUTH will never know whether it can operate with and through its regional partners without this level of interoperability rigor.

Observation. Pre-execution staff exercise (STAFFEX) and communications exercise (COMMEX) were not conducted.

Discussion. As identified on every PMX since 2007, there is no identified time/space on the plan of action and milestones (POAM), prior to warm start, for units/staff to execute a scripted STAFFEX with augmentees after they arrive and prior to STARTEX. This results in participants are unfamiliar with the digital tools, information stores, and communications methods. This leads to frustration and impacts the staff's ability to focus on the exercise's operational/tactical problems. They instead spend more time at the G6 communications help desk versus interacting with other participants, sharing knowledge, and preparing for the exercise.

Recommendations. Conduct a STAFFEX with U.S. personnel one to two days after completing Academics to discuss transitioning to a joint task force (JTF). Follow this with a one or two day COMMEX with the full enterprise (SOUTHCOM and components).

ANNEX A

Key Leader Interviews

The following are interviews from seven key U.S. Army, Chilean Army, and Peruvian Army leaders regarding Exercise PANAMAX 24, covering subjects including, but not limited to planning, training, missions, interoperability, challenges, successes, and areas for possible improvement in future iterations of the exercise:

- **MG Philip (Phil) John Ryan**, Commander, Multinational Force South with interview conducted on 19 August 2024
- **CSM Ronald J. Graves**, Command Sergeant Major, Multinational Force South with interview conducted on 10 March 2025
- **MG Eduardo Valdivia Mendez (Chilean Army),** Commander, Combined Force Land Component Command with interview conducted on 14 August 2024
- **BG Monie R. Ulis,** Deputy Commanding General, Multinational Force South with interview conducted on 13 August 2024
- **MG Marco Antonio Marin Saldana (Peruvian Army),** Deputy Commanding General-Interoperability, Multinational Force South with interview conducted on 16 August 2024
- **Mr. Richard C. Merrin,** Foreign Policy Advisor, Multinational Force South with interview conducted on 15 August 2024
- **CW5 Mark A. Bryant,** Senior Warrant Advisor, Multinational Force South with interview conducted on 19 August 2024
- **Mr. Paul K. (Keith) Warman,** CALL Military Analyst Forward/LNO at U.S. Army South and U.S. Army North with interview conducted on 11 August 2024

MG Philip (Phil) John Ryan
Commander, Multinational Force South
Interview on 19 August 2024

Question. How well did PANAMAX 24 (OPERATION FUTURO NOBLE) increase the command's readiness to transition to a Multinational Force HQ, to conduct offensive and defensive military operations in a Joint Operations Area (JOA), train a foreign security force, and to enhance our ability to secure the approaches to the Panama Canal?

Answer. I think from a multinational force standpoint, it went well. As our Senior Mentor stated there was a lot of "forming and norming" but no real "storming." I attribute this to the relationships built in the train up events- the Academics, planning events, and certainly some of the social events we did before the switch got turned on late in that first week. Obviously I fell in on this, having come in from a year in the Middle East. I did not even know what PANAMAX was until a few months ago. So, I missed all of the planning conferences, including the Planning in Crisis (PIC), and never before met any of the fellow General Officers from our Central and South America partner nations. But it started on that Tuesday morning when I showed up at the post theater for Academics and did some introductions. That night I had all of the senior officers, representatives from all the countries we had here at the time, the Senior Mentor, along with key Army South staff over to my house. These leaders filled the backbone of our Multinational Force South headquarters.

I think we did well. In terms of the mission statement itself, the mission statement and Commander's intent were certainly not my words. I changed some things on the first day. Some things changed were not even realistic for us to do as this headquarters. We don't do the economy. One of the terms that was in there was something about stabilizing the economy. That is not in my job title. We are the "M" in the DIME (Diplomatic, Informational, Military, and Economic). We support the D, I, and E but we are not part of the State Department, or World Bank, or any other aspects of the financial world to do that part of that mission statement. But overall, to answer your question, I think we transitioned well. Part of that was just by leaving your leader egos and national caveats at the door and by rolling up our sleeves and getting to it.

Question. How did this exercise improve multinational interoperability and enhance mutual readiness with Allies and Partners in the region?

Answer. I believe overall the exercise went extremely well, especially the interoperability part. Our staff here at Army South were kind of shadow figures supporting our partner nations. The Army South Chief of Staff (CoS) was out there but he wasn't my CoS. I had a Peruvian Navy Captain as my CoS for the exercise. A lot of learning there. But overall, he grew tremendously during the week. Most other staff sections had a partner lead, and we were in a supporting role. That automatically built collaboration. I think there was good communication and collaboration immediately from D-0, our WARMSTART day, and the two days prior to that. There was certainly a lot of mutual awareness and mutual understanding on people's capabilities, their

limitations, and what they would be allowed to do in this joint and coalition fight, if we had to do this to defend the Panama Canal.

General Richardson, Commander, United States Southern Command (SOUTHCOM) helped drive this with understanding on what each nation brought. This includes from the air side, maritime, special operations forces (SOF), and ground side. All of our contributing partner nations brought something different, something unique to PANAMAX. It was not just the American F-18s, F-22s, or F-35s. There were lots of different aircraft. It was not just a standard infantry brigade combat team on the ground. We had multinational battalions and brigades on the ground in New Centralia that had different capabilities. This certainly helped with our readiness.

Question. What were the successes and challenges in the information environment and how did you control the narrative?

Answer. Winning in the information environment is critical. Especially in this day and age, because the speed of information is something that everyone struggles with, to do it honestly. We have adversaries out there who can make up information and can flood the zone with false narratives, false information, and false facts.

On a success, it was our coming together, forming the team, collaborating with our partners, and being open and transparent from the very beginning. My guidance was to use all of our non-kinetic means as much as we could before we go to a kinetic option. Really, because part of that was trying to stay ahead of the narrative. If we drop a 500 pound bomb on a school, or a church, or we killed some innocent civilians, no matter if we killed 100 enemy personnel, we probably lost the narrative and the initiative. Then we would have to clean up the narrative because we just killed a four year old girl. Something like that.

On challenges, there are many new people both on our staff and those that came in for the exercise. Many hands went up when I asked people if this was there first time for any PANAMAX. Also, many people had not gone to all the planning events, Academics, and train up courses in Miami, including myself.

The constrained timeline and battle rhythm really was a struggle at times because it did not allow us to use all of our processes. From Joint publications, the need for boards, bureaus, centers, cells, and working groups (B2C2WG) – we just could not fit anymore into a 12-hour constrained timeline. By the time everybody gets their machines back up we got our first meeting to go to, then the second, that rolls into the third. By then it’s lunch. We come back and we’re preparing for the last couple of meetings for the day and trying to get back with folks. Very tough cycle to stay ahead of. In that 12-hour time zone, we were plotting along one day at a time. We kept in succession; Day-41, Day-42, etc. A recommendation- how about if we look at starting on Day-41, then jump to Day-45, then going to Day-50, etc.- just so that we can stay in pace. This will be something for the exercise design people to do. Staying in pace will both challenge the staff all at once, and across all of our functions. This will really work them.

In terms of the narrative itself, I appreciate some of our folks who rearranged our tents to work people together. Information folks with public affairs and cyber folks. Being closer or collocated, they could fuse messages together. A message transmitted on this net may be something totally different on a different net. Or, if you are doing well in one area and poorly in a different way, it may be how we are transmitting the message. Sometimes how you transmit the message is more important than the message itself. All must be fused with fires. They understand air, ground, maritime, SOF, and all fires. There needs to be messaging before, during, and after fires.

Question. What are your takeaway lessons and best practices from this exercise?

Answer. I'll start with a personal one. Having just returned, in June, from one year in the Middle East I did not have this opportunity. I have already contacted the General Officer Management Office (GOMO) to recommend that the next Commander at Army South is required to go to the Combined Joint Force Land Component Commander (CJFLCC) course prior to assuming command. I think that experience, that education, would help the train up process for the exercise.

In terms of broader unit organizational requirements, we have to find more time in this exercise. The recommendation is to expand the 12-hour window. Maybe have two 8 or two 9-hour shifts where you can work more people and more staff. For an 8-hour, it could be 0400-1200 and 1100-1900. There is a 1-hour handoff in the middle of the day which forces a shift change. Like one of my boss's use to say, "bad things happen during shift change!" This will ensure we are utilizing our tools to properly handle information, intelligence, and operations from shift A to shift B.

Better utilize Commander's calls. If we have an expanded day we will be able to execute a Commander's call. Me with the Component Commanders to go over things and me with the Combatant Commander. I think I had three point to point conversations with her during the exercise and probably should have had more. This is due to her travels and all the other scheduled meetings. It is critical to have that one-on-one time to discuss "here's my risk, here's what I see us doing, and here's where I see opportunity."

Dedicate some time before the switch is turned on for STARTEX to do a Rehearsal of Concept (ROC) drill and some battle drills in the Joint Operations Center (JOC) itself. For example, do a Personnel Recovery (PR) event which will exercise just about every member of the staff, or at least every staff section. From the G1 all the way to the G6. They all have to be involved in PR. It's an operation, it's intel, and it's IO and public affairs. You need supplies and equipment and communications. There are aspects from tactical to strategic to contend with.

The final challenge for the future is we cannot afford to be in a big, immoveable command post with 25 tents, 20 generators, and all these climate control units buzzing all day long with an electronic footprint that is just enormous. So how do we fight in the future? Do we continue with these tents set up? I think we could apply some lessons learned from other units that have done operations like this in real world locations, or in training at Warfighter exercises. Apply some of those lessons in establishing a command post whether in an abandoned building or other type facility. I've run Tactical Operations Centers (TOCs) in hotel rooms before. There are ways of

doing this to cancel or reduce footprints in a dispersed manner. We really need to flatten comms more. Thoughts for PANAMAX 26!

CSM Ronald J. Graves
Command Sergeant Major, Multinational Force South
10 March 2025

Question. How well did PANAMAX 24 (OPERATION FUTURO NOBLE) increase the command's readiness to transition to a Multinational Force Headquarters?

Answer. PANAMAX 24 was a great opportunity for U.S. Army South to build readiness in many ways. Every two years this headquarters (HQ) works to build a joint multinational manning document consisting of over 20 countries' personnel across all warfighting functions (WfFs) consisting of officers, noncommissioned officers (NCOs), and warrant officers. All fulfil vital roles in the team building process. After that there was an abundance of coordination for travel and developing the Multinational Force South (MNFS) HQ design, setup, and occupation by more than 500 members. Without these opportunities, it's hard to touch the equipment enough and utilize the network in day to day operations. Due to a constant transition of personnel, this exercise is essential to train new members in all facets of MNFS roles and functions to maintain both readiness and resident expertise.

Question. How did this exercise improve multinational interoperability and enhance mutual readiness with allies and partners in the region?

Answer. Following the building of the multinational force HQ many smaller training opportunities were established to focus on the three domains of interoperability (human, procedural, and technical). In the human dimension we worked on relationship building and language barriers. Under procedural we worked to generate shared understanding of established standard operating procedures (SOPs) and WfFs, as many countries have different doctrine. Lastly, in the technical dimension we worked hard to establish user accounts and get everyone on a common network. These things just don't happen overnight; it takes months to generate trust, shared understanding, and common procedures for everyone to be on the same page.

Question. As you have participated in many PANAMAX exercises before, based on your experience, what did the MNFS get better at than in previous years?

Answer. Over the past two PANAMAX exercises we have gotten better at integrating more warrant officers and NCOs in the MNFS HQ. In previous iterations there was a tendency for counterpart countries to send only officers. It's been a great effort to highlight the significance of the important roles these invaluable members play in day to day operations. I hope after I am home it continues.

Question. What challenges did the command still wrestle with?

Answer. Connectivity is a constant issue we wrestle with as the Combined Enterprise Regional Information Exchange (CENTRIX) network is only used once we activate the joint manning document (JMD) and physically build out the HQ. Additionally, building a large tent city is labor intensive requiring a lot of essential equipment not resident in the modified table of organization and equipment MTO&E, thus requiring the support of other entities to establish the main command post (MCP).

Question. In your view as the Army South Senior Enlisted Leader (SEL), in what ways did PANAMAX develop younger Soldiers and NCOs? What can be added to improve their training experience?

Answer. PANAMAX leverages the entire command's expertise and manpower to fulfill all of the roles and functions of such a HQ. Soldiers and NCOs fill many roles across MNFS from each WfF. This is true in both functional areas and in the main command post's joint operations center (JOC) floor. They are the conduit to operations, as the doers. This exercise builds upon their core military occupational specialty (MOS) skills as members of their directorates, but also as trainers and communicators with counterpart country NCOs and Soldiers.

Question. What are your takeaway lessons and best practices from this exercise?

Answer. PANAMAX is a very important exercise to all of the countries involved and many more. Panama is one of the most strategic pieces of terrain in not just the Western Hemisphere, but the world. Moreover, PANAMAX promotes generating shared interest in the security of the Panama Canal and surrounding areas facilitating the shipment of goods from the Atlantic to the Pacific Oceans and vice versa. Without the United States and international involvement and interest it Panama's security, transportation of goods will increase in timeliness, security, and expense. This includes shipping military equipment from one operational area to the next. This exercise assists in ensuring the experience and understanding is passed to each iteration of Soldiers that participate building a bench of NCOs, warrant officers, and officers should something happen, and our militaries are called upon to defend the Panama Canal.

MG Eduardo Valdivia Mendez (Chilean Army)
Commander, Combined Force Land Component Command (CFLCC)
Interview on 14 August 2024

Question. How did CFLCC visualize, synchronize, and conduct multi-domain operations? What went well and not so well?

Answer. It is a complex task to be able to synchronize with multiple domains and even more with multinational forces with different doctrines and languages. Fortunately, the professionalism and dedication of all the participating countries has allowed the successful development of these complex operations. It has allowed us to find solutions that are efficient and innovative that increase our knowledge for future real-world operations.

Question. What were the multinational interoperability successes and challenges?

Answer. PANAMAX requires a lot of interaction between its participants and that allows us to verify and understand our capacity to interoperate. It obliges us to find different ways to integrate our doctrines and languages in this formulated multi-domain environment. This allows an additional effort from all the countries to apply our doctrines, knowledge, and processes at different levels.

Question. How did PANAMAX 24 strengthen allies and partners and what could be done better to enhance relationships and our working together?

Answer. PANAMAX contributes to the understanding of different cultures, functions, and doctrines while forming real friendships, comradery, and international cooperation.

Question. What are your takeaway lessons and best practices from this exercise?

Answer. It was an incredible experience. We learned a lot of the participating countries' capacity and knowledge from the American and partner nation forces, along with their capacity to adapt and interact in a multinational environment. A bond we have forged that will remain forever.

BG Monie R. Ulis
Deputy Commanding General, Multinational Force South
Interview on 13 August 2024

Question. How did PANAMAX 24 improve the command's ability to plan for and conduct offensive and defensive military operations in the Joint Operations Area (JOA), enable restoration of Public Security Forces, and to secure approaches to the Panama Canal?

Answer.

- Enhanced our ability to coordinate and synchronize staff processes through multiple repetition.

- Provided to identify gaps in setting conditions for successful transition to national public security forces and if required, another military task force.

Question. What were the successes and challenges to achieve multinational interoperability?

Answer.

- To unite under a common goal of achieving the mission and respect for our differences regardless of the area where differences surfaced.

- Planning, coordination, and interoperability increased as the exercise continued showing great promise should this exercise ever turn to a real-life event.

- Languages can be a challenge but never a barrier. We were able to mitigate the challenges through interpreters both from partner nations and the United States.

Question. What were the successes and challenges in information operations and how did Multinational Force South (MNFS) control the narrative?

Answer.

- Influencing the information environment is always a challenge and requires consistent but well structed narratives. It also requires rapid execution to be ahead of competing narratives.

- We were successful with influencing local public support for MNFS efforts and delegitimizing the Brigada des Martires Del Libération (BML) by highlighting and amplifying negative effects of BML presence.

Question. What are your takeaway lessons and best practices from this exercise?

Answer.

- Communicate, communicate, communicate. But more important to ensure the elements of communication; ensuring the message was received and understood cannot be overstated.

- Speed of execution may vary due to language, cultural was of thinking about a problem, and other differences within human dynamics.

MG Marco A. Marin Saldana
Deputy Commanding General-Interoperability, Multinational Force South
Interview on 16 August 2024

> There is only one thing worse than fighting with allies, and that is fighting without them."[27]
>
> Sir Winston Churchill, United Kingdom Prime Minister during World War II

Question. What were the successes and challenges in achieving multinational interoperability?

Answer. The first thing to achieving multinational interoperability is integration. In PANAMAX 24, we were from different forces- Army, Navy, Marines, and Air Force. In addition to that we were from different countries. Different countries mean different cultures and languages. At first, we were really unknown persons between each other. All of this situation really complicated our goals. But due to the professionalism of the officers, there capabilities and skills enabled us to build relationships and work together better each day. We built and improved our communications. During the training, all the officers and other personnel improved throughout the exercise. By the last day we were integrated, coordinating, and working together successfully.

The challenge in this type of exercise is we must recognize it as an opportunity and continue this training with all the different countries in the United States Southern Command (SOUTHCOM) area of responsibility (AOR). We must continue to train on our responsibilities and work together on our common objectives. This includes our common strategic goal of protecting the Panama Canal. This canal flows a moderate percentage of the global economy. If the enemy ever takes the Panama Canal it will impact the whole region and multiple economies.

Question. How did PANAMAX 24 strengthen allies and partners and what could be done better to enhance relationships and our working together?

Answer. I believe the way to strengthen relationships between allies and partners is by continuing to work together. Our focus and priority should be on our mission to protect the Panama Canal. When our Armed Forces understand this priority, and our objectives within the region, our relationships are better. We have our differences, but we have a lot of things in common across our countries. By working together, we have strength in the region. Our relationship is based on that.

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[27] Goodreads, Winston S. Churchill, Quotable Quote, https://www.goodreads.com/quotes/1062059-there-is-only-one-thing-worse-than-fighting-with-allies

I consider this training as really important for all the countries in the region. We are training on the same goal. During the training, obviously we had some challenges and troubles while we operated together. This is normal in training or war. But we continued to improve.

Question. What changes would you make to PANAMAX for it to be an even better exercise for both the U.S. and the partner nations?

Answer.

First, we need to improve communications. The All Partners Access Network (APAN) is a great system. But if personnel don't know how to employ it, or if the system has technical issues during your work, or is not running, this impacts our ability to communicate. When APAN was not running we could not distribute orders affecting integration.

Second, we need more time to conduct this exercise. It initially appeared that conducting a 12-hour a day exercise would be sufficient to achieve our training objectives. We found out there was not sufficient time in the day for the necessary coordination at each echelon. The lower echelons did not have time to coordinate and plan under this time constraint. More time will improve staff organization and facilitate better staff planning at all levels. At each echelon, their officers need the time to work together on planning and processes, at their level, in order to give their best responses and recommendations to their next higher level headquarters.

Lastly, I would like to suggest having more interpreters because many partner nation officers speak limited English. To improve in this area, the officer who is speaking, either U.S. or partner nation, and the interpreter must get together in advance to coordinate on what will be presented and spoken on.

Question. What are your takeaway lessons and best practices from this exercise?

Answer.

Lessons

- Improve the communications- specifically the APAN website that did not work at times.
- Conduct more partner nation APAN training.
- Provide more APAN on-site support.

- I think the best lesson we learned during this training is that we were able to appreciate what Franklin T. Roosevelt, 32nd President of the United States, said at a United Nations Conference, "Nations will learn to work together, only by actually working together."[28]

Best Practices

- The brotherhood between our nations, with all the officers and their subordinates understanding the goals of this training and working together to achieve them.
- U.S. and partner nation forces working together to improve our capabilities.
- Nations learn only by training together.

[28] John Woolley and Gerhard Peters, University of California-Santa Barbara (UCSG), The American Presidency Project, Franklin D. Roosevelt, 32nd President of the United States: 1933-1945, Address on the Signing of the Agreement Establishing the United Nations Relief and Rehabilitation Administration (U.N.R.R.A.), 9 November 1943, https://www.presidency.ucsb.edu/documents/address-the-signing-the-agreement-establishing-the-unrra

Richard C. Merrin
Foreign Policy Advisor, Multinational Force South
Interview on 15 August 2024

Question. What were the successes and challenges you experienced during this exercise?

Answer. I gained a lot from the last PANAMAX exercise which enabled me to more effectively contribute this year. Everyone understood the exercise as a learning experience. All had a common concern to be at the right place, at the right time, given the many competing meetings. Outside of scheduled meetings, you had to figure out how to best contact people. For me, for example, this included establishing and maintaining contact with the International Committee of the Red Cross (ICRC). This particular office was part of the exercise's White Cell. I found it very difficult to contact them. Often, no one was there to pick up and answer my calls. This eventually got resolved. Rank and position played a part. For the next PANAMAX, I recommend that the White Cell have designated people in specific positions with a backup person. They must be more accessible and armed with information. Establishing a directory on the exercise's SharePoint home page may support this access. Of note, we must also consider partner nation (PN) access. They operated primarily on the All Partners Access Network (APAN).

A specific challenge was the 12-hour exercise day. For next PANAMAX, we may want to consider going back to a 24-hour a day exercise. Or perhaps having two shifts going to a 16 or 18 hour exercise. This would better support the staff preparing for phase transitions, shift changes, and meeting slide submission suspenses.

Question. How effective, or what was lacking, in the use of interpreters and translators?

Answer. Interpreter deficiencies were a significant challenge at the beginning of this year's PANAMAX. I understand that it resulted from a budget cut for interpreters. I realize we need to make the most efficient use of taxpayer dollars, but interpretation for an exercise, or operation, should not be one of those areas. This exercise requires highly trained and qualified interpreters due to its scale, scope, and sheer number of PN participants. The interpreters who began this year's PANAMAX needed more training and experience. The plan was to conduct "sequential," (consecutive) versus "simultaneous" (real-time) interpretation. I do not criticize the junior officer who did his best to perform the role as a sequential interpreter. But continuing that mode of interpretation would have at least doubled the time required to hold meetings and decreased productivity overall. Further, more word meanings may have been lost. Additionally, there appeared to be scheduling challenges to have interpreters at the right place, at the right time. In my view, this was due to because interpreters were in one cell, and it was difficult to get a hold of them. Trying to find them occurred on many days. Interpreters are critical for people in the room to understand what was said. As the exercise progressed, I greatly appreciated the quick replacement by professional U.S. Army South in-house interpreters, including one colleague who needed to drastically change his schedule to support this exercise at the last minute.

Question. How did PANAMAX 24 strengthen allies and partners and what could be done better to enhance relationships and our working together?

Answer. I return to a point I made in PANAMAX 22, that our U.S. personnel need to not only work with their PN personnel, but they should make substantial attempts to socialize during the days PANAMAX occurs. I encouraged going to the "Galley" for lunch together with our PN personnel. I also realize that we are particularly busy during PANAMAX and I, myself, only made it to the on post dining facility one time. Nevertheless, while I saw many PN participants eating lunch there, I saw no U.S. personnel. "Breaking bread," as a valued general once told me, is important. Our PNs likely gained much more in bilateral and multilateral collaboration than U.S. forces at our own galley. That said, I appreciate the increased interactions away from the tents that occurred between the senior leaders during PANAMAX.

Question. What was the most impactful policy advice and counsel you provided the MNFS Commander during the fight and what was the impact?

Answer. Building interagency relationships and opening communications with them, for the command, are some of my key responsibilities. I provide advice to align military actions with interagency-driven foreign policy. At PANAMAX 24, believe the collaboration I made across multiple agencies helped inform the MNFS Commander to successfully execute his Military Information Support Operations (MISO).

Question. What are your takeaway lessons and best practices from this exercise?

Answer.

- Working together with multinational forces leads to seeing some of the difficulties that can arise.
- Be prepared for when the MNFS Commander and Ambassador speak together.
- Communicate with the U.S. Southern Command Political Advisor (POLAD) more on real world issues affecting the exercise scenario.
- Understand the importance of the Regional Security Officer at U.S. embassies.
- Review and update the scenario to include more realistic situations.
- Include real-world environmental impacts in the operational area of the exercise.
- Consider ramifications of non-U.S. personnel conducting protests on a U.S. installation.
- Finding a different time of the year to conduct PANAMAX, due to the extreme heat in San Antonio during the summer weeks. A different time would provide greater

opportunities for personnel to interact outside of cramped air-conditioned rooms and tents.

CW5 Mark A. Bryant
Senior Warrant Advisor, Multinational Force South
Interview on 19 August 2024

Question. How well did PANAMAX 24 (OPERATION FUTURO NOBLE) increase the command's readiness to transition to a Multinational Force HQ?

Answer. The exercise is for building partnerships not only for leaders but also the "workers" (lieutenants, captains, and majors). These junior and mid-grade officers will become the future leaders. Focus on them deeply. Exercise processes did not start "gelling" at 80% for three days. There is a need to conduct battle drills to better prepare. More enlisted and special development are required in the sections. Maybe conduct a longer exercise with a break in-between major parts. This exercise was on a 12-hour a day schedule for the partner nations (PNs). United States (U.S.) forces had to work longer to make sure required actions from the United States Southern Command (SOUTHCOM) Battle Update Briefing (BUB) (ending 30 minutes prior to daily PN departure) were ready when exercise participants stepped back in at 0600 for the 0730 Multinational Force South (MNFS) Commander's Update Brief (CUB).

Question. How did this exercise improve multinational interoperability and enhance mutual readiness with allies and partners in the region?

Answer. It was great having the Deputy Commanding General-Operations (DCG-O) empowered by the Commanding General (CG). This equals trust with risk powered down. The leadership may have to get out of some meetings to perform "work." United States Army South (ARSOUTH) CG, MG Ryan, started to do this by trying to visit each section and get their perspectives along with multinational leaders. The All Partners Access Network (APAN) is a great tool for us and our partners. Populate it, then we may be able to experience multinational interoperability, as the Combined Enterprise Regional Information Exchange System (CENTRIX) is not always operational.

Question. Based on your experience, what did the MNFS get better at than in previous years, and what challenges did the command still wrestle with?

Answer. I got here in 2019 and started down the PANAMAX road which stopped for COVID-19. We had the second planning in crisis (PIC) exercise on post. It would have been better for more of the headquarters (HQ) to attend.

PANAMAX 2022 was my first full exercise, whereby, I was in the White Cell creating breadcrumbs for MNSF to follow to reach the joint sections training goals, as well as the commanders.

Question. What are your takeaway lessons and best practices from this exercise? What are some of your recommendations/insights?

Answer.

- Place more emphasis and focus on the culmination in PANAMAX. Current exercise design includes Phase 0, Shape; Phase 1, Deter; Phase 2, Seize the Initiative; Phase 3, Dominate; Phase 4 Stabilize; and Phase 5, Enable Civil Authority. Recommend the following changes: (1) Move Phase 1 to Phase 2 (because I believe we are good at Phase 0 activities, (2) Phase 2 to Phase 3, (3) Phase 3 to Phase 4, and (4) Phase 5.

- Have the commander "out" with the forces, building relations before the exercise. Just months prior to PANAMAX 24 execution, the CG changed out, as well as most of the primary staff. The HQ was forming, not storming, and very well norming at ARSOUTH level at PANAMAX 24. We must realize that we need to keep the same people from the PIC at the other PANAMAX Joint Exercise Life Cycle (JELC) training events.

- We needed higher HQ documents from SOUTHCOM that leads to MNSF documents, then down to the components, prior to the start of the exercise (STARTEX). This exercise began in the early 2000's- why is it always new? Higher' s documents were behind MNSF by days during the exercise. We should have the templates correct to fill out the information, not figuring out the template on the fly, and disregarding the information. Each staff section must have the same base template and then add their "overlay," a PowerPoint build. We need to figure out our common operational picture (COP) and how it is done before STARTEX at D+42. Then, with these processes, we will have the necessary data to form information to transfer into knowledge, and decisions made by the commander instead of "slideology."

- Not only in intelligence, but each section was "good at reporting the news." However, the "so what" was missing at the beginning but started happening when the CG provided direction through priority information requirements (PIR).

- Each section has training objectives, but all must be working to a common commander's "picture/intent." This requires integrating these training objectives together.

- If defense of the Panama Canal is our mission, should we not be there defending the canal? In PANAMAX 24, the Navy was as if they even took assets away from New Centralia's fight to assist the Navy in defending the canal.

- We must address and identify how low does a multinational force go down? In PANAMAX 24, we were battle tracking as well as USSOUTHCOM. This negatively impacted the MNFS echelon to plan for and execute boards, bureaus, centers, cells, and working groups (B2C2WG) processes. Conduct more academics on this and include in other exercises leading up to this.

- Need more "interpreters" scattered throughout the J Staffs that understand the J Staff job processes, i.e. intelligence, targeting, etc.

Paul K. (Keith) Warman
Center for Army Lessons Learned, Military Analyst Forward/LNO
at U.S. Army South and U.S. Army North
Interview conducted by U.S. Army South, Public Affairs Office (PAO)
11 August 2024

Question. What significant changes have you seen in the PANAMAX exercise over time?

Answer. I was assigned as the Center for Army Lessons Learned (CALL) Military Analyst Forward (MAF)/LNO at U.S. Army South and U.S. Army North in the beginning of 2015. I've had the opportunity to conduct CALL collection operations at multiple PANAMAX exercises. My first experience was supporting PANAMAX 16 (OPERATION FUTURO NOBLE) from 25 July-5 August 2016. Early on I realized the significance of this training event as it is U.S. Southern Command and U.S. Army South's largest biennial exercise with partner nations and brings together all the Multinational Force South (MNFS) components.

Most significant change I have observed over time is the ever increasing desire for both U.S. and partner nation forces to participate in the exercise. Believe this is due to all realizing the commonly shared and persistent threats faced across the Western Hemisphere. Threats portrayed in today's PANAMAX are more complex, diverse, and realistic than in the past. An example is what it takes for a commander today to gain information advantage on the enemy.

It is clear that all formations making up MNFS recognize the value of this training time and operating together at this level of exercise. I get to see this first-hand by collecting unit observations and lessons (best practices and issues). Also, by conducting interviews with both U.S. and partner nation senior leaders. Their insights are invaluable to improving future rotations.

What does not change in PANAMAX, and shouldn't, is the focus on U.S. and partner nation team building, improving multinational interoperability, and enhancing mutual readiness.

As in previous exercises I am producing a CALL publication on this year's PANAMAX 24. I look forward to the next one to see what changes it may bring.

ANNEX B

GLOSSARY

ACRONYMS AND ABBREVIAITONS

AAR	After Action Review
ADA	Air Defense Artillery
ADP	Army Doctrine Publication
AIDP	Army Intelligence Data Platform
AO	Area of Operations
APAN	All Partners Access Network
APOD	Aerial Port of Embarkation
ARSOUTH	United States Army South
ASCA	Acquisition and Cross-Service Agreement
ASCC	Army Service Component Command
ASR	Aerial Supply Route
AT	Antiterrorism
ATCICA	Army Theater Counterintelligence Coordinating Authority
ATG	Attack Guidance Matrix
ATO	Air Tasking Order
B2C2WG	Boards, Bureaus, Centers, Cells, and Working Groups
BDA	Battle Damage Assessment
BML	Brigada de los Martires de la Libération
BN	Battalion
C2	Command and Control
C4I	Command, Control, Communications, Computers, and Intelligence
CA	Civil Affairs
CAL	Critical Asset List
CAOC	Combined Air Operations Center
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CCDR	Combatant Commander
CCIR	Commander’s Critical Information Requirement
CCMD	Combatant Command
CDC	Concept Development Conference
CDE	Collateral Damage Estimate
CECG	Combined Exercise Control Group
CENTRIXS	Combined Enterprise Regional Information Exchange System
CEK	Core Extension Kit
CFACC	Combined Forces Air Component Command
CFAK	CENTRIXS-IANTN Flyaway Kit
CFLCC	Combined Forces Land Component Command
CFMCC	Combined Forces Maritime Component Command
CFSOCC	Combined Forces Special Operations Command

CI	Counterintelligence
CIO	Chief Information Officer
CIP	Common Intelligence Picture
CIVCAS	Civilian Casualty
CJTF	Combined Joint Task Force
COP	Common Operational Picture
COMMEX	Communications Exercise
CM	Consequence Management
CMO	Civil Military Operations
COA	Course of Action
CoS	Chief of Staff
COMMEX	Communications Exercise
CPX	Command Post Exercise
CSB	Contracting Support Brigade
C-sUAS	Counter Small Unmanned aerial System
CT	Counterterrorism
CTO	Combating Transnational Organized Crime
CUB	Commander's Update Brief
CUOPS	Current Operations
DAL	Defended Asset List
DCG-O	Deputy Commanding General-Operations
DHA	Detention Holding Area
DJC2	Deployable Joint Command and Control
DRRS	Defense Readiness Reporting System
DSM	Decision Support Matrix
DST	Decision Support Template
DTA	Data Transfer Agent
DTT	Deployable Training Team
ENDEX	End of Exercise
ENG	Engineer
EOD	Explosives, Ordnance, Disposal
ESC	Expeditionary Sustainment Command
EXDIR	Exercise Directive
FAAR	Facilitated After Action Review
FD	Foreign Disclosure
FDO	Flexible Deterrence Option
FED	Fires and Effects Directorate
FM	Field Manual
FMI	Foreign Military Interaction
FOB	Forward Operating Base
FPC	Final Planning Conference
FPCON	Force Protection Condition
FRO	Flexible Response Option
FSCM	Fire Support Coordination Measures
FTX	Field Training Exercise

FUOPS	Future Operations
GCC	Geographic Combatant Command
GCCS-J	Global Command and Control System-Joint
GOMO	General Officer Management Office
HA/DR	Humanitarian Assistance/Disaster Relief
HCA	Humanitarian and Civic Assistance
HUMINT	Human Intelligence
Host Nation	Host Nation
HPTL	High Payoff Target List
HQ	Headquarters
IANTN	Inter-American Naval Telecommunications Network
IAW	In Accordance With
I-CFT	Information-Cross-Functional Team
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
IED	Improvised Explosive Device
IHL	Intelligence Handover Line
IIR	Intelligence Information Report
INDOPACOM	United States Indo-Pacific Command
INTREP	Intelligence Report
IO	Information Operations
IPC	Initial Planning Conference
IPR	In-Progress Review
ISR	Intelligence, Surveillance, and Reconnaissance
IWFF	Intelligence Warfighting Function
JCMB	Joint Collection Management Board
JCSE	Joint Communications Support Element
JECC	Joint Enabling Capabilities Command
JELC	Joint Exercise Life Cycle
JEMSO	Joint Electromagnetic Spectrum Operations
JEP	Joint Exercise Program
JISE	Joint Intelligence Support Element
JIPTL	Joint Integrated Prioritized Target List
JMD	Joint Manning Document
JMEEL	Joint Mission Essential Equipment List
JMET	Joint Mission Essential Task
JMETL	Joint Mission Essential Task List
JOA	Joint Operational Area
JOC	Joint Operations Center
JPP	Joint Planning Process
JRSOI	Joint Reception, Staging, Onward Movement, and Integration
JSOC	Joint Sustainment Operations Center
JTCB	Joint Targeting Coordination Board
JTF	Joint Task Force
JTP	Joint Targeting Program

JTWG	Joint Targeting Working Group
JUONS	Joint Operation Urgent Needs
JWICS	Joint Worldwide Intelligence Communications System
KM	Knowledge Management
KMO	Knowledge Management Officer
LNO	Logistics Laison Officer
LOC	Line of Communication
LOE	Line of Effort
LOGSTAT	Logistics Status Report
LOO	Line of Operation
LPD	Leader Professional Development
LSCO	Large Scale Combat Operations
MDO	Multi-Domain Operations
METL	Mission Essential Task List
MILDEC	Military Deception
MISO	Military Information Support Operations
MNFS	Multinational Force South
MNL	Multinational Logistics
MOE	Measures of Effectiveness
MOP	Measures of Performance
MP	Military Police
MPC	Mid Planning Conference
MPE	Mission Partner Environment
MPN	Mission Partner Network
MS	Microsoft
MSEL	Master Scenario Event List
MSR	Main Supply Route
MTOE	Modified Table of Organization and Equipment
NAI	Named Area of Interest
NATO	North Atlantic Treaty Organization
NETCOM	U.S. Army Network Enterprise Technology Command
NGO	Nongovernmental Organization
NIPERNET	Non-Classified Internet Protocol Router
NSL	No Strike List
OCS	Operational Contract Support
OCSIC	Operational Contract Support Integration Cell
OE	Operational Environment
OGA	Other Government Agency
O&I	Operations and Intelligence
OIC	Officer in Charge
OIE	Operations in the Information Environment
OJOA	Outside Joint Operations Area
OPCON	Operational Control
OPD	Operational Protection Directorate
OPEX	Operational Exercise

OPORD	Operations Order
OPSEC	Operations Security
OPTEMPO	Operations Tempo
ORSA	Operations Research Systems Analysis
PA	Public Affairs
PAO	Public Affairs Office
PACE	Primary, Alternate, Contingency, and Emergency
PIC	Planning in Crises
PIR	Priority Information Requirement
PKO	Peacekeeping Operations
PME	Professional Military Education
PMX	Panamax
PN	Partner Nation
POAM	Plan of Action and Milestones
POR	Program of Record
POTF	Psychological Operations Task Force
PR	Personnel Recovery
PRO	Protection
PSF	Public Security Force
PVO	Private Voluntary Organization
PWG	Protection Working Group
QA/QC	Quality Assurance/Quality Control
RFF	Request for Forces
ROE	Rules of Engagement
RTL	Restricted Target List
RVA	Request for Visit Authorization
SCD	Security Cooperation Division
SCP	SOUTHCOM Campaign Plan
SFAB	Security Force Assistance Brigade
SIGACTS	Significant Activities
SIPRNET	Secure Internet Protocol Router Network
SITREP	Situation Report
SME	Subject Matter Expert
SOF	Special Operations Forces
SOP	Standard Operating Procedures
SOUTHCOM	United States Southern Command
SPOD	Seaport of Debarkation
STAFFEX	Staff Exercise
STARTEX	Start of Exercise
SYNCMAT	Synchronization Matrix
TCP	Theater Campaign Plan
TIOG	Tactical Information Operations Group
TO	Training Objective
TOC	Tactical Operations Center
TOR	Terms of Reference

TOWG	Targeting Objective Working Group
TPFDD	Time Phased Force Deployment Data
TREX	Training and Exercises
TSC	Theater Sustainment Command
TSM	Target Synchronization Matrix
TTPs	Tactics, Techniques, and Procedures
TX	Texas
TWG	Targeting Working Group
UJTL	Universal Joint Task List
UNSCR	United Nations Security Council Resolution
U.S.	United States
VDI	Virtual Desktop Infrastructure
VEO	Violent Extremist Organization
WfF	Warfighting Function
WG	Working Group
WHINSEC	Western Hemisphere Institute for Security Cooperation